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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

FERTILITY ASSISTANCE FOR FEMALE NAVAL OFFICERS: THE EMOTIONAL, PHYSICAL, AND MONETARY COSTS

by

Adrain D. Felder

December 2018

Thesis Advisor: Co-Advisor: Kathryn J. Aten Robert J. Eger III

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FERTILITY ASSISTANCE FOR FEMALE NAVAL OFFICERS: THE EMOTIONAL, PHYSICAL, AND MONETARY COSTS

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

This study examines the personal experiences and perceptions of 30 active-duty female naval officers who have used or considered using fertility assistance. Through in-depth interviews and thematic analysis, I document and examine 1) the experiences of active-duty female naval officers with fertility assistance treatments in the context of their naval careers; 2) how these experiences affected the officers personally, financially, and professionally; and 3) how military service contributed to female officers' decisions regarding the timing of childbearing and experience with fertility assistance. This study advances understanding of the many factors that impact women pursuing parenthood while serving in the armed forces. It provides valuable insight into the experiences and perspectives of female service members and offers recommendations to guide policy and decision-making.

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LIST OF ACRONYMS AND ABBREVIATIONS

| ADSM | Active-duty Service Member |
|-----------|--|
| AMH | Anti-mullerian Hormone |
| ART | Assisted Reproductive Technology |
| BUMED | Bureau of Medicine and Surgery |
| CDC | Center for Disease Control |
| DHA | Defense Health Agency |
| DoD | Department of Defense |
| DoN | Department of the Navy |
| FET | Frozen Embryo Transfer |
| FITREP | Fitness Report |
| FSH | Follicle-stimulating Hormone |
| GIFT | Gamete Intrafallopian Transfer |
| ICSI | Intracytoplasmic Sperm Injection |
| IUI | Intrauterine Insemination |
| IVF | In Vitro Fertilization |
| IVF-ET | In Vitro Fertilization-Embryo Transfer |
| MAMC | Madigan Army Medical Center |
| MTF | Military Treatment Facility |
| NDAA | National Defense Authorization Act |
| NMCSD | Naval Medical Center San Diego |
| PARFQ | Physical Activity Risk Factor Questionnaire |
| PCM | Primary Care Manager |
| PCS | Permanent Change of Station |
| PCOS | Polycystic Ovary Syndrome |
| PRD | Projected Rotation Date |
| OSD | Officer of the Secretary of Defense |
| SAMMC | San Antonio Military Medical Center |
| SHCP | Supplemental Health Care Program |
| TAMC | Tripler Army Medical Center |
| U.S. DHHS | United States Department of Health and Human Services xiii |

| WAMC | Womack Army Medical Center |
|--------|--|
| WRNMMC | Walter Reed National Military Medical Center |
| ZIFT | Zygote Intrafallopian Transfer |

EXECUTIVE SUMMARY

The U.S. Navy seeks to retain qualified women, but women face unique challenges in the Navy. The previous secretary of defense, Ash Carter, acknowledged that one of the main reasons women reported for leaving the military is the lack of balance between work and family. Women in professional fields, including Navy officers, often make a tradeoff between career and family, delaying childbirth for the "opportune moment." Significant career demands may occur during a woman's most fertile years and at the expense of her ability to conceive, resulting in the need to seek fertility assistance. This study advances understanding of the unique decisions military women make pertaining to fertility and provides recommendations to help the Navy retain qualified women.

This study explores the personal experiences and perceptions of 30 active-duty female naval officers who have used or considered using fertility services. The qualitative research approach allowed the researcher to examine a vital, and yet heretofore missing, perspective, the first-hand experiences of active-duty female naval officers who have used or considered using assisted reproductive technology (ART) services. The study documents participants' experiences and examines the emotional, physical, and monetary costs they experienced.

The experiences of the women in this study varied based on treatment, treatment location, experience with loss, level of support from command and family as well as type of career. Many of the participants experienced barriers to pregnancy related to medical concerns, partner-related issues, and the inability to conceive for unknown reasons. Participants' commitment to the Navy and time limits imposed by biological clocks, shore duty, permanent change of station, required trainings, and deployments exacerbated the barriers to pregnancy they faced and added to the emotional, professional, physical, and monetary costs they experienced. Participants often postponed pregnancy to fulfill their Navy commitments and avoid actions associated with stigmas surrounding pregnancy in Navy culture. Participants' responses show that planning a pregnancy and meeting Navy commitments is complex, especially when plans are restricted to specific windows of time. No matter how much participants planned to get pregnant during a certain window, their bodies did not always comply.

Participants experienced emotional, monetary, professional and physical costs along their journey. Emotional costs, which participants often did not share or hid from others, were the most prevalent. Participants did not always take the time to grieve their loss of a child or loss of childbearing years. While financial costs were not as burdensome for dual military and couples with two incomes, for those who did not have a significant amount of disposable income, the financial burden was more significant. Most participants received the support that they needed from their commands during their pursuit of parenthood; however, the level of support varied by command. The costs, likewise, varied among participants. While maintaining privacy was important for participants, they found that there were benefits from sharing experiences with others who have gone through treatments. Sharing their experiences functioned as an invaluable resource as women were able to gain knowledge about treatments, receive emotional support throughout their experience, and find hope in the examples of women who experienced similar situations.

Because of their experiences, the majority of the women's perceptions of pregnancy and a Navy career changed over time. The participants provided recommendations, based on their experiences, for changes to procedures and policy that could help to lessen the burden and costs that women endure when pursuing parenthood through fertility assistance treatments. Recommendations included the following:

- Access to treatments and information regarding treatments should be more readily available.
- Fertility treatments should be covered under Tricare.
- Women should receive education on the barriers to pregnancy and their options to preserve fertility earlier in their naval careers.

Women willingly serve their country as they honorably wear the cloth of our nation. This service to country often comes at the expense of their most fertile childbearing years, which is not usually the case for their male counterparts. The uniquely demanding commitment required for military service ticks away at women's biological clock such that female naval officers are electing to pursue or preserve fertility through the use of fertility treatments. This pursuit comes with emotional, professional, physical, and monetary costs that women often do not share, due to stigma and the desire to maintain privacy, and that the Navy, thus, does not acknowledge or address.

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To my advisors, Dr. Kathryn Aten and Dr. Robert Eger, thank you for embarking on this journey with me. If I were a betting woman, I would bet that you never imagined that you would be discussing reproductive organs and fertility in a business school. Thank you for allowing me to pursue this topic and for seeing its value. Your mentorship, support and encouragement mean more than you will ever know. I could not have made it through this without you.

To the 30 women in this study and those who desired to volunteer, words cannot begin to express my gratitude, appreciation, and respect for each and every one of you. I consider myself lucky to serve with this group of phenomenal, strong, and courageous women. The stories of your careers and your pursuit of parenthood will forever be a part of me. Thank you for trusting me with your journey.

To my amazing friend, A.L., your journey brought this topic to life for me and inspired me to share the stories of other women pursuing parenthood through the use of fertility treatments. Thank you for your friendship and for allowing me to be a part of your journey.

I would also like to thank the following individuals, departments, and organizations for their support and assistance: Lieutenant Christine Cairoli, Lieutenant Elyse Pertot, MD, Lieutenant Commander Philip Clark, Major Genevieve Studer, Lieutenant Commander Megan Potter, Rebecca Pieken, Celine Lai, Rikki Nguyen, Bryan Hudgens, Jennifer Heissel, Navy Survey Office, Naval Postgraduate School (NPS) Institutional Review Board, NPS Library Staff and the women of the Female Navy Officer Facebook group. Thank you for your support, all that you have done, and all that you will continue to do.

To my family and friends, thank you from the depths of my heart. Your support means the world to me and I could not have made it this far without you.

I. INTRODUCTION

The Navy wants to retain women, but women face unique challenges. The previous secretary of defense, Ash Carter, acknowledged that one of the main reasons women reported for leaving the military is the lack of balance between work and family. Secretary Carter stated, "at 10 years of service, when women are at their peak years for starting a family, women are retained at a rate 30 percent lower than men across services" (Carter, 2016). "Studies have documented the negative financial impacts of high turnover among military personnel, highlighting the importance of addressing early attrition among women service members from an organizational perspective" (Dichter & True, 2015, p. 187). Industry recognizes that women must strike a balance between parenthood and profession and has taken appropriate measures to retain women in the workforce. The Navy needs to explore these trends as the potential exists to lose talented women to industries offering more competitive benefits.

Women in professional fields, including Navy officers, often make a tradeoff between career and family, delaying childbirth for the "opportune moment." Significant career demands may occur during a woman's most fertile years and at the expense of her ability to conceive, resulting in the need to seek fertility assistance. Fertility assistance insurance coverage is limited for both the civilian sector and the military, which results in substantial out-of-pocket costs. Some corporations have acknowledged the tradeoff women make, as well as the associated costs (Lorenzetti, 2014). In response, they have implemented company-sponsored egg freezing and other fertility assistance programs (Lorenzetti, 2014).

"The majority of military personnel are in the prime of their child-bearing or fathering years: Nearly half of all enlisted personnel are under age 26, with the next largest group, 22 percent, being ages 26 to 30. More than 42 percent of officers are between the ages of 26 and 35" (Kime, 2016). These individuals face the unique challenge of balancing family planning with operational requirements, permanent change of station (PCS) every two to three years, and hazardous work environments.

For women, who "currently comprise 14% of active-duty forces and 20% of new military recruits" (Dichter & True, 2015, p. 187), pregnancy can result in consequences such as deferment from operational tours, disqualification from flight status and certain training environments, transfer of command if serving aboard a ship, and maternity leave of absence. These factors can disrupt career progression if they occur at critical points within a women's career. These critical points include, but are not limited to, department head tours, operational tours, flight status qualifying tours, and special assignment tours. For dual-military families, the challenges are even more significant. These women must account for their spouses' operational tours and geographical separation from their spouses resulting in periods during which they cannot attempt to become pregnant.

For women on active-duty, the timing of pregnancy is critically important as most will only stay at a command for two to three years. The *Navy Guidelines Concerning Pregnancy and Parenthood* instruction stipulates, "Service members who plan to expand their family should take into account personal and career factors. Planning pregnancies to coincide with assignments to non-operational or non-deployable or shore duties may minimize career disruption and reduce mission impact due to gapped billets in operational units" (Department of the Navy [DoN], 2018). Getting a better understanding of the experiences of women who are attempting to follow these guidelines will help the Navy retain and recruit women as they compete with industry for highly qualified personnel.

Compared to their civilian counterparts, male and female service members have a lower rate of childbirth and tend to have their children later (Teachman, Tedrow, & Anderson, 2015). This disparity is even larger for women in the military, which suggests "that the constraints of a military occupation are particularly strong for them" (Teachman et al., 2015, p. 604). Teachman et al. (2015) continue,

The particularly large negative effect of current service on the childbearing of women suggests that the military has not provided an environment where women can match the family life-course patterns of their civilian counterparts. Military jobs appear to be more inconsistent with childbearing than are jobs in the civilian sector. This is the case for both men and women, although the effect is particularly large for women. (p. 604)

Having children later in life may result in additional challenges such as fertility decline and complications associated with advanced maternal age. In addition to these challenges, Figure 1 shows some of the most common diagnoses for patients who have used assisted reproductive technology (ART) (National Center for Chronic Disease Prevention and Health Promotion, 2010). These challenges, in their varying forms, cause many women to seek out fertility assistance treatments.

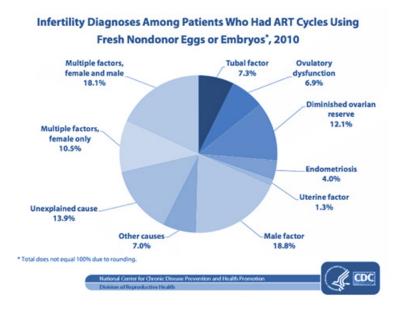


Figure 1. Common Infertility Diagnoses. Source: National Center for Chronic Disease Prevention and Health Promotion (2010).

In January of 2016, Defense Secretary Ash Carter announced the military would cover sperm and egg preservation for active-duty service members under a pilot program (Kime, 2016; Office of the Secretary of Defense [OSD], 2015). The defense secretary announced that the pilot program applied to any service member upon request (Kime, 2016; OSD, 2015). This announcement was in response to Public Law 113–291, which required the Defense Secretary to "Report on Efforts to Treat Infertility of Military Families" (Carl Levin & Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, 2015, pp. 131–132). In the response to section 729, Defense Secretary Carter stated, "in recognition of the unique requirements and demands of military service as well as the

potential impact to military readiness and mission capability, the Department continues to evaluate potential increased access to reproductive health services" (Office of the Secretary of Defense [OSD], 2016). To date, the increased access described by Defense Secretary Carter does not exist. "The Department placed program implementation on hold in July 2016 because it was unfunded. The Department decided not to fund the program and canceled it in December 2017" (OSD, 2018, p. 3).

The objective of this study is to get a better understanding of the unique decisions military women make pertaining to fertility and to provide recommendations that could help the Navy retain women rather than losing them to industry. This study documents the personal experiences and perceptions of active-duty female naval officers who have used or considered using ART services and examines the emotional, physical, and monetary costs. The findings of this study provide valuable insights into the experiences and perspectives of female service members, which can improve policy and decision-making.

The remainder of this report is organized as follows:

- Chapter II (Fertility Assistance Treatments and Trends) describes the context that affects women making the decision to pursue parenthood with fertility assistance during their Navy careers.
- Chapter III (Method) describes the overall research approach and data collection and analysis methods.
- Chapter IV (Analysis) explores the data, providing examples and key themes.
- Chapter V (Findings) provides a description of the participants' journeys and participants' recommendations.
- Chapter VI (Conclusion and Discussion) presents a summary of the conclusions, a discussion of the study, and recommendations for future research.

II. FERTILITY ASSISTANCE TREATMENTS AND TRENDS

This chapter provides context necessary to understand the experiences of women considering or seeking fertility assistance during their Navy careers. The chapter includes four sections. I begin with an overview of the types, outcomes, and utilization rates of fertility treatments. Next, I describe infrastructure related factors relevant to Navy women including the costs and availability of fertility assistance treatments. Then I outline initiatives by civilian and military organizations. Finally, I describe societal trends that are affecting individual behavior and organizational initiatives.

A. FERTILITY ASSISTANCE

There are many different types of fertility services that can be utilized to increase one's fecundity. Each of these services has varying outcomes that are dependent on many other factors. Though the outcomes of fertility assistance treatments vary, the utilization of these treatments has increased over time due to an increase in the age at which individuals are having children.

1. Types of Fertility Assistance

The different types of fertility treatments include medication, artificial insemination, and assisted reproductive technology (ART). These treatments range from least invasive, aimed at recruiting more eggs and encouraging ovulation, to most invasive—ART, which are surgical procedures. Both men and women are included in the infertility work up. Treatments target immediate and future options.

Medication treatments only target ovulation. In this type of treatment, doctors use fertility drugs to control a woman's reproductive hormones in order to stimulate the growth and release of mature eggs (WebMD, n.d.b). "Fertility drug use has increased markedly in developed countries and is expected to increase further due to more and more women postponing attempts to become pregnant until after 35 years of age" (Diergaarde & Kurta, 2014). The most common drugs are clomiphene citrate (an oral medication) and gonadotropins (an injectable medication; WebMD, n.d.b). Use of these medications is then coordinated with timed intercourse or intrauterine insemination to ensure sperm is available when a mature egg is ovulated.

Artificial insemination, also known as intrauterine insemination (IUI), is when the sperm is directly introduced into the uterine cavity. Typically, the semen is optimized or "washed" and then inserted through the woman's cervix with a pipelle (WebMD, n.d.a). This procedure is often done in conjunction with medications to induce ovulation or recruit more than one mature egg (Womack Army Medical Center, n.d.).

The semen goes through a sperm washing process to separate the sperm and create a concentrated sperm specimen. The sperm is then inserted in the cervix or in the uterus via catheter (Womack Army Medical Center, n.d.). The woman lies on her back for at least 15 minutes post insemination (Womack Army Medical Center, n.d.). The most common form of artificial insemination is IUI, which involves the placement of sperm into the uterus (WebMD, n.d.a). Figure 2 depicts the IUI process (Redrock Fertility, n.d.).

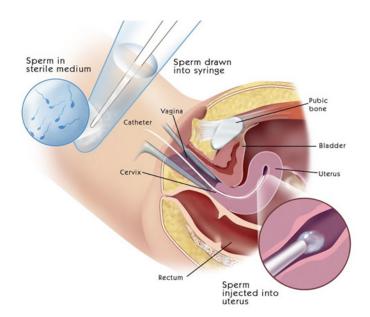


Figure 2. Intrauterine Insemination Process. Source: Redrock Fertility (n.d.).

ART includes treatments that require the handling of both egg and sperm (Medline Plus, n.d.). "ART includes in vitro fertilization-embryo transfer (IVF-ET), gamete

intrafallopian transfer (GIFT), zygote intrafallopian transfer (ZIFT), and frozen embryo transfer (FET)" (Society for Assisted Reproductive Technology, n.d.). Society for Assisted Reproductive Technology continues, "ART may be recommended when other treatments (such as intrauterine insemination) have not been successful or when there is severe male factor infertility, severe endometriosis or tubal obstruction" (Society for Assisted Reproductive Technology, n.d.). Of these, the most common form of ART is in vitro fertilization (IVF), which makes up approximately 99% of ART procedures performed (Society for Assisted Reproductive Technology, n.d.).

IVF is when the sperm and egg are combined outside of the body and then inserted into the uterus after an embryo has been formed (WebMD, n.d.c). Prior to egg retrieval, the woman injects a series of hormones and undergoes close monitoring with blood work and ultrasound to stimulate egg growth (WebMD, n.d.c). Additional medication is given to assist the development of the egg or eggs (WebMD, n.d.c). The eggs are retrieved before they leave the follicles of the ovaries and if they are at the right stage of development, they are combined with sperm outside of the body (WebMD, n.d.c). The fertilized eggs are monitored for up to five days until the embryo reaches a certain stage in development (WebMD, n.d.c). Once the embryo is ready, the patient returns to the hospital to have the embryo transferred back into the uterus with a catheter (WebMD, n.d.c). After remaining in bed for several hours, the woman is released and given a pregnancy test a few weeks after the procedure (WebMD, n.d.c). The IVF process is depicted in Figure 3 (In Vitro Fertilization, IVF Process, and Embryo Transfer [IVF-ET], n.d.).

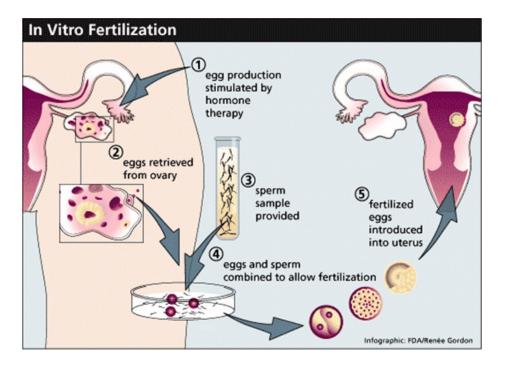


Figure 3. In Vitro Fertilization Process. Source: IVF-ET (n.d).

Intracytoplasmic sperm injection (ICSI) may be performed as a part of the IVF treatment. "ICSI refers to the laboratory procedure where a single sperm is picked up with a fine glass needle and is injected directly into each egg" (SIMS IVF Dublin, n.d.). This process is depicted in Figure 4 (SIMS IVF Dublin, n.d.).

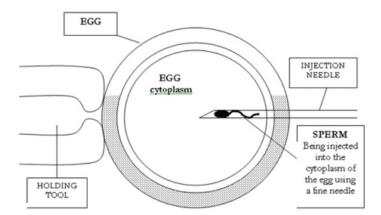


Figure 4. Process of Intracytoplasmic Sperm Injection. Source: SIMS IVF Dublin (n.d.).

Cryopreservation is a type of fertility assistance that provides future options for those wishing to conceive. "Cryopreservation is the freezing of reproductive tissue—eggs, sperm or embryos—for later use with ART. There are a variety of reasons that cryopreservation may be done, both electively or as part of a course of infertility treatment" (Midwest Fertility, n.d.). Cryopreservation for women involves the use of fertility medication to stimulate the ovaries to produce eggs, which are then retrieved upon maturity (Midwest Fertility, n.d.). The eggs are placed in a solution and cryopreserved (Midwest Fertility, n.d.). An embryo can also be cryopreserved by fertilizing the retrieved egg with sperm (Midwest Fertility, n.d.). Ovarian tissue, as well as sperm, can also be cryopreserved. Figure 5 depicts the cryopreservation process for ovarian tissue, embryos, and oocytes (Oncofertility Consortium, n.d.).

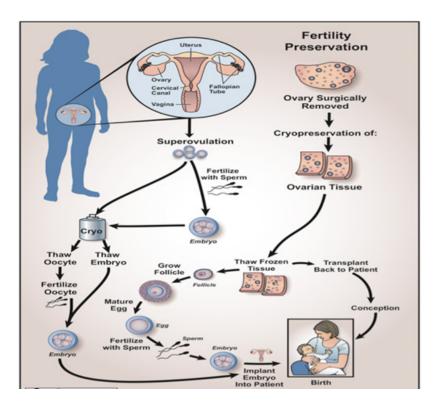


Figure 5. Cryopreservation Process for Ovarian Tissue, Embryos, and Oocytes. Source: Oncofertility Consortium (n.d.).

2. Outcomes of Fertility Assistance Treatments

As it pertains to treatments targeting only ovulation, "success rates for induction of ovulation vary considerably and depend on the age of the woman, the type of medication used, whether there are other infertility factors present in the couple, and other factors" (Advanced Fertility Center of Chicago, n.d.b).

Success rates for artificial insemination vary. Some reasons why the chances might be lower that it will work are: older age of the women, poor egg or sperm quality, severe case of endometriosis, a lot of damage to fallopian tubes, usually from long-term infection, and blockage of fallopian tubes—IUI will not work in this case. (WebMD, n.d.a)

As with most fertility treatments, the likelihood of having a successful pregnancy increases if the eggs are retrieved and frozen when women are younger (Shaw, n.d.). Figure 6 provides the outcomes of ART cycles when fresh non-donor eggs and embryos are used (National Center for Chronic Disease Prevention and Health Promotion, 2015).

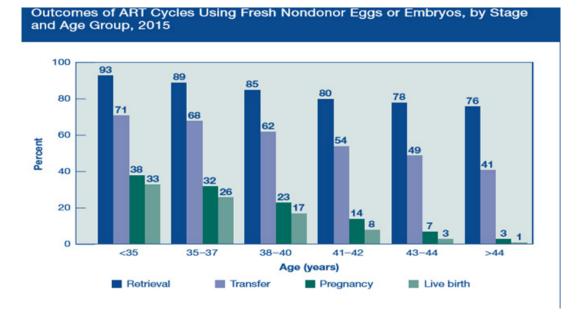


Figure 6. Outcome of ART Cycles Using Fresh Non-Donor Eggs or Embryos, by Stage and Age Group, 2015. Source: National Center for Chronic Disease Prevention and Health Promotion (2015).

As shown in Figure 6, live births significantly decrease as women age. This figure demonstrates the importance of retrieving eggs earlier rather than later.

3. Utilization Rates of Fertility Assistance

Because women are waiting to have children until later in life, more women are seeking fertility assistance, as age is a major contributing factor for fertility problems. "About one-third of couples in which the woman is over 35 have fertility problems" (U.S. Department of Health & Human Services [U.S. DHHS], 2018). This increase in age "decreases a woman's chances of having a baby in the following ways: her ovaries become less able to release eggs, she has a smaller number of eggs left, her eggs are not as healthy, she is more likely to have health conditions that can cause fertility problems, and she is more likely to have a miscarriage" (U.S. DHHS, 2018). "Since 1995, the number of ART procedures performed in the United States and the number of infants born as a result of these procedures have nearly tripled" (Sunderam et al., 2015). Figure 7 provides a breakdown of ART use by age group in the United States.

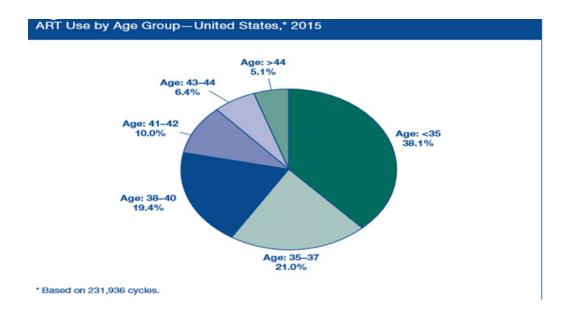


Figure 7. United States ART Usage by Age Group. Source: National Center for Chronic Disease Prevention and Health Promotion (2015)

Figure 7 shows that 61.9% of individuals in the United States who use ART are 35 and older (National Center for Chronic Disease Prevention and Health Promotion, 2015).

Over a 5-year period, FY 2010 through FY 2014, 7,181 active-duty service members received infertility services in Military Treatment Facilities (MTF) and in purchased care and utilized 7,431 episodes of fertility services. Of those, 2,444 episodes were for ART services (IVF; artificial insemination; and cryopreservation). (OSD, 2016, p. 8)

The number of active-duty service members utilizing fertility assistance outside of MTF without a referral is inconclusive.

B. INFRASTRUCTURE FOR FERTILITY ASSISTANCE

The costs and availability of fertility assistance are likely to influence women's decisions. Dependent on the type of treatment, number of treatment cycles, and facility utilized, the costs vary and have the potential to create a financial burden. In addition, patients may have to commute to receive services.

1. Cost of Fertility Assistance

Table 1 provides the 2018 cost of fertility treatment at the Advanced Fertility Center of Chicago and national averages for those pursuing fertility treatments in the civilian sector (Advanced Fertility Center of Chicago, n.d.a). IUI can cost \$300–\$1,000 per cycle (Advanced Fertility Center of Chicago, n.d.a). Clomid medication costs \$10–\$100, and monitored Clomid cycle costs range from \$800 to \$4,000 per cycle (Advanced Fertility Center of Chicago, n.d.a). Fertility hormone injections can range from \$1,500 to \$6,000 per cycle (Advanced Fertility Center of Chicago, n.d.a). IVF plus ICSI costs \$13,000 per cycle on average (Advanced Fertility Center of Chicago, n.d.a). IVF plus ICSI costs \$13,000 per cycle on average (Advanced Fertility Center of Chicago, n.d.a). IVF is a very costly procedure that can be a tremendous financial burden (Wu, Henne, & Propst, 2012). The "average cost of an IVF cycle in the U.S. is \$12,499, according to the American Society of Reproductive Medicine. This price will vary depending on where you live, the amount of medications you're required to take, the number of IVF cycles you undergo and the amount your insurance company will pay towards the procedure" (WebMD, n.d.c). The national average for IVF, as listed on Table 1, is \$11,500 per cycle (Advanced Fertility Center of Chicago, n.d.a). For egg freezing "a cycle costs about \$10,000. Storage of the eggs runs around \$500 a year, and an egg thaw cycle is about \$5,000. IVF is then needed to fertilize the egg and implant the embryo—that costs around \$10,000" (Shaw, n.d.). The national average for egg freezing, as listed on Table 1, is \$7,500. "The cumulative cost of failed cycles and medications can total up to \$85,000 per live birth" (Wu et al., 2012, p. 745). For IVF, the out of pocket cost per couple at the MTF is approximately \$5,000 for each IVF cycle (OSD, 2016).

Table 1.Costs of Fertility Treatments for Advanced Fertility Center of
Chicago and National Averages. Source: Advanced Fertility
Center of Chicago (n.d.a).

| | | Cost Range | C | Dur Fee | |
|--|---------------------------------|----------------------|---------------|----------|--|
| Cost for a new visit to reproductive endocrine fertility specialist | | \$200-400 | | \$250 | |
| Cost for pelvic ultrasound to evaluate uterus and ovaries | | \$150-500 | \$150-500 \$2 | | |
| Cost of fertility related blood tests | | \$200-400 v | | varies | |
| Cost for semen analysis - sperm test | | \$50-300 | | \$70 | |
| Costs for a hysterosalpingogram (HSG - dye test of tubes) | | | | varies | |
| Many (or all) of these tests & office visits are often covered by healt More information about fertility testing and <u>initial infertility e</u> | | ns | | | |
| Costs of Basic Fertility Treatments | | | | | |
| | | Approximate Range in | USA | Our Fe | |
| Clomid medication cost | | \$10-100 | | Same | |
| Ionitored Clomid cycle cost (bloods and ultrasound testing, sperm processing and insemination) | | \$800-4000 | | \$1100 | |
| ntrauterine insemination, IUI cost, artificial insemination cost | | \$300-1000 | | \$550 | |
| Nonitored injectable FSH cycle cost (bloods and ultrasound testing, sperm processing and insemination) | | \$1500-6000 | | \$2200 | |
| Cost of injectable fertility drugs for an injectable FSH cycle | | \$1000 - 3500 | | Same | |
| sost of injectable fertility drugs for an injectable PSH cycle | | (avg \$1600) | | Same | |
| More information about <u>fertility treatments</u> | | | | | |
| Cost of Advanced Fertility Treatments - IVF and Donor Eg | | | | _ | |
| | Cost Range / Average | | 0 | Our Fee | |
| Egg freezing cycle costs for fertility preservation (all inclusive) | \$7,500 National average | | \$ | \$6,100 | |
| VF, In Vitro Fertilization cycle costs (all inclusive) | \$11 500 | | \$10,000 | | |
| n Vitro fertilization plus ICSI costs (all inclusive) | \$13,000 | | \$ | \$11,500 | |
| Cost of injectable fertility meds for an IVF cycle | \$1500-6000 (Average \$3500) | | : | Same | |
| Cost of IVF cycle with donor eggs includes all agency, donor & legal fees, etc.) | \$28,000 | | \$ | 26,000 | |
| J , , | \$1500-4000 (Average \$2300) | | | Same | |

These costs vary depending on the facility and applicable insurance coverage. Because of the lack of coverage by most insurance companies, most, if not all, of the costs are out of pocket. These costs are much less if treatments are obtained at an MTF.

2. Military Treatment Facilities Offering ART

The following six MTFs offer varying ART services at a reduced cost to service members and to their spouses (Wu et al., 2012): Walter Reed National Military Medical Center (WRNMMC), Bethesda, Maryland; Tripler Army Medical Center (TAMC), Honolulu, Hawaii; Womack Army Medical Center (WAMC), Fayetteville, North Carolina; Madigan Army Medical Center (MAMC), Tacoma, Washington; San Antonio Military Medical Center (SAMMC), San Antonio, Texas; and Naval Medical Center San Diego (NMCSD), San Diego, California (OSD, 2016). These facilities work closely with the private sector and may refer a patient to the private sector, depending on their in-house capabilities (OSD, 2016). WAMC's website indicated that IVF is offered at their facility four times per year and that there is a waitlist of six to 12 months (Womack Army Medical Center, n.d.). Prior to the initial appointment, the patient must have a referral, have current lab and medical exams, submit justification for requesting the service, obtain a basic infertility work up within 12 months of the appointment, and meet other requirements depending on their current health status (Womack Army Medical Center, n.d.). Females who are 35 years of age or older or any age with a previous failed IVF at a civilian facility are classified as immediate referral (Womack Army Medical Center, n.d.). Any services not covered by Tricare are the responsibility of the patient (Womack Army Medical Center, n.d.). The report from the secretary of defense acknowledged that limited access to the six MTFs offering ART services, change in permanent duty station, temporary duty, deployments, ability to take time off from work, financial burden, lack of ART specialists, and separation from services were all barriers that prevent and/or disrupt service members from receiving ART (OSD, 2016).

3. MTF Budget Allocation for Infertility Treatments

Table 2 provides a breakdown of the budget allocation for the provision of infertility treatment inclusive of services provided at the MTF and those provided through the civilian sector. As can be seen, the five-year cost of the program totaled \$37,086,498 (OSD, 2016).

Table 2. Current Cost to the DoD for Providing Infertility Services to Members and Dependents. Source: OSD (2016)

| budget All | ocation to | or Direct Care and Allowed | | | | | | |
|------------------------------------|-----------------------------|------------------------------|-------------|-------------|-------------|-------------|--------------|----------------|
| | | | FY10 | FY11 | FY12 | FY13 | FY14 | Five Yr. Total |
| Direct Care | 2 | | | | | | | |
| | In-vitro Fe | ertilization | \$200,214 | \$325,191 | \$351,472 | \$307,118 | \$321,036 | \$1,505,031 |
| | Artificial Insemination | | 89,567 | 121,671 | 144,192 | 155,680 | 167,378 | 678,488 |
| | Other Infe | ertility Treatment | 2,705,407 | 2,976,030 | 2,708,883 | 3,160,219 | 3,590,392 | 15,140,931 |
| | Cryoprese | ervation | - | | | | | |
| | Tests, Dru | gs, and Infertility Dx Costs | 1,967,157 | 2,411,687 | 2,343,770 | 2,378,500 | 2,835,522 | 11,936,636 |
| • | Total | | \$4,962,345 | \$5,834,579 | \$5,548,317 | \$6,001,517 | \$6,914,328 | \$29,261,086 |
| Purchased | Care | | | | | | | |
| 1 | In-vitro Fe | ertilization | - | | - | | - | - |
| | Artificial Insemination | | | | | | | |
| | Other Infertility Treatment | | 578,053 | 583,041 | 642,153 | 599,225 | 587,006 | 2,989,478 |
| | Cryopreservation | | - | | | - | - | |
| | Tests, Dru | gs, and Infertility Dx Costs | 887,190 | 858,378 | 921,596 | 1,080,851 | 1,087,919 | 4,835,934 |
| | Total | | 1,465,243 | 1,441,419 | 1,563,749 | 1,680,076 | 1,674,925 | 7,825,412 |
| Total costs for Fertility Services | | \$6,427,588 | \$7,275,998 | \$7,112,066 | \$7,681,593 | \$8,589,253 | \$37,086,498 | |

4. **Tricare Insurance Coverage of Fertility Assistance**

Tricare may cover some services related to ART if it is "medically necessary and combined with natural conception (Tricare, n.d.). Medically necessary includes the following services, which were taken directly from the Tricare website:

- Diagnosis and treatment for an illness or injury of the male or female • reproductive system.
- Care for erectile dysfunction if it has physical cause. •
- Diagnostic services: •
 - 0 Semen analysis
 - Hormone evaluation
 - Chromosomal studies
 - Immunologic studies
 - Special and sperm function test
 - Bacteriologic investigation (Tricare, n.d.)

The following services are listed as not covered on the Tricare website:

- Artificial or intrauterine insemination •
- Any costs related to donors or semen banks •
- Reversal of tubal ligation or vasectomy, unless medically necessary
- Care for erectile dysfunction from psychological causes, including: • • Depression

- o Anxiety
- o Stress (Tricare, n.d.)
- Non-coital reproductive procedures, services, or supplies, including:
 - In vitro fertilization
 - o Gamete intrafallopian transfer
 - o Zygote intrafallopian transfer
 - Tubal embryo transfer (Tricare, n.d.)

Non-coital services are not covered by Tricare for active-duty service members or those utilizing Tricare basic. These services include artificial insemination, in-vitro fertilization, cryopreservation, and any other ART service (OSD, 2016).

These services are excluded from both ADSMs under the Supplemental Health Care Program (SHCP) and all other Tricare beneficiaries under the Tricare Basic Program because they are elective in nature and do not specifically diagnose or treat an illness or injury, as required by statute. (OSD, 2016, p. 2)

This does not apply to active-duty service members who require ART due to injuries or severe illnesses, inclusive of, but not limited to blast injuries and cancer treatments (OSD, 2016). For those who suffered a Category II or III injury or illness while on active-duty, "lost natural reproductive ability due to [the aforementioned] illness or injury, and [have] a lawful spouse," (Tricare, n.d.) Tricare may cover the following:

- Sperm retrieval
- Egg retrieval
- In vitro fertilization
- Artificial insemination
- Blastocyst implantation
- Cryopreservation and storage of embryos (Tricare, n.d.)

For Category II and III patients, Tricare does not cover fertility preservation or surrogacy (Tricare, n.d.). Tricare's lack of ART benefits aligns with those of the civilian sector. There are only 15 states that mandate partial or full insurance coverage for infertility assistance (Wu et al., 2012). Additionally, Veterans Affairs does not cover most ART services, including IVF, cryopreservation, and egg transfer, but it does cover artificial insemination for veterans (OSD, 2016).

C. CIVILIAN AND MILITARY INITIATIVES

Both civilian and military organizations have recognized the importance of being at the forefront of providing family-friendly benefits that could make them premier employers. Toward this end, both military and civilian organizations have explored offering fertility assistance benefits. In the following section, I review strategic initiatives by the civilian sector as well as the military's Force of the Future Pilot Program: Initiative #35, "Egg and Sperm Cryopreservation."

1. Initiatives by the Civilian Sector

Apple and Facebook offer their employees up to \$20,000 towards eggs preservation and storage in order to give their employees more freedom in choosing when to start families (Lorenzetti, 2014). Both Apple and Facebook also offer coverage for fertility treatments for their employees as well as coverage for adoption (Lorenzetti, 2014). Table 3 lists employers with the most generous IVF coverage during 2017–2018 (Fertility IQ, n.d.).

| EMPLOYER | INDUSTRY | TOTAL POINTS | COVERAGE (100,000 POINTS MAX) | "UNLIMITED COVERAGE" BONUS | ACCESSIBILITY BONUS | COVERAGE DETAILS | PRE- AUTHORIZATIONS |
|---------------------------|------------|-----------------|----------------------------------|-------------------------------|------------------------|---------------------|------------------------|
| Bain | Consulting | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| BCG | Consulting | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| Chanel | Fashion | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| Bank of America | Finance | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| KKR | Finance | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| Ropes and Gray | Legal | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| Gates Foundation | Non-Profit | 125,000 | \$100,000 | None | 25,000 | 4 Cycles + PGS | None |
| Facebook | Technology | 125,000 | \$100,000 | None | 25,000 | 4 Cycles + PGS | None |
| Pinterest | Technology | 125,000 | \$100,000 | None | 25,000 | 4 Cycles + PGS | None |
| Spotify | Technology | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| Pyramid Hotel Group | Travel | 125,000 | Unlimited | 25,000 | None | Unlimited | Standard |
| City of Baltimore | Government | 120,000 | \$120,000 | None | None | 6 Cycles | Standard |
| Conair | Consumer | 100,000 | \$100,000 | None | None | \$100,000 | Standard |
| Unilever | Consumer | 100,000 | \$75,000 | None | 25,000 | \$100,000 | None |
| Johns Hopkins | Education | 100,000 | \$100,000 | None | None | \$100,000 | Standard |
| LinkedIn | Technology | 100,000 | \$75,000 | None | 25,000 | 3 Cycles + PGS | None |
| University of Maryland | Education | 100,000 | \$100,000 | None | None | 5 Cycles | Standard |
| News Corp | Media | 100,000 | \$75,000 | None | 25,000 | 3 Cycles + PGS | None |
| Google | Technology | 100,000 | \$75,000 | None | 25,000 | 3 Cycles + PGS | None |
| Salesforce | Technology | 100,000 | \$75,000 | None | 25,000 | 3 Cycles + PGS | None |

Table 3.Employers with Most Generous IVF Coverage.
Source: Fertility IQ (n.d.).

As can be seen in Table 3, the employers provide from \$75,000 to unlimited coverage for IVF services. In addition to the companies listed, many other companies within the retail, industrial, non-profit, consumer products, academic, pharmaceutical, legal, media and

publishing, fashion, banking and financing, consulting and auditing, and technology sectors offer IVF benefits to their employees (Fertility IQ, n.d.).

Some have stated that Apple and Facebook's decision to offer egg preservation benefits was for the benefit of the company, not for the benefit of the employee (Mertes, 2015). Critics have also stated that it sends the message that employers are pushing and expect women to delay childbearing for the sake of their careers (Mertes, 2015; Harwood, 2015). Others would say that companies offer these benefits "to attract and retain good employees and to make sure they remain healthy (and thus productive)" (Mertes, 2015, p. 1205).

2. Force of the Future Pilot Program: Initiative #35, "Egg and Sperm Cryopreservation"

Because of the importance placed on achieving work and family balance, Defense Secretary Carter acknowledged that the military needs to be more like the civilian sector in modernizing the workforce in order to retain and recruit (Carter, 2016). Defense Secretary Carter said, the pilot program to freeze eggs would

provide greater flexibility for our troops who want to start a family, but find it difficult because of where they find themselves in their careers. Particularly, for women who are mid-grade officers and enlisted personnel, this benefit will demonstrate that we understand the demands upon them and want to help them balance commitments to force and commitments to family. We want to retain them in the military. (Carter, 2016)

Defense Secretary Carter acknowledged,

by providing this additional peace of mind for our young service members, we provide our force greater confidence about their future, while providing one more tool to make the military a more family-friendly employer, an employer that honors the desire of our men and women to commit themselves completely to their careers, or to serve courageously in combat, while preserving their ability to have children in the future. (Carter, 2016)

The DoD's cryopreservation program was "set forth in House Report 115–200, pages 145–146, to accompany H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018" (Office of the Secretary of Defense [OSD], 2018, p. 2). The DoD

estimated the costs to the DoD for the full two-year pilot program to be at \$56.9M (OSD, 2018).

"For the two-year demonstration pilot, DoD active-duty service members (members on active-duty for more than 30 days) with no pending deployment would be allowed up to three attempts to successfully collect, freeze, and store their own eggs or sperm in the TRICARE Network at zero out-of-pocket expense" (OSD, 2018, p. 3). Program features can be found in the *Report to Congressional Armed Services Committees on Force of the Future Pilot Program on Cryopreservation of Gametes*. According to this report, "the Department placed program implementation on hold in July 2016 because it was unfunded. The Department decided not to fund the program: Initiative #35, "Egg and Sperm Cryopreservation" suffered a similar fate to the Family Act, which was introduced in Congress in 2011. The Family Act was introduced with the purpose of providing an income tax credit for 50% of qualified fertility treatment expenses not to exceed \$13,360 (Wu et al., 2012; S. 965, 2011). Congress did not enact the Act; therefore, the Act died (S. 965, 2011). In 2013, the bill was reintroduced, but again was not enacted (S. 881, 2013).

D. SOCIETAL TRENDS

Societal trends influence the use of fertility assistance treatments. The subsequent section looks at the shift in average age of mothers, postponement of pregnancy, impact of having children later, and social egg freezing.

1. Increase in Average Age of Mothers

According to the Center for Disease Control (CDC), the average age of first-time mothers in the United States has increased over the last four decades (Mathews & Hamilton, 2014; Cil, Turkgeldi, & Seli, 2015). The shift is primarily due to the increase in first time mothers who are 35 and older (Mathews & Hamilton, 2014). This trend has also been seen in the United Kingdom (Cil et al., 2015). Figure 8 shows the increase in age for first births from 1970 to 2012.

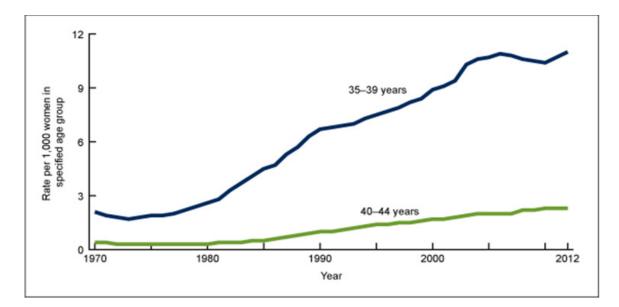


Figure 8. First Birth Rates by Selected Age of Mother: United States, 1970– 2012. Source: Mathews & Hamilton (2014).

2. Postponing Pregnancy

Studies have shown that women postpone childbearing for a host of reasons including the desire to meet educational and professional goals, getting married later in life, and the increasing prevalence of divorce (Cil et al., 2015; Hodes-Wertz, Druckenmiller, Smith, & Noyes, 2013).

Women who find themselves in their late 30s and involuntarily childless are in some respects merely experiencing the consequences of dutifully following the social and professional scripts laid out for them: to become educated, to contribute to the economy, and to prioritize work over family. (Harwood, 2015)

Women in executive level careers sometimes choose between maintaining career progression and starting a family (Ezzedeen & Ritchey, 2009). Similarly, women in the military are often faced with the same challenging choices due to the pressures and demands of their careers during their childbearing years. "Women who are less well educated and in occupations that are relatively less advantaged often start families before those in categories that would be considered more advantaged" (Ralston, Gayle, & Lambert, 2016, p. 8).

3. Impact of Delaying Childbirth

Delaying childbirth has individual and national effects. The years during which individuals typically build the foundation of their careers align with women's most fertile years. This "biological reality" that is unique to women often results in women having to make decisions that men do not (Ezzedeen & Ritchey, 2009, p. 390). On average, age-related infertility in women increases in the early 30s and progressively accelerates at 35 and older (Cil et al., 2015). Because women are having children later, combined with a decline in fertility, many women will either not have children or will require IVF to bear children as they get older (Cil et al., 2015). The inability to conceive has psychological impacts on women and those around them (Cil et al., 2015). Childlessness for women carries greater stigmatization than it does for men (Cil et al., 2015).

According to the CDC, delaying childbearing has an impact on population growth and composition (Mathews & Hamilton, 2014). The average number of children that are born per family in developed countries is less than the rate required to maintain the population (Cil et al., 2015). Though having children at a later age increases the risk of medical complications, older mothers are more financially stable and tend to have a higher level of education (Mathews & Hamilton, 2014).

4. Social Egg Freezing

Oocyte cryopreservation, or egg freezing, allows women to preserve their eggs for donation or to have children at a more advanced age. The motivation for egg freezing can be categorized as medical or social. Medical egg freezing refers to egg freezing in response to medical conditions such as ovarian illnesses, premature menopause, endometriosis, and blocked fallopian tubes (Baldwin, Culley, Hudson, & Mitchell, 2018). Social egg freezing refers to egg freezing for non-medical reasons. The emphasis in press accounts of cryopreservation is on egg freezing as a means for professional women to delay pregnancy in pursuit of their careers (Alter, 2015; Fletcher, 2009; Rosenblum, 2014); however, other motivations such as failure to find the right partner also drive the decision (Baldwin et al., 2018; Cil et al., 2015). Social egg freezing is considered an elective procedure in the United States (Cil et al., 2015). "Much of the media representation of social egg freezing portrays women as undertaking this process because they have chosen to purse their career and 'delay' motherhood," (Baldwin et al., 2018, p. 12) which could be viewed as selfish. Public opinion surveys have shown that social egg freezing is not viewed positively with one study's participants indicating that they do not consider this treatment natural (Sandor, Vicsek, & Bauer, 2017). However, the reasons for social egg freezing by women and the demographics of these women have not been studied extensively (Baldwin et al., 2018; Cil et al., 2015). The limited extant studies find that among the women studied, the primary reason for seeking social egg freezing is not to excel in their careers (Baldwin, 2017); rather, the women studied are more influenced and concerned by social and medical factors (Baldwin et al., 2018; Cil et al., 2015).

"Running out of time" is expressed in two ways: running out of time to find a partner, a social factor (Baldwin, 2017; Baldwin et al., 2018; Cil et al., 2015; Harwood, 2015), and running out of time according to the woman's biological clock, a medical factor, also known as age-related fertility decline (Baldwin et al., 2018; Cil et al., 2015). Women have preferences regarding how they want to raise their children; for example, many women want to be in a committed relationship with a partner who wants to procreate and jointly raise children under one roof. These preferences, along with not wanting to settle for the wrong partner for the sake of having children and not wanting to risk having regrets in the future, influence the choice to seek social egg freezing (Baldwin et al., 2018).

Cil et al. (2015) analyzed the limited literature on why women freeze their eggs, and found that other social concerns, including education, career, finances, and increased divorce rates, influenced their choices to pursue social egg freezing. In their analysis, Cil et al. (2015) found that according to two other studies, "when women were asked why they did not want children earlier, nearly all studies showed not having a partner was the most common reason (88%), followed by professional (24%) and financial (15%)" (Cil et al., 2015, p. 430). They also noted that "in a meta-analysis evaluating the experiences and perceptions of women regarding advanced maternal age and delayed childbearing, education and career goals and gaining financial security and stability in their relationships before having children were the most common reasons for postponing motherhood" (Cil et al., 2015).

al., 2015, p. 430). These social concerns that cause delays in pregnancy are some of the reasons why women freeze their eggs (Cil et al., 2015).

Age-related concerns and the biological clock also influence women's fertility assistance choices. Some women view social egg freezing as a way to ensure that they do not have regrets later in life if they decide in the future that they want children, but could not conceive naturally (Baldwin et al., 2018). By freezing their eggs, women preserve their chances of having children at a later phase in their life (Baldwin et al., 2018). Egg preservation at a younger age may "decrease the number of inefficient IVF attempts at advanced ages, providing higher success rates with the use of better quality oocytes obtained at a younger age" (Cil et al., 2015, p. 431). Women are sometimes unaware of the complexity of fertility and the increase in risks and complications as they approach and enter advanced maternal age (Cil et al., 2015). Unfortunately, some women misjudge their ability to have children later in life or depend on the ability to have children with the assistance of ART, which may be unsuccessful (Baldwin et al., 2018; Cil et al., 2015).

E. CONCLUSION

Women are having children later in life, and more women are using fertility assistance. An understanding of the complexity of fertility assistance treatments and the trends that result in women utilizing these services sheds light on the highly complex, multi-faceted journey that many career women experience in their pursuit of parenthood. Each individual journey varies based on the type of treatment utilized. These treatments come with a substantial price tag that is typically covered by the individual pursing the treatment rather than insurance. This can result in a huge financial burden. This financial burden is exacerbated when multiple treatments and treatment cycles are needed and when facilities are not located nearby. Fertility assistance initiatives have been undertaken by the civilian sector in order to recruit and retain women in the workforce, which helps alleviate the financial burden on these individuals and their families.

The military's cancelled egg and sperm cryopreservation pilot program initiative was a step in the right direction as it would have been an excellent recruitment and retention tool. This has been acknowledged by the Department of Defense, yet these services are considered elective and are not covered by Tricare. If the program or other programs similar to the civilian sector were adopted and funded, they would provide women serving in the Armed Forces with options that allow them to pursue parenthood while excelling in their careers. It would also show that the DoD truly understands the challenges and tradeoffs that women, especially officers and senior enlisted who have put having children on hold for the sake of pursuing career milestones and supporting the mission, face daily. Women who need these services are faced with an emotional, physical, and financial cost that could be lessened if the military covered theses services.

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III. METHOD

A. RESEARCH APPROACH

This research is an exploratory, interpretive study using primarily analysis of qualitative data, supplemented with financial data. This study utilizes thematic analysis of semi-structured, conversational interviews to explore how female naval officers experience the emotional, physical, and monetary costs of fertility assistance (Denzin & Lincoln, 2011). "Ethnographic interviewing involves two distinct but complementary processes: developing rapport and eliciting information. Rapport encourages informants to talk about their culture. Eliciting information fosters the development of rapport" (Spradley, 2016, p. 78). Financial data provides context and background for the results of the qualitative analysis. Utilizing a combination of qualitative and quantitative data allows for data to be used together for reinforcement (Creswell, 2009).

In designing this study, my goal was to document the perceived physical, monetary, and emotional cost of fertility assistance for women serving in the U.S. Navy. I wanted to obtain detailed responses to the questions:

- What are your experiences with assisted reproductive technology?
- How have these experiences affected you personally, financially, and professionally?
- What factors of military service contributed to your decision on when to pursue childbearing?
- What is the organizational culture when it comes to childbearing and how did this affect your experience?
- What changes to Navy policies would you recommend?

This study received approval from the Naval Postgraduate School Institutional Review Board. Because the interviews were conducted with individuals from various commands, the study required approval from the Navy Survey Office.

B. DATA SOURCES AND COLLECTION

1. Interviews

This study utilized semi-structured, conversational interviews. According to Rubin & Rubin (2012), semi-structured interviews

- 1. facilitate long conversations between the researcher and the interviewees,
- 2. allow the researcher to ask a few specific questions to learn about a particular topic and ask follow-on questions when needed, and
- 3. encourage detailed and rich answers.

This qualitative approach allowed service members to express their experiences and perspectives without confinement. The researcher built a rapport with the interviewees to ensure they were comfortable sharing their honest opinions and experiences. The interviews captured the women's lived experience including their experiences and perceptions of the following: emotional and physical costs associated with choices to facilitate career progression, organizational barriers, and monetary costs of any treatments they have undergone.

2. Participants

The researcher recruited 30 active-duty participants using the Navy female officer Facebook group. This study targeted female naval officers because of the age at which these women enter the service and the demands of their career paths. Studies have shown "occupation-based social categories for women are associated with different childbirth patterns, suggesting for instance that educational and occupational advantage can act as a double [childbearing] delaying mechanism for women" (Ralston et al., 2015, p. 8). Ralston et al. (2015) continue, "Women who are less well educated and in occupations that are relatively less advantaged often start families before those in categories that would be considered more advantaged" (Ralston et al., 2015, p. 8). Navy officers are required to have a bachelor's degree at a minimum to enter the service. Female officers' educational levels and leadership activities are similar to executive women who have been studied in the civilian sector, thus allowing comparison to extant literature. However, the structured career path, deployments, and commitment inherent in military service make the Navy an extreme case regarding family and career planning. Qualitative studies of extreme contexts are particularly revelatory because extreme cases reveal social processes that in less extreme contexts would not be visible (Eisenhardt, 1989; Pettigrew, 1990).

I requested active-duty volunteers from the Facebook group with an expectation of 10 participants from the ranks of O1–O3, 10 O4 participants, five O5 participants, and five O6 and above participants. If unable to find the requested number of participants within each category who had or had planned to have ART services, I anticipated the need to adjust the numbers within each category. "The idea behind qualitative research is to purposefully select participants or sites that will best help the researcher understand the problems and the research question" (Creswell, 2009, p. 178). I obtained 30 volunteers within the first three hours of posting the study. Due to limitations on the allowed number of interviewees, I ceased recruitment efforts upon reaching 30 volunteers. All 30 volunteers were successfully contacted. After initial contact, I did not receive replies from four of the volunteers, and two volunteers were disqualified for the study due to being in retired status. Six additional volunteers were identified and contacted based on the residual responses received post suspending the request for participants. All six of those volunteers consented to participate in the study, which brought the total participant count to 30. Eleven O1-O3 participants, 13 O4 participants, four O5 participants, and two O6 participants volunteered for the study.

3. Approach

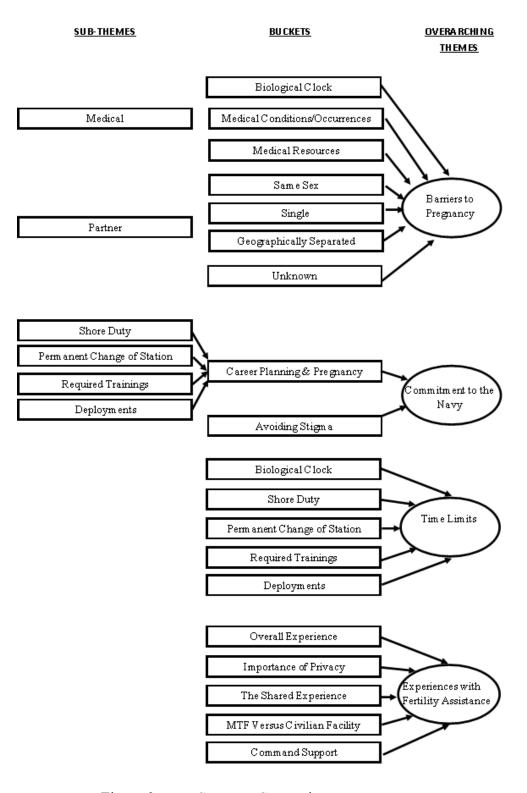
The interviews were conducted via telephone, WhatsApp, and Facebook Messenger. The researcher expected each interview to take up to one hour. The researcher digitally recorded each of the interviews with the permission of each participant. All interviews were conducted by a single individual. Each recording was transcribed upon the completion of each interview. The transcription of 30 interviews, which ranged from 30 minutes to one hour and four minutes, resulted in 494 normal paragraphing pages of typed transcription.

C. DATA ANALYSIS APPROACH

After transcription, while continuing to interview, I read each of the transcripts and made notes of initial impressions. Upon completion of the interviews, I reread each of the transcripts and my notes on initial impressions to gain a broad understanding of the content. I then began open coding, reading through the transcripts and marking segments of text that related substantial and/or repetitive, words, experiences, and perceptions. I focused on words, experiences, and perceptions related to the interview questions:

- What are your experiences with assisted reproductive technology?
- How have these experiences affected you personally, financially, and professionally?
- What factors of military service contributed to your decision on when to pursue childbearing?
- What is the organizational culture when it comes to childbearing and how did this affect your experience?
- What changes to Navy policies would you recommend?

Throughout this initial review, I read the transcripts several times and marked 940 segments of conversational interview text from several lines to several paragraphs long. The 940 segments were further analyzed and labeled according to themes and key ideals and thoughts. Through successive readings of the text and discussion with colleagues, I grouped the segments of text into six sub-themes, 19 buckets, and four categories that represented key themes. The themes, buckets, and sub-themes are displayed in Figure 9. Finally, I compared responses across ranks and career paths in order to identify common themes amongst peer groups. I also reviewed military instructions and guidance pertaining to pregnancy and compared these to the interview data.





D. DATA LIMITATIONS

Because there were only 30 participants and all interviewees were naval officers, the results are exploratory. In addition, because these are personal interviews, the responses are necessarily personal and convey the subjective experiences of participants. Additional studies will be required to ascertain the degree to which the findings generalize to Navy women or other populations. The findings, however, illuminate important issues that should be considered by policy makers and for further study.

IV. ANALYSIS

This study captures the journey of female naval officers in the pursuit of parenthood as well as the personal costs associated with this journey. This chapter presents the analysis including a description of participants and their journeys. The subsequent chapter presents the answers to the primary research question, what are the personal costs associated with the journey, and participants' recommendations.

A. DESCRIPTION OF PARTICIPANTS

The following section describes the demographics of the participants and is summarized in Table 4: Demographics of Participants. The 30 participants included two surface warfare officers, one human resources officer, three naval aviators, two full-time support naval aviators, one information professional officer, two intelligence officers, two medical corps officers, two dental corps officers, six medical service corps officers, three judge advocate generals, and six nurse corps officers.

| DEMOGRAPHIC | TOTALS | PERCENTAGES | |
|--|--------|-------------|--|
| RANK | | | |
| LT | 11 | 36.67% | |
| LCDR | 13 | 43.33% | |
| CDR | 4 | 13.33% | |
| CAPTAIN | 2 | 6.67% | |
| DESIGNATOR | | | |
| 1110 – Surface Warfare Officer | 2 | 6.67% | |
| 1200 – Human Resources Officer | 1 | 3.33% | |
| 1310 – Naval Aviator | 3 | 10.00% | |
| 1317- Full-time Support-Naval Aviator | 2 | 6.67% | |
| 1820- Information Professional Officer | 1 | 3.33% | |
| 1830- Intelligence Officer | 2 | 6.67% | |
| 2100-Medical Corps Officer | 2 | 6.67% | |
| 2200-Dental Corps Officer | 2 | 6.67% | |
| 2300 – Medical Service Corps Officer | 6 | 20.00% | |
| 2500-Judge Advocate General's Corp Officer | 3 | 10.00% | |
| 2900 – Nurse Corps Officer | 6 | 20.00% | |
| PRIOR ENLISTED | | | |
| Yes | 4 | 13.33% | |
| No | 26 | 86.67% | |
| MARITAL STATUS | | | |
| Single | 6 | 20.00% | |
| Single/Previously Divorced | 2 | 6.67% | |
| Married | 17 | 56.67% | |
| Married-Same sex | 3 | 10.00% | |
| Married/Previously Divorced | 2 | 6.67% | |
| DUAL MILITARY | | | |
| Yes | 11 | 36.67% | |
| No | 11 | 36.67% | |
| N/A | 8 | 26.67% | |
| CHILDREN | · · | | |
| Children / Not Currently Pregnant | 12 | 40.00% | |
| No Children/Not Currently Pregnant | 11 | 36.67% | |
| Children/Currently Pregnant | 4 | 13.33% | |
| No Children/Currently Pregnant | 3 | 10.00% | |
| HIGHEST LEVEL OF EDUCATION | | | |
| Bachelors | 4 | 13.33% | |
| Masters | 18 | 60.00% | |
| Doctorate | 8 | 26.67% | |

Table 4.Demographic Breakdown

The participants' educational backgrounds varied. Four hold bachelor's degrees, 18 hold master's degrees, and eight hold doctoral degrees. Four of the participants were prior enlisted. The marital status of participants also varied with six women identifying as single, two were single/previously divorced, three were in same sex marriages, and 19 were in opposite sex marriages with two of the 19 identifying as previously divorced. Of those who identified as being married, 11 were dual-military. With the exception of deployments, eight of the 11 indicated that they have been co-located with their spouse throughout their marriages. Out of the three remaining dual-military participants, one participant indicated being co-located with her spouse six out of nine years (66.67% of the time), the second was co-located one and a half out of four and a half years (33.33% of the time), and the third was co-located with her spouse three and a half out of five years (70% of the time).

The motives for joining the military varied amongst the participants. The primary motives participants identified were benefits, family, and a desire to serve. Some participants identified more than one motivator. Some were motivated to join because of the opportunities and benefits provided by the Navy, including scholarships, loan repayment, tuition assistance, healthcare, travel, and unique career opportunities. Others wanted to follow in their family's footsteps by serving their country, attending the Naval Academy, or having the same occupation in the military as a family member who previously served. Some desired a career that was specific to the Navy, wanted to follow their passion, pursue their childhood dream, or were influenced by a life event. Some were encouraged by a friend, family member, or mentor to join the Navy. One transferred to active-duty from the reserves, one transferred from another branch of service because her initial service downsized, and one transferred from another service in order to better facilitate co-locations with her spouse. The participants have diverse and highly complex backgrounds. Regardless of their reasons for choosing a military career, all participants have served their country selflessly.

Participants' years of service ranged from two to over 25 years. Figure 10 shows the number of participants by years of service, and Figure 11 shows the percentages falling within each year category. Of all of the participants, 34% have 10 years or less of service, 56% have between 11–20 years of service, and 10% have 21–25 years of service.

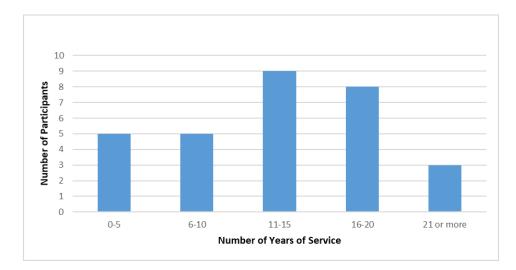


Figure 10. Participants by Years of Service

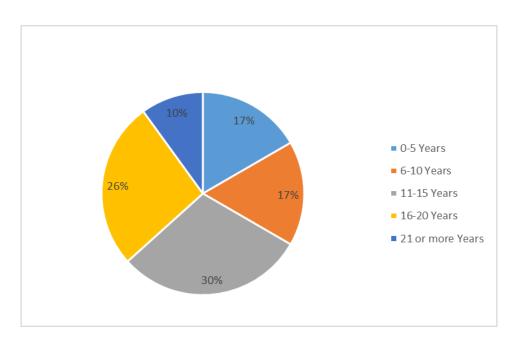


Figure 11. Percentage of Participants by Years of Service

Career paths and duty stations varied based on specialty, but included staff, department head, command, overseas, and instructor tours as well as duty under instruction, training commands, operational commands, and deployments. The years of operational experience ranged across the participants with some having zero operational experience to others spending the majority of their careers operational and/or overseas.

Some of the women have had sea/shore rotations their entire careers while others are in career fields that do not have sea/shore rotations. Though there were a host of extraordinary achievements, a few of the women broke glass ceilings by being the first women to function in roles that were previously only open to men. One participant recalled,

I realized that the Army wasn't [going to] let me do what the Army does because I was a woman. The Navy on the other hand was [going to] let me do what the Navy does, which means be on a ship despite the fact that I was a woman and despite the limitations that were there in the early 90s. So, that and the fact that it was—the technical aspects of the Navy were much more appealing.... (Interviewee, personal communication)

When asked if they currently have children, 12 participants (40%) indicated that they have at least one child and are not currently pregnant, 11 participants (37%) indicated that they do not have children and they are not pregnant, four participants (13%) indicated that they have at least one child and are currently pregnant, and three participants (10%) indicated that they have not had children, but they are pregnant. Figure 12 shows the participants' parental status, and Figure 13 shows the breakdown by percentages.

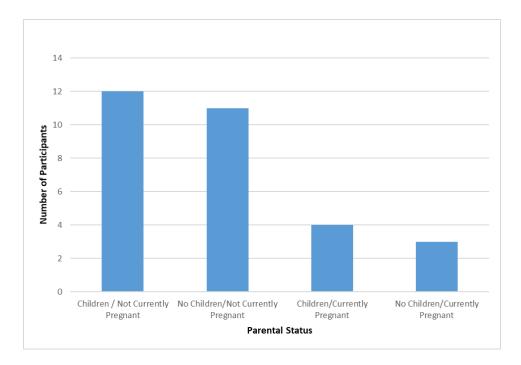


Figure 12. Participants by Parental Status

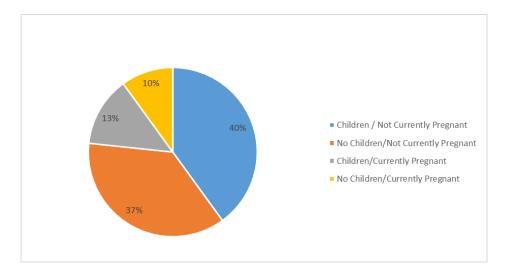


Figure 13. Percentage of Participants by Parental Status

The participants' age at time of live childbirths ranged from 29 years of age to 44 years of age. Three of the women have had multiple live childbirths. Figure 14 shows a breakdown of the participants' age at time of childbirths, and Figure 15 provides the breakdown by percentages. As can be seen in Figure 6, 69% of the women had their children at advanced maternal age. The average age and median of first childbirth was 36.2 years of age, which is advanced maternal age. This is consistent with the average age of first-time mothers in the United States increasing primarily due to the increase in first time mothers who are 35 and older (Mathews & Hamilton, 2014).

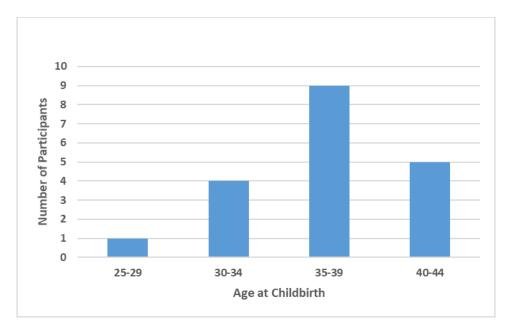


Figure 14. Participants by Age at First Childbirth

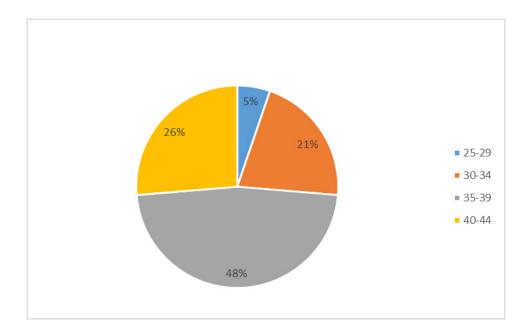


Figure 15. Percentage of Participants by Age at First Childbirth

In addition, two women fostered and adopted children. One participant recapped her decisions regarding adoption and IVF as follows:

And by the time that they moved in they were four, five, and seven, and then I had to decide—I was old, right. I mean, how old was I then? I was at over 35, so that's advanced maternal age. And so, I had to decide if I wanted to be pregnant or not....And so, I was like, wow, is it okay to even try to be pregnant when we have, you know, three new children already? And that was a very difficult decision. I felt very selfish for wanting to have biologically related children. I was adopted as an infant, so I always knew that I wanted to grow my family through adoption. That was always something that I wanted to do ever since I was very small. It was one of my really embarrassing things that I would bring up on first dates in a way to weed out men because I just wasn't interested in developing feelings for someone who didn't [want to] do that. And my husband was completely supportive of anything that I wanted to do, IVF or not, you know, trying to conceive naturally or not, adopting only. He would have been supportive of whatever decision I made. But I decided that I wanted to be pregnant just to see what it was like. (Interviewee, personal communication)

When the participants were asked what things they wanted to have in place or wanted to accomplish prior to pursuing parenthood, the factors listed by participants included the following: financial stability, a stable partner or marriage, the right time in their career, a career or educational milestone, a support system, and the opportunity to spend time with their spouse prior to having a child.

B. EXPERIENCED BARRIERS TO PREGNANCY

The barriers to pregnancy that lead women to seek fertility assistance include inability to conceive due to medical, partner, and unknown reasons. These barriers are exacerbated for some female naval officers by the required commitment associated with serving in the Navy and Navy constraints on timing of career progression and deployments. Commitment and timing requirements are indoctrinated, and participants perceived accommodating these requirements as necessary to a successful Navy career. For many participants, the desire to succeed in their Navy careers, led to their postponement of pregnancy for the sake of mission. Experiencing these barriers creates emotional, professional, and monetary stressors. Figure 16 provides an illustration of the factors contributing to the use of fertility assistance in the Navy. This section includes a selection of quotes from participants depicting their experiences; additional quotes can be found in the appendix.



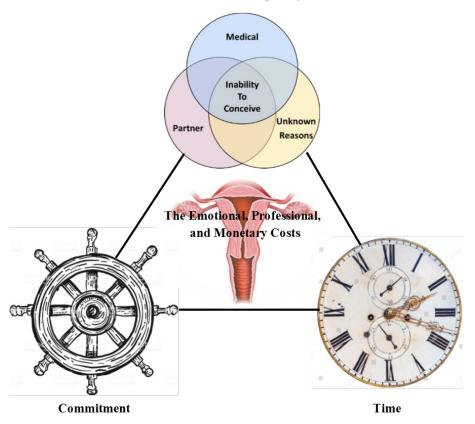


Figure 16. Factors Contributing to the Use of Fertility Assistance in the Navy

1. Medical Reasons

Medical related barriers complicated participants' ability to get pregnant. Upon further analysis, barriers provided by participants were categorized into three categories: biological clock, medical condition/occurrences and medical resources.

a. Biological clock

The term *biological clock* refers to the fact that as women age, their fertility declines, and they will eventually go through menopause. The age at which menopause occurs varies among women, but menopause cannot be reversed. Participants considered their biological clocks when making decisions about having children. As one participant explained,

So, physically I'm advanced maternal age, so I get more monitoring, which is nice. You know, I get a little bit more peace of mind, but I do...wonder what it would be like to be 26 or 27 and have that energy and sort of physical resilience...because now we're [going to] have three kids under four years old. (Interviewee, personal communication)

In addition, some fertility clinics would not treat women for infertility once they reached a certain age, as one participant noted:

So, I found a place in Jacksonville because there's only a couple places that do it. I found one of the places won't even do it if you're over 38, which is just so scary because I was 38 at the time. (Interviewee, personal communication)

Approaching the expiration of their biological clocks caused participants to reflect on what their journey would have been like if they had pursued parenthood. As experienced by some participants, advancing maternal age can lead to complications and eventually closes the door to experiencing pregnancy.

b. Medical conditions/occurrences

Medical conditions or occurrences refer to clinically diagnosed barriers. Many medical conditions affecting either partner can be a barrier to conception. Some participants found that medical conditions, often that they had been unaware of, contributed to their inability to conceive. Some of the participants proactively requested testing from their medical providers, while others went through fertility testing after they disclosed their plan to get pregnant in the future or their failed attempts at conceiving to their medical provider. The medical conditions participants identified include low ovarian reserve, poor quality of eggs, polycystic ovary syndrome (PCOS), endometriosis, tubal blockage, uterine fibroid, adenomyosis, premature ovarian failure, and polyps.

For example, as a direct result of an ectopic pregnancy, one participant had to have one of her fallopian tubes removed:

We decided during my husband's training tour that it was, like, the perfect time to try. And I did get pregnant right away. And it ended up an ectopic pregnancy....I had my tube removed—my right tube removed—in emergency surgery, and—so, that's where—you know, I just still was optimistic, like, I have another tube, we can do this. And I just let myself heal for a couple of months, and my husband and I were like, okay, let's try. (Interviewee, personal communication)

Medical conditions of participants' partners also affected the ability to conceive. For participants who met their husbands post vasectomy, the choice of having to utilize fertility assistance was evident. In addition, male partners of participants discovered male factor fertility issues such as low motility and low sperm counts. Having knowledge of the existence of male factor fertility issues helped guide the decision of one participant:

The doc put into the system a full fertility work-up, which was just fortuitous because it caught male factor infertility issue. So...the numbers were fine, but they weren't swimming, like the motility was low. So, anyway, that flagged it....When I came home [from deployment], we already knew that...if we were trying naturally, we were [going to] be at a disadvantage. It wouldn't be impossible, but it was—you know, now we felt, okay, we're over 30. We know we have some issues. Let's accelerate the process. And so, that's what led us down the path of IUI, and then eventually IVF. (Interviewee, personal communication)

These conditions created barriers to pregnancy and in some cases limited treatment

options, as is the case when the quality of eggs is an issue:

Unfortunately, I never have the quality of eggs where they can freeze or preserve them. So, every time I go through IVF, [we] start at the beginning where they're harvesting the eggs and going through all of that. (Interviewee, personal communication)

During fertility treatments, some participants experienced loss in a multitude of ways, including successful harvesting of eggs, but failure of embryo transfer, ectopic pregnancy, or miscarriages. Several women experienced multiple miscarriages.

And actually, the second round of Clomid and IUI, we do get pregnant, and then we had a miscarriage at about eight weeks. They're—all of them about eight weeks. And then a few months later, we get pregnant again...When we're able to start IUI again, we get pregnant again...and that one's a chemical pregnancy, but—you know, we get a positive test, but the HCG levels are going down, so that [was the second miscarriage]. And then...it's probably five or six months later... we continue. So, we do about six rounds of IUI. And then on that 6th round, we conceived again. And this time, that pregnancy seemed viable, and—so we had an ultrasound, and we see the heartbeat, and all was well there. At the end it—ultimately, we had a [miscarriage] at about 12 weeks. And so, at that point, we don't—this is the third miscarriage. They do a D&C, so they can take the products of conception to see if there's some genetic reason that we are not able to stay in the pregnancy...which is...inconclusive. So, at that point, they refer us to Walter Reed to IVF because at this point, they're like—if I was now, you know, 36, 37 years old probably—so, yeah, 37 years old, and they're like, you know, You're on this downward slope of your fertility, and we don't know the status of your eggs until we actually get the IVF to pull them out and see, so there's a reason why [we] keep getting a miscarriage. (Interviewee, personal communication)

Medical conditions and occurrences altered the experiences of the participants by posing unexpected challenges that resulted in physical and emotional costs. These conditions extended the time required to attain parenthood, resulted in the use of fertility treatments, and created monetary costs.

c. Medical resources

Lack of access to medical treatments and resources created barriers to pregnancy for participants. Fertility clinics, especially those located at the MTF, were not always located in close proximity to duty stations, which posed a barrier to pregnancy because gaining access to care required the individual to commute to the closest MTF to receive treatments. One participant explained,

I arrived [at a new duty station] and met with my new PCM, who's, of course, new to Navy medicine, and was like, I don't really know how this works. And I was like, let me tell you how it works. And so, I was like what I [want to] know is if you can refer me to a [local] facility...instead of me having to go all the way to Walter Reed. And the answer to that is no. They could refer a spouse of active-duty to a [local facility], but they cannot refer active-duty is what I was told. So, because I'm a single female active-duty, I have to now still travel to Walter Reed. (Interviewee, personal communication)

Dependent on the treatment, multiple appointments may be required, which means the individual will have to miss days and as is the case with some treatments, weeks from work. Dependent on the chain of command, work requirements, and time available, participants indicated that commuting may not be feasible. Even without the commute, participants expressed the difficulty of being able to schedule appointments around their work schedule. Their experiences varied based on the level of support received from their commands; some commands were more supportive than others. In situations where a civilian fertility facility is located within close proximity, which is not always the case, the individual may choose to access care through the civilian sector. As mentioned earlier, these treatments are more expensive in the civilian sector than they are at the MTF. Several participants indicated that they commuted to their nearest facility, which in some cases was a one- to four-hour commute and in the most extreme case required flying from Europe back to the United States for treatment at an MTF. One participant recounted,

We also are not anywhere near a military facility that offers the ART program assistance. I know Walter Reed is the closest one to us, but that still was, like, four hours without traffic. So, we knew we weren't [going to] be able to utilize any of the military-offered ART assistance. (Interviewee, personal communication)

Even when women attempt to plan for fertility treatments on shore duty, it is not easy to find the time to go to treatments, especially when the clinics are far away. One participant explained,

And there was not a civilian reproductive endocrinologist in Jacksonville, North Carolina. The closest one, I think, was Wilmington or Raleigh area. So, geographically, that was a challenge for us. It was a little over two hours each way between Lejeune and Fort Bragg. So, that obviously presented a logistical challenge.... I had several friends who, you know, had different challenges. Obviously, everyone's fertility journey is different, but it was challenging as a professional to get the time off from work...even though it is medical care...when you have your unit manager or someone saying you need to find your own replacement....They don't understand that—the fertility stuff is so time sensitive. Like, no, I can't do it the next day. And so, that really was a challenge... not being able to have, like, flexible work hours and stuff. (Interviewee, personal communication)

Another participant explained,

So, that two-hour drive, I had to do it, like, a ton of times and actually had to stay up there, like, overnight in a hotel just to get myself in for the egg withdrawal, which is actually an invasive procedure. So, I've had a lot of support. Like, if I needed to go on a Wednesday at noon up to the doctor during this month long, you know, process, my boss was like, Go. Take liberty, go. Like, you don't need to take leave, you don't need to worry, just go. I think other commands if you had...a boss who was not understanding or if you're more junior, you might have a hard time, like, leaving every week to go drive two hours for your appointments. But it's required if you're ...going through the process. Like, you can't deviate off the timeline

at all. So, I lucked out, but other people could have an issue with that....A lot of times, we are located, like, out in the middle of nowhere. And fertility clinics are not—they're in, like, major metropolitan areas for the most part. (Interviewee, personal communication)

Participant responses suggest that distance from treatment facilities and frequency of appointments can cause postponement of treatments. Oftentimes, participants required multiple cycles of treatments. Some participants postponed seeking treatment until they were stationed closer to a fertility facility, whether civilian or MTF. One participant recounted,

As I was getting ready to leave fellowship, I talked to the reproductive endocrinology clinic...about egg freezing because I knew—I was 33 years old at that point in time—I knew when I came back from my overseas tour, I was [going to] be 35. As a physician, I knew the risks of advanced maternal age and things like that, so I met with a reproductive endocrinologist about the potential of egg or embryo freezing at that point in time. And they did some tests. They found I had good reserves, so they said realistically they were just [going to] put me on the routine list. And if I wanted to come back and do treatments while I was [in Japan], I'd have to basically take leave and try and do it while I was overseas, which I didn't think was feasible...so when we came back from Japan...my wife and I decided to [begin treatment]—we had found a donor through California Cryobank. (Interviewee, personal communication)

Another participant recounted,

So, my husband and I discussed it, and, with Walter Reed being a two plus hour drive each way, we decided that really wasn't feasible because I still had to work. And when you're doing IVF, you have several appointments, you know, probably anywhere from eight to 10 appointments in a two-week period. So, it just wasn't [going to] work; I couldn't get two weeks or more off of work each time I needed to attempt an IVF cycle. And we knew with my odds that we probably weren't [going to] get pregnant on the first, second, or even third try. It was [going to] be a thing we were [going to] have to keep at it and keep at it until we just can't keep at it anymore because I have no eggs left. So, we decided to go out in town. And we had to foot the bill, the expense for that. And it was very, very expensive but ultimately worth it. (Interviewee, personal communication)

The interviews showed that medical barriers to pregnancy materialized from the inability to obtain information about treatments and the inability to access medical treatments. The lack of access to medical treatment was seen both in relation to geography

as well as in relation to being required to follow a "cookie-cutter" fertility plan as opposed to one unique to the participants. One participant recounted,

I go talk to medical, I totally get...the runaround. I ask what my options are for...freezing. They say, Oh, we're only available for people who have been hurt in combat. Or maybe we can give you a referral....It's pretty stressful to try to go through this while you're in a pretty competitive program for school....So, anyways, my time runs out—like, I graduate. The referral time was two and a half months between appointments....I'm not [going to] say that the medical staff was incompetent, but I'm going to say that they certainly didn't do anything extra to help the situation. (Interviewee, personal communication)

Another participant recounted,

We PCSed to our first duty station....So, we got settled in and started trying to get pregnant. At that point, I was 31. 30, 30/31...It took us a long time. We weren't seeing any kind of—like, we weren't getting pregnant, so I started with talking to the local clinic that I was assigned to. They had...their OBGYN department and I was required to go through that like, I guess through the fertility doc before I could move on to Tripler...So, I felt like I wasted a little bit of time with him, but, you know, they did all the blood tests. They decided that there might be a slight male factor, did all of the invasive tests to figure out if there was anything wrong with me. They put me on Clomid for one round and then Femara for one round with just natural means. Nothing happened, and so the doctor at the clinic decided, Okay, we've done this quite a while now. It's been at least one year of trying, so he referred me to the Reproductive and Endocrinology Institute or clinic at the hospital. (Interviewee, personal communication)

Medical resource barriers impacted the participants' experiences by adding additional stressors, such as commuting, delayed treatments, inaccessibility, and increased monetary costs.

2. Partner-Related Reasons

Having a same sex partner, being single, and being geographically separated from a partner, presented the participants with barriers to pregnancy. For participants in same sex marriages and for participants who were single, the absence of a male partner created the requirement to seek fertility assistance in order to pursue pregnancy. For participants who were geographically separated from their spouse, this absence impacted the timing of pregnancy and influenced treatment options.

a. Same sex

For participants in same-sex marriages, the use of fertility assistance is required for pregnancy. Participants carefully researched and analyzed their options for using known and unknown sperm donors as well as their treatment options. One participant recounted,

So, it took us a lot longer in, like, the lead up to having kids to decide to actually, like, purchase the sperm and, like, go forward with the process, because I knew as a—you know, as a gay woman that my options for conception are intrinsically linked to fertility treatments of some flavor. So, it took us kind of a lot longer than I had expected to, like, pick a sperm donor and be comfortable and, like, learn the whole process and understand our options. (Interviewee, personal communication)

For participants in same-sex marriages, finding a donor, choosing treatment options and deciding which spouse will carry the child add to the emotional cost of their experience.

b. Single

Many of the participants listed being married or in a committed and stable relationship as key factors they wanted to have in place prior to pursuing parenthood. For one participant the absence of marriage was a deal breaker for having children. She froze her eggs in hopes of using her eggs with her future husband.

I had looked at IVF back in San Diego, but with all of the deployments and the times, it didn't work. I was not keen on the idea of doing a donor at all. That was not something that I wanted to do. I knew I would either be married, or I would not have kids. So, I went up to Newport. I immediately went and talked to my primary care provider, and I said, Look, this is the first time I'm not [going to] be deployed anywhere. I want to do IVF. And I wanted to have my eggs harvested....She said, Well, technically, I can't put you in for an infertility consult because you're not having sex. She...put me in [to have my] follicle counts [checked] and my uterus lining just to make sure that everything was looking good. You know, standard fertility workup without calling it infertility. (Interviewee, personal communication)

While 73.3% of participants are currently married, the 26.7% who are currently single face a unique challenge of meeting, establishing, and sustaining a meaningful relationship while serving as an active-duty female naval officer. While participants acknowledged that this is challenging, they also related that it is not impossible.

Participants recounted the difficulty of finding a partner willing to relocate and accept the requirements of their career:

And it's also tricky because...it's harder to find a male spouse who is interested in letting your career kind of dictate some of the things like moving. Unless you're [going to] be a dual-military family. And I haven't really met anyone who's willing to kind of take on that type of situation or anyone that I'd like to stay with who would take on that situation. (Interviewee, personal communication)

Another participant explained,

So, I was roughly 25, and, you know, I was like, oh, I guess I'm [going to] be putting my dating life on hold for about two years. It's Guam. It's a small island. Ratio of male to female, let alone officer to enlisted was—is slim. I was actually the only single officer at my command for a good six months. So, those have been factors....I did return stateside...you know, other factors with building your career and things like that....I have had relationships end because they're like, well, you're moving. You're—eventually [going to] move, why start. And I'm like, oh great, that's awesome.... (Interviewee, personal communication)

Married participants also recounted that prior to meeting their spouse, they were concerned that they would not meet a partner that they could start a family with. Several currently married women explained that when they met their spouse, given their career demands, they had abandoned the prospect of meeting someone. As recounted by one participant,

[I] went to Bahrain honestly with the expectation that it would be another year to year and a half where I would not meet anybody because I was moving to an island in the Middle East, and, oddly, that is where I met my husband. (Interviewee, personal communication)

Another explained,

For the deployments, we were based in Lemoore, which is kind of the middle of nowhere California....It's really isolated....It's not good for having a life. So, I didn't want to date guys in my squadron....There was really nobody else to date—because we were out in the middle of nowhere....I was focused on flying and...maintaining my operational readiness....The deployments were kind of depressing and the combat experience was very real...Iraq twice and Afghanistan once from there..... So, I basically came off deployment, went right into [an up-tempo assignment] that was like going right back on deployment...went from

Lemoore, California, sort of total isolation to DC where I thought, oh, I'll get a life, you know, and I'll date and find a partner, you know, move on with our life. And that wasn't possible given the up-tempo.... So, towards the end of it...I did actually meet my husband at an event. So, it was... actually good that we were both military because we had a common language, a common experience, but without complications of being in the same command or anything. (Interviewee, personal communication)

Single participants also described how some people equated being single to being

able to take on extra duties.

So, people with kids it was like, Oh, you don't have kids. You can work Christmas. And you're like, What the hell? I still have a family, like... You know, things of that nature have been a challenge without children because I think that there's varying perceptions of, you know, what people assume your family life is [going to] be like. (Interviewee, personal communication)

Taking on more duties often means less time to have and enjoy personal activities that might lead to finding a partner. But, as one participant explained, that concern is not something she feels comfortable voicing:

You find that you're constantly the one who gets, you know, like, Oh, you don't have anyone to go home to. Why don't you do this? Or you don't have anything, so...—you know. It kind of becomes trickier... the longer you do that or the more people realize that you're in your 30's and you're...picking up rank, they kind of see you as being this career-oriented person, so kind of identify, like, Hey, this is where I want you to go next. And you're like, You do realize I have other goals other than just my career goals. But it's not really something you [want to] talk about with them because you're afraid—well, I'm afraid that it's kind of like, Oh, well if you're [going to] do that in your life, that means like eight months from now, I'm [going to] lose you for three months, and I don't want to give you this opportunity. So, you kind of see that, especially when you don't have any other support services. (Interviewee, personal communication)

For participants who are single, but desire to have a family, fertility treatments provide an avenue for starting a family. Some participants have chosen to cryopreserve their eggs in hopes of preserving their chances at having a child when they meet the right person, while others chose to pursue parenthood on their own through the use of donor sperm. The absence of a partner is a barrier to pregnancy that caused participants to rely on fertility assistance in order to pursue parenthood. One participant explained, I will say that I've come to realize as I've gotten older in the JAG Corps— I'm only specifically talking about the JAG Corps because that's all I really know—but as I get older and start stressing about children and stuff, I've reached out to people and people have reached out to me about alternatives. And it does seem like a lot of my peers—not a lot, but a surprising number have decided to start a family on their own without being married. I think that as attorneys in the JAG Corps, most of the women are very intelligent, very accomplished, and driven, and I think sometimes men are intimidated by that. And so, I found a lot of fantastic [older] females that have decided to just kind of stop waiting on finding the perfect spouse and [start] a family on their own. (Interviewee, personal communication)

One participant met her significant other a little later in life, and he expressed that he did not want to have any more children of his own, which led her to pursue parenthood on her own.

We had a talk about it. We agreed that, okay, he wasn't [going to] have to be a biological parent, but he knew—he'd always known that I wanted to be one, so I was [going to] go off and do it on my own. So... that was an unanticipated obstacle, you know. (Interviewee, personal communication)

Single women also face legal barriers in some countries. One single participant decided that she was willing to pursue the journey on her own, but because she was stationed in Italy, she was not allowed to pursue treatments without a male partner. She explained,

You know, if you're in Italy, and you're single, you can't do infertility because it's against the law. You can lie, which I was told. Like, All you need to do is bring this, like, the male, like, ID and lab results, and we can do it for you with this, you know, donor sperm. ...After [the miscarriage] ...I then pursued having IVF in Italy in January....And this time, I didn't want to travel so far, and so I went to the Italian fertility clinic and learned that it's illegal—the pope, you know—to do it for single females. Now, if I had a boyfriend, I only had to have a boyfriend. I didn't have to have a husband, I just had to have a boyfriend, it would be fine. I did not feel comfortable because I worked directly for the commanding officer of the hospital to lie to the Italian authorities about getting pregnant. So, I was like you know what? I will just do it when I get home. (Interviewee, personal communication)

The inability to find a suitable partner hindered participants' ability to pursue parenthood. This functioned as a significant barrier that led to them pursuing fertility treatments. For participants in countries such as Italy, the local law prohibits the usage of fertility treatments by single women, which further complicated their experience and resulted in additional emotional and monetary costs.

c. Geographically separated

Geographical separation from a spouse or significant other contributed to participants' inability to conceive and is a barrier to pregnancy as it limits their physical interaction with their partner and reduces the windows of opportunity. One participant wanted to start a family after getting married to a fellow naval air crewman, but the geographical separation made that impossible:

My husband and I were trying to have a family.... And during that tour, especially right after we got married, we never saw each other again. The command thought it would be in our best interest to keep us separated, essentially having him relieve me on deployment, so—the normal turnaround time...of...two or three months out on deployment, come back for three months or so, and then go out again. What they were doing was not even putting us in different areas. Like, me on deployment in one area and him deploying to an area and going to relieve me on my deployment. So, normally we get maybe three or four days together. And that happened for a long time. Pretty much the rest of our tour there, so... So, pretty messed up, so, needless to say, no babies there. On our next tour, he actually got out of the Navy....Upon checking into my next command, I got sent on a year deployment. (Interviewee, personal communication)

Though this participant and her dual-military spouse were both on sea duty at the same time, that's not always the case as the "One on Sea Duty/One on Shore Duty" paragraph of the MILPERSMAN 1300–1000 describes.

Whenever possible, [Projected Rotation Date (PRDs)] will reflect a rotation in which one member will be on sea duty while the spouse is on shore duty, and their PRDs will be matched to facilitate future collocation requests. It is imperative that military couples with dependents maintain a current and workable family care plan that can be utilized when needed. (Department of the Navy [DoN], 2016)

When one member is on sea duty and the other is on shore duty, geographical separations create a barrier to pregnancy as the individual who is on sea duty will be absent during deployments and underway periods. Interviewees, who were geographically

separated from their spouses had less chances to attempt conception and postponed pregnancy due to not seeing their spouse on a regular basis. They may not have seen their spouse when they were ovulating. Time continued to pass and the female participants grew closer to advanced maternal age. One participant explained,

I have a few good friends in the Navy who have run into a lot of the same things. Like, you know...a lot of us are dual [military]. Those are the people we meet and get married to a lot of us. And it's just a matter of being stationed together, like being together during, you know, the times when you're ovulating and stuff, like it's a very small window. So, a lot of my other friends have had some issues or waited until the upper thirties and have had issues. (Interviewee, personal communication)

Geographical separation limited and postponed pregnancy attempts by decreasing physical interactions between the participants and their spouses. These separations equate to lost time on the biological clock.

3. Unknown Reasons

Some participants tried to conceive naturally with their significant other, but were unable to do so. As a result, they sought medical attention. But tests could not pinpoint any medically related issues. The inability to conceive for unknown reasons is a barrier to pregnancy because a clinical cause could not be pinpointed, yet the participants were unable to conceive. Without a definitive cause, participants were left to wonder why they were having difficulty and what they could do differently. One participant explained,

And so, we did a full, fresh IVF cycle. We had five embryos that fertilized. Only one ever made it to a blastocyst. That's the one that was transferred. The rest never even made it to freeze. And the transfer was unsuccessful. At that time, I asked, you know, where do we go from here? Like, obviously, I felt like something was wrong because, again, they'd always be, like, y'all are normal, y'all are normal, we don't know why you can't get pregnant. (Interviewee, personal communication)

Another participant explained how not knowing the cause led to repetitive attempts:

So, now I get referred to Portsmouth Naval Hospital to kind of their infertility clinic....We go through all the normal tests. They can't find anything physically wrong, and so we move on to IUI. So...they put me on Clomid, and we start using...fertility assistance...but, really, for me, it was never a definitive—you know, there was never anything...that was

obviously wrong. And so, there was no explanation, so we kind of kept trying [for three years using fertility assistance]. And, you know, ultimately, you know, it worked out. (Interviewee, personal communication)

The inability to conceive for unknown reasons, led to costly repeated attempts at pregnancy as the participants could not pinpoint a cause for their lack of conception. These repetitive attempts were physical, emotionally, and monetarily taxing.

The majority of the participants did not anticipate these barriers to pregnancy. Some participants believed that since they were young and healthy and since family members and friends were able to conceive easily, there would not be any issues. One participant explained,

Both of us are healthy, nonsmokers, socially drinking, like, nothing huge, no family medical history....We had friends that...tried the first time at home, got pregnant. Tried the first time IUI, got pregnant. And for us, there's nothing medically wrong still, but it was very difficult for my wife....But we didn't foresee anything.... But then...realizing it's a lot more difficult obviously than you expect, especially being a healthy, young girl....So, it's...you never know what's [going to] happen essentially. (Interviewee, personal communication)

One participant recounted not anticipating barriers and realizing that those barriers may not have existed if she pursued pregnancy earlier. She explained,

I thought that, with me getting married in my early 30s, that I—you know, and I've been a very healthy person-never even had a cavity; never broke a bone...having a cold is the worst thing that...that ever happened to me medical-wise. So, I really didn't think I would have any issues or any barriers getting pregnant as long as I could time it right with my shore duty tour. And it was once I got to my shore duty tour, and we started trying that I discovered I had some medical issues that had developed. And those issues weren't there when I was younger, so had I... been trying to get pregnant as a younger woman, it would not have been an issue. But they were definitely barriers for me now, and that's the reason I ultimately had to turn to IVF to try to get pregnant. And even with IVF, my odds weren't great. But I'm thankful that it got us our-a beautiful son, so we have that. But, yeah, definitely experienced a lot of unanticipated barriers when I was trying to plan my pregnancy. And I spent the majority of the three-year shore tour just trying to get pregnant. (Interviewee, personal communication)

Another participant explained,

I mean, I thought—I was young, I was healthy. I didn't think there'd be any issues. My husband's a little older than me, but not by much....So, neither of us are at the point where I thought we would have problems. All of my friends got pregnant, like, super quick. So I really didn't think, given my age and health levels, that I'd really have any issues. (Interviewee, personal communication)

Many of the women indicated that they thought getting pregnant would be easier.

As shared by one participant,

You always [kind of] figure, especially in your 20s—my husband and I got married when I was 23—you know, you just do it when you want. Turns out once we started going through the IVF process that I had a low ovarian reserve. So, I was only 31 when we got my eggs harvested... so I basically had, like, 40-year-old ovaries instead of 30-year-old ovaries. So, I didn't produce as many eggs as maybe I should have. (Interviewee, personal communication)

One participant explained,

[In] North Carolina, where I'm from originally, sex [education] makes you think, you know, if a guy sneezes on you, you're [going to] get pregnant. (Interviewee, personal communication)

Another participant explained,

I had a very unrealistic expectation. When I married my husband, I met him at 38. Married him, you know, early 38. I was like, okay. I'm [going to] marry him, I will be 39 years old. We will [have]...two months to be able to get pregnant, so I could knock this baby out, you know, before I hit 40. Yeah, that's not exactly how it went. So...infertility was something that...I didn't know anyone who had struggled with it. All of my friends were...five years younger, had all had kids, you know. It wasn't something that anyone talked about. (Interviewee, personal communication)

Participants thought that once they stopped birth control, they would easily get

pregnant. One participant recounted,

I was totally naive, and I thought as soon as, you know, I took my IUD out that we'd be able to conceive. And it would be quick and successful because I wasn't really aware that, you know, as early [as]...mid-thirties people start to struggle. So, we didn't anticipate any issues. (Interviewee, personal communication)

Another participant recounted,

I expected to come off the pill and have a regular cycle and, you know, be able to get pregnant within a year. And that did not happen...it wasn't even close. It was really difficult. I wasn't having regular periods. I was diagnosed with PCOS, which didn't rear its ugly head until I came off of the pills. So, the pill essentially masked the symptoms of PCOS and covered them up. So, I didn't know I had it until I came off of the pill. (Interviewee, personal communication)

Others knew that they had a medical issue that might make it more difficult. One ticipant explained

participant explained,

I knew I only had one tube, so I thought, you know, maybe that would play a role, but I was pretty optimistic at the beginning. But then that optimism started to go away unfortunately. (Interviewee, personal communication)

There were participants who had either experienced a pregnancy before or who attempted to conceive over an extended period of time before consulting a medical provider. One participant recounted,

I got pregnant sort of accidentally. The birth control failed... This was not an intentional thing. But I got pregnant, so I thought, Oh, I could get pregnant. Unfortunately, it didn't turn out to be that way. I couldn't stay pregnant... And so, you know, as far as obstacles, I wasn't anticipating any. I thought, you know, my mom got pregnant with no problem. Her sisters did. My cousins did. I didn't think there would be an issue with me getting pregnant. It turns out I was wrong. (Interviewee, personal communication)

Another participant recounted,

It literally was during a routine Pap smear that I finally asked my doctor. I was like, Hey, look, I don't know when I should ask this question, but— You know, because we were kind of more considering doing—we were doing more natural family planning to prevent during the times where we wanted to [kind of] hold off. And so, I was just like, It's been almost five years since I stopped taking birth control, and we haven't had, like, a scare. Is this something that we should be looking into? And she's like, Yes, we definitely should be testing things for now. (Interviewee, personal communication)

The interviews showed that what participants expected their family planning experience to be did not align with what they actually experienced. One participant recounted, I always planned to have a family, and I didn't think that would be difficult. Career-wise, I mean, I certainly—honestly, I didn't expect to still be here 21 years later.... But family-wise...that probably is just the most—I don't know, the thing that I envisioned that did not—yeah, was the hardest to achieve I suppose. (Interviewee, personal communication)

Another participant recounted,

Well, I didn't expect it to be so hard. You try for a really long time not to get pregnant. And then when you do, you kind of expect it to happen and then, surprise, it doesn't. But, yeah, I think the hardest thing is like again, you know, you—you're like, Yay, we're here. We're [going to] try to start having a baby. And month after month goes by of negative pregnancy tests, and you're like, Goodness gracious. Like, what's going on? What are we doing wrong? What's wrong with us? You know, those kind of questions. And those are emotionally draining, and it becomes a real struggle. (Interviewee, personal communication)

Another participant explained,

You're growing up and you're thinking, oh, okay, I'll find someone, or, you know, I can just go get pregnant however I need to whether it's, you know, IVF if I'm single and I want kids. And it'll be great. It'll be easy, I'll just, you know, decide it's time. You know, [if] I stopped using birth control and a couple months later, you'll be pregnant. And it'll be great, like, because that's kind of the mindset everyone has. And that's not what happened...So, then you go through all the testing, and then they came back. And they say, You know what? We just don't know why you're having these issues...but hey, let's do this dye test because maybe this dye test will show us that, like, your tubes are blocked....And they come back and they go... We're not sure, but the dye was kind of slow, so you can either keep trying, or we can do exploratory surgery and see if you're tubes are blocked. But realize that if we get in there, and your tubes are too bad that we might just take them because it's-it might be too bad, and we can't fix it. So, now you're going, what do you mean my tubes might be too bad, and you have to surgically remove them, and then I don't have my fallopian tubes anymore? And I mean, so, now you're starting to think I just wanted to have kids, and now all of a sudden, it's this big production. (Interviewee, personal communication)

Some knew what to expect as they worked in medical careers, did lots of research,

or had friends who went through similar situations. As explained by one participant,

Well, I'm a very objective, scientifically-driven person, so once I was given this diagnosis by the flight surgeon and told that the only way I was going to have a family was through IVF and even with that my odds were not good, I knew that the first thing I needed to do was research my condition and research IVF and try to make all of my odds as best as possible. So, in terms of what my expectations were, I will say I was completely aloof to a lot of the things like egg freezing when you're younger and IVF and, you know, IUI's and other reproductive assistance technology that's available until that moment when I had that diagnosis. So, I had to kind of jump right in from having no expectations to building a set of expectations using what I know from science and what I'm learning as I'm reading in these, you know, journal articles and talking with doctors. And I had to build a set of realistic expectations, which, frankly, included that I probably wouldn't get pregnant, but that we wanted to try anyway. So, based on those expectations that I built, I would say I was wildly pleased with the outcome because the odds were not in my favor, and it did end up with a very healthy pregnancy and a very healthy baby. (Interviewee, personal communication)

In most cases, participants did not anticipate the barriers to pregnancy and time required to get pregnant. Their expectations and experiences did not align. The majority of the participants were focused on career progression, upholding their commitment to the Navy, and/or finding the right partner.

C. COMMITMENT TO THE NAVY

The barriers to pregnancy that exist for women in the general population are exacerbated for female naval officers due to the commitments required to serve in the Navy. Participants expressed fertility concerns as related to partners, medical, and inability to conceive for unknown reasons. While female executives in some civilian fields likely have similar concerns, the nature of military service demands an extreme commitment. Female naval officers are committed to one, male-dominated organization and have very structured career paths that require frequent relocations, completion of milestones, and deployments in order to succeed. These requirements come with a substantial time commitment that separates families and make it harder to find a supportive partner. The competitive nature of the Navy exacerbates the need to meet and exceed those requirements. Women in the Navy are wary of acting in ways that are associated with stigmas engrained in the organizational culture. The nature of a naval career influenced participants' career planning and pregnancy as well as shaped their perceptions of the stigmas associated with serving as female naval officers. The following sections discuss the participants' challenges pertaining to career planning and pregnancy as well as stigmas.

1. Career Planning and Pregnancy

Career planning as it pertains to pregnancy as a female Navy officer is important as females are encouraged to plan pregnancy for shore duty tours. The interviews showed that in addition to taking shore duty into consideration, participants also planned pregnancy around permanent change of station, required trainings, and deployment/operational sea duties. To assist service members with planning parenthood, the Navy provides an abundance of information and resources on contraceptives. The Contraception Methods section in OPNAV 6000.1D instruction provides the following guidance:

All Service members are encouraged to exercise responsible sexual practices at all times. All Service members should discuss family planning efforts and contraception methods during their annual physical or periodic health assessment and during pre-deployment exams or sea duty screenings. (DoN, 2018)

Though the instruction addresses "all service members," this is unique to female service members as their male counterparts are able to remain at operational commands and training locations when their spouses are pregnant. For women, dependent on their field, this is not always the case, and a pregnancy at the "wrong" time can result in inability to complete certain career milestones until after the conclusion of their pregnancy and/or transfer from their command at an inopportune moment. Interviews show that some participants were discouraged from having children. One participant recounted,

I've heard people have that conversation.... Are you sure this is what you [want to] do? Like, you can still be deployed, and you're [going to] have to figure out what to do with your child. If you're like a single female looking to have a family, that's what those family care plans are for.... But at the same time, it's kind of a big commitment and a big choice, but it seems like a lot of times, people don't [want to] let you make your own choice. (Interviewee, personal communication)

Another participant acknowledged that the desire for career progression was a barrier to getting pregnant:

The first thing, of course, that comes to mind is just career progression because the JAG Corps's extremely competitive. And I think we're judged based on how—you know, how we do at our jobs, and I think people who can spend longer at their jobs probably perform better. So, I think the barrier would be career progression to having children. And also, you know, it limits females in what types of jobs they can have, you know. Females can't be pregnant and on a ship. For the JAG Corps specifically, the ship billets are the most competitive billets; they're the hardest sought-after billets, and, you know, if you've got a female who's wanting to have a family, they're not [going to] get those billets. (Interviewee, personal communication)

One participant was aware of the pressure career progression had on planning pregnancy; however, she chose to put family first.

Since I joined later in life, and I know that 20 years may or may not be in the future, I'm not too-this sounds horrible-but I'm not too concerned with, I guess, rank. So, like if lieutenant commander doesn't come up, it doesn't come up, and I know I can get the same job in the outside because I had the same job before on the outside essentially....I know I've heard...depending on when you have your baby, it can hurt your career or anything like that. Like those thoughts, luckily, don't affect me essentially.... Military's very rank-oriented, very-like, you need to promote...you need to do all these extra things. That's not my mentality anyways, so it personally doesn't affect me like that, I guess. Like, if I got pregnant my first year versus my third year versus my fourth year when I might be in zone for lieutenant commander, like, personally, I'm [going to] do what's best for my family. So, that part doesn't affect me, but from what I hear, people—it appears people make decisions based on when they might be in zone, in rank, in all those things, which is kind of disheartening because, obviously, there's a lot of people, men and women, that have dedicated so much time to the military. And there's-it seems like they're stuck in that rank thing, making chief, making this, making lieutenant commander, making whatever. It's like some of them-it appears, again...I couldn't say firsthand, but it appears that some of them lose track of their personal goals for family and so forth. So...it's hard to say leeway for those that are trying to start families because I don't know if that's possible-the way it's already set up that it's such a rank-based system. But more understanding because, again, personally, even if I was in zone next year and I was, you know, trying to have a baby now, that would personally not stop me from having a baby. (Interviewee, personal communication)

Though some of the participants were discouraged from having children at certain

points in their career, the discussion section of the OPNAVINST 6000.1D states,

a. Pregnancy and parenthood are natural events that may occur in Service members' lives and can be compatible with successful naval service, as discussed in [SECNAVINST 1000.10A].

b. A Service member who learns they are pregnant is responsible for promptly confirming their pregnancy and informing their commanding officer (CO). Pregnancy should not adversely affect career progression, as discussed in [SECNAVINST 1000.10A]. While pregnancy may require temporary reassignment in some cases, it should not restrict tasks normally assigned to Service members and should not affect their ability to perform routine tasks associated with their billets, with the exception of limitations listed in [other portions of the instruction]. (DoN, 2018)

Though the OPNAVINST 6000.1D indicates that "Pregnancy should not adversely affect career progression," many women perceive an adverse impact. One participant recounted,

I know that I had a peer who was discouraged from having children during her sea tour, which is just really upsetting. And she ended up getting pregnant, and she lost that billet. They say that it doesn't affect us career-wise, but if you've got a female who hasn't deployed because she's had, you know, two kids, against a male who has deployed, I think that that female's always going to lose out. I don't have specific—except that one friend of mine, I don't have any specific data to support that. But I would say overall, yes, outwardly, they do say that they support it, but I think realistically females, especially single females, who choose to have children do get punished—probably not intentionally, but absolutely indirectly. (Interviewee, personal communication)

Another participant shared her experience with being discouraged from having kids

for the sake of a career opportunity.

So, I've had a surprising number of people say to me, Oh, that's great that you [want to] have kids, but, you know, [you] shouldn't prioritize that. Like, you should go to a ship. You should go operational. Like, you can have kids after that. And that's, like, surprising to me. Like, I'm 30 years old with a master's degree. I'm not an 18-year-old that's begging to have kids, you know. And, so, that is frustrating. My specialty leader actually said to mewe were talking whether or not I was [going to] stay in the Navy and next steps and what opportunities there are for me-and he wrote up [a]...fellowship.... It's great training, like I've learned so much. But the timing doesn't really work, so I'd be away from [my] husband, which is what it is. But if we were trying to have kids at the time and so I would have been away from my husband with an infant, and that's a lot-especially in a fellowship program. –And he told me to put having a family on hold until I had gone through the fellowship and met that goal. And I was very, very turned off by that....We are highly sought after in the civilian sector, and so-it's just like unfortunate to me that that's the conversation with [females in this profession] assuming that it is, you know, extrapolated to

more than just myself because retention is an issue, and I think...all females should want to serve and should feel like they're supported in serving. And, you know, I think a married 30-year-old with a master's degree shouldn't be told to put her family on hold so that she could meet X, Y, Z criteria to look good on her FITREP, etc. (Interviewee, personal communication)

One individual felt as though she was adversely affected by choosing to have a family. She was transferred into a job that didn't fully utilize her potential and skills:

I did end up getting pregnant and was detailed to, essentially, like a two-year [sort of] not throwaway job, which really didn't do me any favors for my career anyways. So, I don't know if it was necessarily—you know, my original fears about my career getting sort of derailed with children ended up [kind of] coming to fruition in a different way. So, that was really frustrating for me. And then I am constantly angry at the Navy for wasting incredible talent and capability with female sailors and officers that they just detail to these kind of throwaway billets that nobody cares about. I think it's a total waste, but that's my perspective. (Interviewee, personal communication)

The interviews show that while some careers provide flexibility in terms of schedules, other career paths do not provide that flexibility. Dependent on the participants' specialty, the balancing of career, personal life, and planning of pregnancy, especially when fertility assistance is required, can further convolute their experiences. As explained by one shift worker,

And nursing is different in the sense that...you do also have shift work... more so in your younger years, but it can span into all levels of rank and leadership, so... it definitely can be a challenge with, you know, balancing work and what the Navy kind of puts out there as its requirements. And then having a personal life. (Interviewee, personal communication)

Another participant explained,

So, I do think that a big problem is a lot of the line side women are...at sea duty and stuff during—or department head tours during their...best childbearing years. And I think that's a huge problem that there's no way to take a break in there...it seems like the only way to succeed is...one specific route. And that route doesn't include...being home with your spouse from age 28 to 34, you know. And I think that's been a huge complaint. (Interviewee, personal communication) One participant recounted noticing the difference between her career in the Air Force and her career in the Navy:

I think I changed a lot when I came from the Air Force to the Navy in ...I kind of assumed that active-duty was active-duty. And I didn't really understand the stories of my Navy colleagues when I was in the Air Force, but having to see it now having served aboard ship, I definitely can see how if that was someone's primary career field where they were—had like sea/ shore rotation versus just kind of a one off for a medical type, I could see how that would be made almost unfeasible to plan a family if you did have a husband or the ideal age and particularly if you maybe haven't got married by the time you thought you would. Or you're doing it on your own like I'm doing, so ... (Interviewee, personal communication)

Some say that the Career Intermission Program is the answer for those who need to

take time off from the Navy in order to start a family.

The Career Intermission Program allows Officers and enlisted Sailors the ability to transfer out of the active component and into the Individual Ready Reserve for up to 3 years while retaining full health care coverage and base privileges. (Navy Personnel Command, n.d.a)

While this program is helpful, some participants do not agree that the Career Intermission Program is the answer to the lack of flexibility that exists in some fields. One participant recounted,

I actually had several admirals ask me about [the Career Intermission] Program]....like, oh, What's your perspective, and do you think it will help retain women? And I said, Absolutely not because, ... [if] I was coming up on the end of my service requirement, my commitment, and I said, you know, here I have this buffet of options. I can get out and get on with my life as a civilian. I could transition to the reserves and have flexibility and continue to plug in...periodically to fulfill that...service purpose and work towards all the extrinsic things like a retirement and, you know, bring in the occasional paycheck. Or I can do this Career Intermission Program where I take off for a year or two, but I don't have, like, a means of support. Fertility may or may not work out in that year or two. And then I have a two-for-one payback on the backside? ... or just stay active-duty and push through to 20 years. Of those four options, the Career Intermission Program was the least attractive. And they were like, Oh, you know, of course, it's designed to provide flexibility, but I said, It's just not appealing for me and my situation and for a lot of my peers who were of the same age group. (Interviewee, personal communication)

Another participant explained,

[For] surface warfare officers [and] naval aviators, our career paths are so defined that it is so difficult to find a time in those shore duty windows...to have your family particularly...as you get older....I'd say there is a challenge. Without a doubt, it's a challenge. The Navy has come up with things like the Career Intermission Program and that type of thing, which is a step in the right direction, but it's not at all—an all-out solution because vou can go on Career Intermission and still feel-like, had I not-I considered Career Intermission after my department head job, and I'm glad I didn't because how upset would I have been to be sitting there on intermission for a year or two and be unable to get pregnant. So, it's kind of in my mind like wasting time. So, you know, yeah...that is the problem with this career. And then also with the deployment schedules and having to work all that in and when...dealing with... both...you and your spouse. So, I told other people, like, when I got pregnant, my husband wasn't there actually. When we successfully [conceived]...and it worked out, but then he came back. The week before our children were born is when he returned from his year-long [deployment]. (Interviewee, personal communication)

For aviators, given their defined career paths and milestones, it is difficult to plan pregnancy within the given windows. "Pregnancy is considered disqualifying for designated flight status personnel" (DoN, 2018). As it pertains to aviators,

Flight personnel are authorized to fly with the concurrence of their CO, obstetrician and flight surgeon after requesting to continue to fly while pregnant. This request will initiate the convening of a Local Board of Flight Surgeons (LBFS), in order to assess the health of the pregnant service member and the potential impact flying may have on the service member and their unborn child(ren). If the LBFS assesses acceptable risks to continue flying, a waiver to fly during the second trimester only will be granted from the Naval Aerospace Medical Institute (NAMI). However, flying during pregnancy is prohibited in single-piloted aircraft, ejection seat aircraft, high performance aircraft that will operate in excess of 2Gs, aircraft involved in shipboard operations, or flights with cabin altitudes that exceed 10,000 feet. (Navy Personnel Command, n.d.b).

Participant responses suggest that when individuals become pregnant, it's hit and miss as to whether they will be able to fly during the window allowed because, by instruction, it's at the commanding officer's discretion. It is also not guaranteed that participants will be allowed to stay at their commands. One interviewee recounted her experience as well as the experiences of those in her field: I did get some push back—a lot of push back from my XO at the time. He did not actually want me to fly pregnant. Luckily, my CO was very supportive of it, and I had no physical reasons why I shouldn't, and so I pursued the waiver. And you can only do it in the second trimester, so I did fly 130 hours in that second trimester, and I ended up finishing my qualification for aircraft commander while I was pregnant. So, that was a goal I wanted to complete prior to having a baby because obviously then you're out for months, and, you know, it takes a while to get back in the game, so ... And then after I did that, I unfortunately heard other stories of mostly enlisted people-because there just wasn't that many females in my community, most of the enlisted females did not get to stay in the command while they were pregnant. So, if they got pregnant, they kind of shipped them off. And I actually had written a statement for one of the females who was trying to fight it. And, unfortunately, I talked with her later and nothing ever came of it, and they basically, like, you know, You can't stay here. And it seemed a little crazy because she flew in her first pregnancy at a different command, and so I don't know why she couldn't fly. I know that's only, you know, a couple months out of the whole pregnancy, but I was operations officer when I was down and pregnant and not able to fly, and so I was very useful to the squadron. I was probably the busiest person there, and I think there's a lot of good that can come from someone who, you know, may not be able to fly, but there's a lot of other things that need to be done. And, you know, I was fortunate that that didn't happen to me because my CO supported it at the time, but once that XO became CO is when he prevented other pregnant females from staying in the command while they were pregnant. (Interviewee, personal communication)

Another factor that has to be considered is that after childbirth, women are deferred from several things that could have implications on their career. According to the Operational Deferment paragraph of the OPNAVINST 6000.1:

A Service member who gives birth will be deferred from all transfers (e.g., permanent change of station, temporary additional duty (TAD), temporary duty) to operational assignments for a period of 12 months following delivery ... Service members under operational deferment are exempt from participating in short underway and TAD periods if it inhibits the Service member's ability to breastfeed their child(ren) or prevents them from caring for their child(ren) for more than a normal work day or shift. Service members who experience a stillborn birth or a neonatal demise (infant death 0 to 28 days following birth) are entitled to 6 months operational deferment. (DoN, 2018)

While this policy is beneficial to those who give birth, a few of the participants wanted to plan ahead as they were cognizant of locations that pregnancy would result in

being transferred or deferred. Some participants indicated that they openly communicated with the detailers responsible for identifying their next PCS by informing them that they were actively trying to get pregnant. Some were successful in getting follow-on tours from shore duty to commands that were non-deployable and commands that were conducive for pregnancy. Others were told that they could not be detailed to another shore command based on what they were trying to do; they needed to actually be pregnant in order to be given consideration. One participant recounted,

We were kind of trying to make the decision if we were (going to) keep trying to do just IUI because it's a much cheaper process than to go through IVF. But at that point, I was starting to talk to my detailer because I was within my window for transfer, and the options were looking pretty bad. They essentially were offering me a year unaccompanied to Qatar or a three-year boat tour out of Norfolk, both of which were really terrible options for our family. So, that's kind of when I felt like the pressure sort of increased for me to get pregnant before I got detailed, so that I wasn't in that position where I was detailed into a sea duty because they can't like prospectively detail you. So, even though I was honest with my detailer the whole time and said, Hey. I'm trying to conceive, his response was, Well, I can't detail you to a shore duty unless you are actually pregnant. Which I understand. So, that kind of, like I said, put a lot of extra stress on me getting pregnant before I had to detail. (Interviewee, personal communication)

Another participant recounted,

So, my son ended up being an emergency C-section. And based on that, I kind of delayed a little bit when we could start trying for a second. And did a lot of ...talking with the detailers about timing and pregnancies and figured out that basically a three-month window when we could try for a second. Which we didn't have a lot of faith in after trying for over a year with number one. But basically, you know, three months where after the doctors would say yes, we're clear to try before I could get pregnant, get all the way through a pregnancy, and still have time to make my command slot, come back up, and start flying. ... So, that one worked out. I don't know how that timing worked out that well, as it did on the second try, but... We'll fit a second kid. (Interviewee, personal communication)

Another participant explained,

So, when I put in my preferences...for command slating—and at this point, I actually wasn't even pregnant when I was putting...preferences in, but I was very transparent with my detailer. I was...I'm trying to have a family here...I plan to have...an infant, so I want to go expeditionary command,

so I will...not deploy on my command tour...When I took over as XO, my children were four months old...I was able to go and be an XO and have these infants. (Interviewee, personal communication)

Planning pregnancy with the constraints of Navy guidance and commitments complicated the experience of participants and added stress to an already stressful environment and situation. While both females in the civilian sector and female naval officers may have commitments that require the planning of pregnancy, female naval officers plan their pregnancies around sea-to-shore rotations, permanent change of station, attainment and sustainment of required trainings, and deployments.

a. Shore Duty (Window)

Females are encouraged to plan pregnancy for when they are on shore duty, which, biologically, is not always as easy as it sounds. Some of the participants indicated that they postponed trying to get pregnant until shore duty because they wanted to succeed in their careers and avoid negative impact to the mission and command. According to the Pregnant Service Members paragraph of the OPNAVINST 6000.1D, Pregnant Service Members,

(a) May continue to serve aboard a ship until the 20th week of pregnancy, while in port or during short underway periods, provided an evacuation capability exists and the time for medical evacuation is less than 6 hours to a treatment facility capable of evaluating and stabilizing obstetric emergencies. This requirement includes TAD orders. The 6-hour rule is not intended to allow pregnant Service members to operate routinely at sea, but rather to provide the CO flexibility during short underway periods. A Service member discovered to be pregnant while underway or deployed should be transferred ashore as soon as possible given the constraints of the ship's location, current mission, next port call, health of the Service member and unborn child(ren), etc.

(b) Should not deploy with or be assigned to units that are deploying from notification of pregnancy through 12 months following delivery and release from their provider. Under no circumstance should a pregnant Service member remain onboard past the 20th week of pregnancy. (DoN, 2018)

While female service members may keep in mind the limitations involved with getting pregnant at an inopportune time, the window of time to have children while on shore duty creates its own set of pressures. These windows create a sense of urgency for female service members, which becomes stressful emotionally as they deal with the prospect of running out of time and not knowing if their body is going to cooperate. One participant recounts,

I did feel that little...sense of urgency for that little pocket of time to get things going. I think if I had . . . already transitioned, I would have been a little more relaxed about it. But part of my wanting to move so quickly was because I had, you know, that shore tour, that clock ticking. I sort of wanted to beat the clock before I transitioned....We have a lot of folks who get stationed there on a shore duty, on a shore tour, and so they kind of say, Okay, I have this window. I have this two- or three-year pocket of time where I have to make it—you know, kind of pop out a kid. And they have that sense of urgency. And a lot of them have said—you know, Oh, I've been taking birth control my whole life up until this point like trying to avoid getting pregnant, and then all of a sudden, I want to flip the switch and get pregnant right away. And I don't even know, I don't even know if I have infertility issues. And how many months should I wait and how should... you know. (Interviewee, personal communication)

Another participant explained,

So, I would say, you know, being operational, I was hyper-vigilant about not getting pregnant. And then when I wasn't operational, I was like-I don't want to say panicked, but I was urgent about getting pregnant. And so, it's that very quick switch. Like flipping a switch. That's hard because our biology, our physiology doesn't really work that way. Yeah. So, this is exactly what I'm talking about is like, you know, hopefully you have a supportive command. But I don't know anybody who would check in and be like, Hey, boss. I'm [going to] try to have a baby while I'm here. You know, because that would sort of sabotage your-like your professional standing and reputation, and-you know what I mean? Even if there'seven if they outwardly say, Oh, yeah, I'm supportive. They're thinking, Oh, you're [going to] go on this—you're [going to] need all these appointments. And then you're [going to] go on maternity leave, and people are [going to] have to pick up your slack while you're gone.... I don't know what the answer is, but I don't think that the traditional military rotations and timelines for career paths are compatible with, you know, healthy, young women of reproductive age starting families and nurturing those families. We have to have some sort of other on-ramp/off-ramp-better career intermission program flexibility kind of thing-for women to make it work. (Interviewee, personal communication)

When participants followed guidance and pursued pregnancy during shore duty, there was no guarantee that their bodies would comply, especially with the added stress of perfect timing.

b. Permanent Change of Station

Permanent change of station (PCS) involves the service member relocating to another duty station, which may or may not be located within the same geographical location. These relocations occur on average every two to three years, but in some cases dependent on type of duty station, needs of the Navy, and other circumstances, the lengths of these tours may be shorter or longer. Though PCS orders list the expected rotation date, there is no guarantee that the date listed is going to be the date that they actually relocate. The interviews show that when shore duties are cut short in order to fulfill a Navy commitment, the window of opportunity decreases causing participants to have less time to attempt pregnancy. This impacts those who are trying to plan their pregnancies on shore duty or at a command that is conducive for pregnancy. For someone who has had multiple failed attempts and needs the full amount of shore duty time to pursue pregnancy, this shorter window interrupts their treatment plan. After trying to get pregnant on shore duty and having shore duty cut short in the midst of treatments, one participant indicated that she became pregnant on sea duty after a permanent change of station:

So, once I picked up O-4, they put me into the pot for this board...I don't think anyone realized exactly how it was [going to] work, but it was [going to] change people's PRD by over a year, a year and a half. And if I had known that, I probably would have put a don't pick me letter in for this cycle. But when I was selected for it, they sent me, you know, a list of jobs, and then said, Hey, rank these. I had to stay in [overseas] two years at least in order to get my joint credits, but they ended up deciding to move me... [early].... And we were very up front with our detailer. We said, Hey, we don't want to move, and we're trying to start a family. We're working through, you know, reproductive assistance here, and they're, Tough luck. So, you know, if you get pregnant, we won't move you....If you say no...you won't promote from this point on. So, we made the decision to accept the orders and then continue to try, you know, being up front with our detailer at the time. So, all of those sort of ... all of those reproductivethe refusal of transfer were sort of looked at hanging over us that we, you know, would have had...to move and stop everything if...we weren't successful. So, we did our last one in March of 2018 because after that, it would have just gotten too complicated to try to...undo everything for the move, so we didn't continue past that. Yeah, so, that's really all we've done. We've reached out here in the states. I'm at a sea duty now, and we were just about to start a retrieval cycle in order to sort of retrieve eggs and be able to save or-and be able to preserve the embryos and just freeze them

until after my deployment, and then we actually found out I got pregnant naturally. So, right now...We don't know if it is—you know, if it's good. I'm only about five and a half weeks, so we haven't had the first ultrasound. But after all of that, yeah...So, now we just have to figure out how to make—you know, I'm on sea duty now, so I'll have to leave this job and see what that means for me. But if you couldn't hear, we couldn't be happier. (Interviewee, personal communication)

This participant tried to get pregnant during her window, but her body wasn't ready and then the window was cut short, and she returned to sea duty where she became pregnant naturally. Now she has to leave the job and does not know what that will mean for her future. While it will be known that she got pregnant on sea duty, her journey and struggle to become pregnant previously will not be known.

PCS moves can also complicate relocation for dual-military. This is important because the absence of a partner due to being geographically separated is, as previously mentioned, a barrier to pregnancy. Relocations for dual-military are addressed in MILPERSMAN 1300–1000, Military Couple and Single Parent Assignment Policy (DoN, 2016). According to MILPERSMAN 1300–1000, the Navy tries to collocate dual-military personnel service members, but this is not always possible as it is dependent on manning and other needs of the military:

b. Collocation of Navy members with members of other uniformed services or services of other countries are much more difficult and may not always be possible. Spouse collocation policy does not provide for assignment to duty near a civilian spouse, including civilian Government employees. (DoN, 2016)

c. While there is no established maximum distance between duty stations for collocation, 90 driving miles should be used as a guide when considering collocation requests. In the Pacific Northwest, due to the geographical limitations presented by the Puget Sound, collocation duty station pairings should generally be on the same side of the sound (e.g., Whidbey Island with Everett or Bremerton with Bangor constitutes collocation; Whidbey Island with Bremerton requires excessive commuting time and is not considered collocation). (DoN, 2016)

These PCS moves that are unique to the armed services are also challenging for women without a spouse. Interviews show that frequent moves may not be conducive to a potential civilian partners' professional career. Their view of settling down and starting a family may not include picking up their life and starting over in a new location every two to three years. These relationships may end pre-maturely due to the individual being unwilling or unable to accept and adopt the unique and challenging characteristics of marrying a Navy spouse. As one participant recounted,

Trying to find someone who is accepting of the military career that's a guy or even a woman who wants to have a career...has been very difficult in the military. So, it took a lot of time and effort to find someone who was willing to deal with it. And honestly, I think that my current partner is only willing to deal with it because he knows that I don't have that much time left in the Navy. Like, if I said I have 10 years, I don't think it would work. (Interviewee, personal communication)

For the 26.7% of the participants that identified as single, meeting a partner and having to move functioned as a key factor in their relationship status. The absence of a partner is a barrier to pregnancy.

c. Required Training

The sustainment and attainment of training and educational requirements is an important part of career progression in the Navy. Interviews show that for women who would like to start a family, this is another commitment that must be taken into consideration. As one participant explained,

And then within our community, I think the other driving factor is if you want to make O-5, and sometimes O-4, you have to have a master's degree. So, there was a period of time where I was working full-time and taking two master's courses. I was also doing two master's courses while deployed in Afghanistan during a high up-tempo timeframe. And so, you know, you put all of those things from a career aspect because... I came in wanting to progress and, you know, meet the requirements for promotion and retirement and things like that. I did come in knowing that I wanted it to be a career. And so, you do have to do certain things and hit certain milestones in order for that to happen. And a lot of times that means things get put to the wayside. (Interviewee, personal communication)

Getting pregnant can impact the ability to complete certain trainings requirements until post pregnancy, which can de-rail career paths, dependent on specialty.

d. Deployments/Operational Sea Duties

Dependent on career, an individual can be tasked to deploy from shore duty or they can deploy as a part of their operational/sea duties. These deployments vary in length and frequency and often involve underway periods and training requirements that require the member to be geographically separated from their spouse in addition to the actual deployment. Participant responses suggest that the commitment of deployments and operational sea duty orders cause women to postpone pregnancy. One participant, who deployed multiple times while single and eventually married another military service member and wanted to start a family, postponed trying to get pregnant upon receipt of deployment orders. She didn't want to give the appearance of getting pregnant to get out of deployment:

So, I...did a year boots-on-ground in Afghanistan...and while I was gone is when my husband transitioned out of active-duty. And then when we came back is when we really got serious. So, we tried for a little bit before deployment to conceive. But then when we got back is when we really buckled down. Before I left on the deployment, we just—we were like, Oh, we're newly married. We [want to] have kids. Let's do it, you know? We were just trying naturally....So, you know, we had been trying for a little while and then, you know, when I found out I got these [deployment] orders, obviously I—we're not trying—like I wasn't trying to get pregnant to get out of the deployment. (Interviewee, personal communication)

Planning pregnancy around deployments and operational sea duty is another factor impacting the pursuit of parenthood as it can lead to women postponing pregnancy.

2. Avoiding Stigma

Participant responses suggest that when an individual has the appearance of not planning their pregnancy during their "window," there is often a perceived stigma. This stigma relates to those who get pregnant on a non-shore duty. Participants have indicated that they were cognizant of what people would think if they got pregnant and aware of the impact that pregnancy would have on their careers. Concerns included being viewed as someone who is getting pregnant to get out of work, is not doing enough work, or has declining quality of work. As one participant recounted, Coming in as a junior-enlisted woman and going right into the sea duty deployment off ship, I was very careful about not wanting to get a bad reputation for being one of those girls. And I quickly learned that people talked about those girls as being somebody who would get pregnant to quote "get out of deployment." Even if it was a planned pregnancy, it was frowned upon. And so, there was just this negative stigma that surrounded pregnancy with women, so I was very, very careful to not put myself into that position as a young enlisted woman. I did have a serious relationship with a guy, and we did end up getting married. And I didn't want to have a family with him because I was so concerned about the stigma on how that would impact my career. And ultimately, we did divorce, so I am thankful there were no kids involved. (Interviewee, personal communication)

Another participant explained,

You kind of feel like you're doing something you're not supposed to. If you went out and accidently got pregnant at the bar one night or whatever, it's not a big deal. But actively, like, trying to get pregnant, which could be perceived as being—you know, trying to get out of things or, you know, you're [going to] be out of the clinics or out of the office for certain periods of time is kind of a big difference. It's also an elective type of procedure, so you have to ask permission to get pregnant, and that is extremely hard to ask someone else if you can do something. (Interviewee, personal communication)

One participant recounted,

If she had a baby while we were in Monterey, and then I had to go back to sea duty... I kind of looked at that as not a place that was conducive to being able to have a child for two major reasons. Because I think that I am, like most women in the Navy, very fearful that people will think that I suck at being in the Navy because I'm a woman that has decided to put my family before my career. And I was really apprehensive to get pregnant on a sea duty. Also, for my own career progression, I knew that that was, like, a sure sign that I would not be able to promote. So, those factors really played into kind of this fear that we had to be able to have both of our children in a really short window of time for my shore duty. (Interviewee, personal communication)

Another participant recounted,

I think, professionally, it's the—you know, the potential people's perception of, She's not doing enough. Or where are her priorities? The Navy should be first. Or, you know, Oh, she became a mom and, you know, the work quality isn't there anymore. I think those are some of the fears that—you know—that I have. (Interviewee, personal communication)

According to participants, there never seems to be a right time to get pregnant. One participant explained,

Oh, there—I couldn't do it. I'm a one of one billet, so even if I wanted to start a family, there's no way I could, like—I mean, I would feel so guilty if I tried to—right now. Because I couldn't—like, there's nobody else to do my job. I'm the only one. And, you know—I was saying, and I'm getting older too, so I'm like—well, it's, like, never a good time. Like, I feel like in the military anyway. (Interviewee, personal communication)

Another participant explained,

When I first came into the Navy, I remember very distinctly being told by my peers that I should wait to have children until I was successfully comfortable in my career, but I don't know what that means. I mean, when is—what's a high enough rank? Like, what's enough responsibility? What does that mean? You know, I don't know. But I do remember ... being super careful about not getting pregnant when I was first in the Navy....And I had colleagues that always would make comments about the burden of pregnant women, and it was—it caused a lot of anxiety to think that you could ever be one of those people. You know, we work so hard and care so much, and we don't want—or I didn't want anyone to think poorly of me. (Interviewee, personal communication)

In addition, once the child arrives there is stigma associated with being absent due

to maternity leave and needing to leave work to take care of a sick child. One participant explained,

I've noticed my counterparts too, you know, who have taken time off to have children, like everybody else kind of is like, Oh, well they got pregnant and, well, we have to pick up their slack because they're off, you know, taking maternity leave. And there's kind of a negative impact on your workplace because now...they're short-manned. And, again, this is not this is me just noticing it and being in a conducive environment when I've had to pick the slack for somebody that was out for maternity leave. So, it's not really looked favorably upon and definitely not in an operational environment and definitely not in workplaces because, again, they're short-manned, and the people who have to pick up the slack are not really happy about it. (Interviewee, personal communication)

Another participant explained,

But then there's also the other side of it: Well, my kid is sick. I need to go. I have seen how that has not gone well for people. Or it's the, Gosh, that person constantly needs something, or there's always something. I've

definitely seen that aspect of it where there's not a good working relationship between—with leadership in terms of what you need as a parent. (Interviewee, personal communication)

Interview responses on whether or not participants perceived they would be treated differently after having a child varied. One participant indicated that she feared being treated differently:

Yes. It was a constant fear. Probably coming up to the pregnancy and then even during pregnancy, I just wanted people to treat me as a normal physician and not like a pregnant person. So, it is definitely a concern and something that I wanted to be cognizant of to be both a good military physician and a good mom, but not use motherhood as an excuse or pregnancy as an excuse for anything. (Interviewee, personal communication)

Some interviewees indicated that their perceptions earlier in their career were associated with fear of being treated and viewed differently for having children, but later in their careers, their perceptions changed. One participant explained,

For most of my early career, I thought that I would be treated very differently if I had a baby. I thought that I would not be given opportunities. I thought that I would be viewed as a negative asset to the command instead of a positive, contributing asset to the command. So, for the first half of my career, I would say, yes, I did kind of live out of fear of having a negative image due to being pregnant. But now that I've waited until later in my career where I'm a little more established, I have a professional reputation for working hard. You know, I think I felt a lot more comfortable with where I was with trying to get pregnant and having a pregnancy. I didn't take time off during the pregnancy, but I...had the 12 weeks of maternity leave after the pregnancy, and it was interesting that I really thought I was [going to] be one of those people to just take the 12 weeks off. And I set myself up to be able to take 12 weeks off...I was very open with communication about I'm [going to] be gone for 12 weeks, and I had timelines and tasks that I got everything done that I needed to get done before the delivery of my son. So, I really felt comfortable with taking the 12 weeks off. (Interviewee, personal communication)

Other participants indicated that they did not feel that they would be treated differently:

I don't know if I thought that. I think I was, you know, already in my thirties and an officer. I was kind of past caring about that. I think I was—I'm just too confident for that. So, I've just reached an area where I know I have, like, that professional expertise, and no one's going to treat me differently because of it. I have had—I have heard some gossip about not just me but other moms, like, Oh, you know, they're always leaving to go take their children wherever, like, to a doctor's appointment or something. I've heard that kind of gossip about myself and other people, and I just—I try to, you know, nip it in the bud and tell people, you know, are you [going to] say that about the dads as well or is it just because I'm, you know, a woman? So . . . but I could see how other junior personnel might have a hard time with that with being treated differently or-not being discriminated against per se but definitely looked down upon or like considered slackers or something because they're a parent now. But that's really not the case. I mean, we work-I feel like I'm 10 times more efficient because I have to be. That's okay. And just, like, remember, I'm in the medical field, so I have, like, a lot of understanding [from] people that I work with. It might be totally different if you were talking to a pilot, you know. (Interviewee, personal communication)

Another participant explained,

No, I never did because... I never let the fact that I was a woman or anything like that really feel like it impacted me in the Navy. Like, I worked as hard as I could, and I did all that. And I never felt really discriminated against because I was a woman. So, I just kept that going once I had kids. My husband has been super supportive, and he was on shore duty when I was on sea for—except for when...I first commissioned. So, he's been able to take...[her] to daycare and that kind of thing. So, it's been relatively small impact. And if anything, I think it helps me understand, like, my sailors and people that work for me better that have kids now that I've had my own. So, I don't really feel like it impacted me negatively, or I've been treated differently because I have kids. It gives me additional wickets to relate to my sailors on. (Interviewee, personal communication)

These interviews show that the participants carefully planned for parenthood within the constraints of their careers and Navy commitments, while avoiding stigmas that are often associated with being pregnant or having kids on active-duty.

D. TIME LIMITS

Planning a pregnancy and meeting Navy commitments is complex especially when plans are restricted to specific windows of time. In the mitts of fulfilling their commitment to the Navy, time that they cannot get back fades away. No matter how much participants planned to get pregnant during a certain window, their bodies did not always comply. There are many time limitations associated with serving in the Navy, and the interviews indicate that time as it relates to the biological clock, shore duty windows, permanent change of station, trainings, and deployments were all factors that impacted their experiences pertaining to the pursuit of parenthood.

1. Biological Clock

When participants planned pregnancy around their careers, their biological clocks quickly approached expiration, which hindered the pursuit of parenthood. Running out of time in terms of the biological clock was not something that most participants consciously saw coming. Time essentially either slipped away or was stripped away. When participants put their career first, they waited to pursue parenthood and risked running out of time while trying to achieve goals or while waiting for a significant other to enter their lives. One participant recounted,

So, I mean certainly coming into the military, I was single and, you know, dating but nothing serious. I guess at that point in time, I was more like, Oh, well, you know, I can't get pregnant right now. My career's too important. I [want to] be the best physician I can and having a child now would not work in my plans. And then definitely as I got older and got closer to 35 was definitely concerned that maybe I'd waited too long. And then certainly after my miscarriage, I definitely even verbally said a few times to myself, I think I waited too long. This isn't [going to] happen now. And had some, probably, regret for waiting as long as I did to try and start getting pregnant, but realistically kind of the other part of my brain realized that I would have not been as great of a parent if I had not had a supportive spouse and things like that. So, I'm glad I put my career first in some regards. I definitely created some challenges to childbearing as I get further along in my age. Plus, I will say I have had some excellent mentors that have been through similar situations and been advanced maternal age and been-and are physicians in the military that are higher ranking than me that were willing to talk to me and kind of talked me off the ledge, so to speak, and say, Look, we all did it. We were all in your shoes. We did this at the same age or older than you, so I promise you too can do it. And it's been very nice to have people to mentor me in my career and also in motherhood in the military, which can be a unique situation. (Interviewee, personal communication)

Another participant explained,

I really wish the Navy would have given us an option...to maybe freeze our eggs because it's just...our prime time to have kids we're sitting here serving and trying to make rank and...prove ourselves. And then when we actually are kind of stabilized a little bit more, it's almost [too late]—I'm

[kind of] worried right now....I'm [going to] be too old to even ...be able to have kids. And I do worry about that because I feel like I'm on a time crunch and that my...biological clock is ticking, and I'm just-I'm running out of time. But like, for me, I kind of, you know, just talking to friends that are doing it, and I've considered doing it, you know...those are some of my worries I guess regarding that. But it's definitely things I've looked into and, again, a lot of this comes from friends that I've had that are now too old to have kids, and they wish they had frozen their eggs earlier, so they could have had kids. But now they're past the point of not being able to do it. And they're really regretful, and they're really sad that they can't....I looked around, and I realized that...a lot of people already had children that are...in their teenage years. And I realized that like, Wow, I [want to] have, like, four kids. And I just realized in my mind like, Wow, that's-you know, I don't really have a lot of time left, and I was like I don't even know if I can still have them at that point. So, I think that's when I started really becoming more concerned about it and definitely more worried about if I was [going to] be able to or not. Or if it was [going to] be difficult or if I was—you know, am I still healthy enough to do it and you know that type of thing. (Interviewee, personal communication)

Some participants thought that they would experience pregnancy at a younger age

while others lost track of time. One participant explained,

I anticipated hopefully having kids by the time I was 35 just based on medical recommendations more so than my own desires. I feel I could wait another five years, but I know that that's not—like, the biology doesn't support me there. And I've had, you know, a lot of labs done and a lot of workups done that indicate that I don't have very many years of fertility left. And that's why I chose to freeze my eggs, you know. So, yeah, I did anticipate I would have a family and kids probably by this point in my life, but it didn't happen yet (Interviewee, personal communication).

Another participant explained,

I did not anticipate any barriers [to] having kids initially...so, those barriers seemed to pop up. I had different things happen. When all of a sudden, you're 35 years old, you're 36 years old, you're 37 years old, you're 38 years old, and you realize that there's just different steps of, like, Okay, well, I'm not [going to] find a guy right now. You know the guy is always somewhere out there...but I'd like to have a child. (Interviewee, personal communication)

Some participants unexpectedly experienced premature menopause or went through menopause a lot earlier than they expected. One participant recounted,

So, when I was told by my flight doc that I had very low AMH and essentially premature ovarian failure, which is going into menopause early, I was 34 when I was diagnosed. So, it's very unusual for women to go into menopause when they're 34 or start to go into menopause. And she basically told me, You need to do IVF right now if you want any chance of having a baby. So, she started walking me through the options. (Interviewee, personal communication)

Another participant recounted,

It was probably about a year after we stopped trying, not even a year. I stopped having periods, and I didn't think anything of it because my periods had become very irregular. I had been on hormones for a long time, and I wasn't thinking anything of it. But then I started waking up in the middle of the night. I would be exhausted. I'd fall asleep. I'd wake up two hours later, and I couldn't sleep. My heart would be racing; my mind would be racing. I would be hot, I would be cold—I mean, it was just—I felt horrible all the time. I was always tired. My bones ached, and I thought that I was-I had a lot of connective tissue issues in my family and immune disorders in my family, and so I thought, Oh, my gosh. That's what's happening to me. So, I went to see my primary doc, and they said, Well, maybe you're pregnant. Let's do a pregnancy test. I'm like, no, no, no. So, I did a pregnancy test and, of course, I wasn't pregnant. But then they said, Well, let's do-when was the last time you had a period? And I said, Oh, it's been probably four or five months. And they said, Well, let's do a menopause test and FSH and LAH. And so, it came back—I'll never forget....I was working as a camp nurse...my command had let me take, you know, no-cost TAD....I was up in Julian in this camp, looking out over this beautiful forest and just, you know, was really kind of finding my place and myself in a good place, and then I got this call saying, You're in menopause. And I was like, What? I'm not even 41 years old. You've [got to] be kidding me, I'm not in menopause. And I cried and cried and cried. (Interviewee, personal communication)

For other participants, time continued to tick as they attempted to heal emotionally

from miscarriage. One participant recounted,

Oh, I made the decision pretty quickly. I was 41 when I lost the baby. I was 43 ish when I finally came to that I was [going to] do it, then I was mentally ready. I was not—after having lost that—the one pregnancy…I was just not ready to try, and so at that point, I just decided that I was [going to] do it, and I did. But then I was in my forties. I had—you know, my clock was ticking in more ways than one…not just a biological clock, but, you know, the mortality clock. You know, you don't [want to] saddle a kid, you know, as a 20-year-old with an ill-moving parent either, so it's kind of, you know, my decision. In fact, the pregnancy that took—getting pregnant in October

2015, and basically that was, just as far as I was concerned, my last shot. If that particular one didn't work, I was done, and I was just [going to] look into fostering or something like that. (Interviewee, personal communication)

The biological clocks of participants did not pause for their Navy commitments. The impending expiration posed emotional, financial, and physical costs to women as they tried to maximize what was left of their childbearing years.

2. Shore Duty

As previously mentioned, women are encouraged to plan pregnancy for shore duties and non-operational environments. According to the Assignments section of OPNAVINST 6000.1D,

Service members who plan to expand their family should take into account personal and career factors. Planning pregnancies to coincide with assignments to non-operational or non-deployable or shore duties may minimize career disruption and reduce mission impact due to gapped billets in operational units (DoN, 2018).

When participants followed the guidance given in the OPNAV 6000.1D by waiting and planning pregnancy on their shore duty, some of the participants found that time limitations and the time required for treatments were taxing. One participant recounted,

I mean, I told the guy when I got married, I said, Hey, I need a baby-making tour....I know that I'm penciled in for Hawaii, but I need to be with my husband. And he said, Sure, no problem. And, you know, I remember negotiating for the next set of orders, and I wasn't pregnant yet. And I was like, Hey, I just want to let you know I've done five rounds of IVF....I didn't... lie to you saying that I'm trying to have a baby-making tour. I'm legitimately trying to have a baby-making tour. So... timing is the one thing that people really don't understand....People are like, Oh, yeah, I'm [going to] go through IVF next month. It's not that easy. You have to go to Walter Reed. You have to get the full infertility workup. You're probably looking at least at three months. Then you've [got to] get into one of the cycles. Then you've [got to] start the medications. Every protocol is different. Every time is different, you know. They're like, Okay, you're [going to] start on Monday...and then it's like, Here's your 14-day plan. Well, if on day 12, they're too big, well, then they need to take them on day 12. If on day 14, they're perfect, then they take them on day 14. And if they're too small, then they grow them to day 16. So, I know that's where a lot of people have a really hard time because...people are like, Hey, well, when's your

harvest date? You know, and you don't know literally until the night beforehand when you have a 36-hour trigger. (Interviewee, personal communication0)

Participant responses suggest that when trying to plan for the shore duty window, they ran out of time or came close to running out of time to have children during that window. One participant explained,

And the other issue was during that shore duty, I had screened for operational command. And so, that was the other thing...the clock that was ticking because, you know, I had planned to have, you know, my family on my post department head shore duty. But just being...35 years old...I planned it all perfectly, but as it turns out, you know, I didn't know it was [going to] take...three plus years in order to...have a successful pregnancy. So, at the end of that tour...my PRD was September of 2013 to start the pipeline to go back to operational command. So, that's why that IVF cycle in July really was the last-my last-ditch effort....We...started talking about adoption, and we'd been looking into other options....We had considered donor eggs, like we-had it been obvious that my eggs weren't viable, we probably would have gone that route....The other thing is that the timeline, because with active-duty women, you have...these small windows. And, unfortunately, fertility is an art, and you can't-you know, you can plan to get pregnant. You can plan for when you [want to] get pregnant, but your body needs to cooperate-which was the key. (Interviewee, personal communication)

Another participant recounted,

We did IVF four cycles before we finally got a couple of good eggs that were fertilized that turned into embryos. And we did the genetic screen on those embryos, and one came back as abnormal and one came back as normal. By the time all of that process took place, because the genetic screen takes several weeks, we had already started IVF cycle number five because it was a-you know, just in case both of these embryos come back abnormal, we [want to] go ahead and take advantage of my next cycle here. So, we already did IVF cycle number five. We were right in the middle of it when we got the news that we had one good embryo from cycle number four. We finished out cycle number five, we did not get any good embryos from that cycle. So, all we had was our one embryo from cycle number four, and we had to decide if we wanted to try for more. And that embryo would remain frozen until we were ready, or if we wanted to go ahead and implant. And at that time, I was running up against a clock because I had one year left on my three-year shore tour. So, I had originally intended to be completely done with my pregnancy and fully med up before I transferred from my shore tour. So, I was running out of time, and I said, Let's implant

the embryo and see if it sticks and that way I can have my healthy pregnancy. So, we did that, and it did stick, and I had a healthy pregnancy. (Interviewee, personal communication)

Some participants were not in a relationship or married during their shore duty window. One participant explained,

Well, I did not get pregnant on my shore tour unfortunately because I wasn't married, or I just met my husband when I was leaving. So, I know that people say things like, Oh, you should have babies on your shore tour. But kind of impossible to do that when you're not actually with anybody. So, it was an unfortunate I met my husband pretty much right before I went to my next operational tour. (Interviewee, personal communication)

Another participant explained,

And I would say, I think some people do kind of instructor tours where you're technically on shore duty and have kids successfully, but...by the time [I] got to that point I was still single...Then looking at timing and kind of realizing that once we were getting married, it was [going to] be another three to four years realistically before we could even try for a kid because I would be flying the whole time. And then, basically, I would be walking straight at the high-risk pregnancy because somehow, I got myself all the way to 35. But it is the still—you know, achievable, doable, but yeah ... (Interviewee, personal communication)

One participant planned to get pregnant on shore duty, but her shore duty window was cut short, which created an even tighter time limitation. Both she and her wife desired to carry a baby and were considering the biological clock for the wife and the shore duty/ window for the active-duty member. The time limitation created a smaller window and did not allow for the amount of time needed to identify complications and go through multiple cycles of fertility treatments. She explained,

And then, you know, the other unfortunately frustrating aspect of the Navy is the sea/shore duty rotation. I ended up with a shore duty...that I wasn't expecting and [this shore duty] is an incredibly short shore duty in relative terms to other shore duties. I was originally only supposed to be there for 18 months and then got extended to 21, thankfully. But, you know, we were kind of looking at our window of time to be able to have—to conceive and then have children, you know, as a year and a half because potentially I was [going to] be in a deploying status shortly thereafter. But then, kind of based on the fact that my...wife's biology was trickling faster than mine, we wanted her to go first with having kids because I still had kind of time on our side. So, my wife didn't get pregnant until we had been [at the duty station] for about eight months or so. And then...obviously she went through her pregnancy. And then I started trying to conceive actually before my daughter was even born, which in hindsight would have been insane. But I was really nervous about, again, the timeline issue that I had and my fears of promotability and kind of staying...as a career in the Navy. But I had a lot more trouble conceiving and ended up having to go through IVF, so egg retrieval and then in vitro fertilization. So, my process was a lot more expensive and time-consuming. My wife, on her first try with IUI...got pregnant. So, we got really lucky with her. And...she was the one we thought would be hard. And it turned out, even at 29 years of age, I ...actually had some complications and issues that required IVF treatments. (Interviewee, personal communication)

Though shore duty is thought to be the best time to conceive, some of the women mentioned that there did not seem to be a right time to get pregnant. Time limitations and shore duty windows become even more convoluted for those who are dual-military. One participant explained,

I would say probably more stress involved in the conceiving side than we would have expected. A lot of that is now kind of one of those-once you walk down the fertile path, suddenly you realize that a lot of people around you are doing it or have done it or have experience in it. But up until then, you don't really know, and it just seems like, you know, kind of everybody managed to get pregnant easily. And when you're not, kind of figuring out what and why. Or the fact that you're just watching time vanish that you don't actually have in a Navy timeline. In particular, I'd say the biggest stress for us was really when we were trying to figure out, Is there a way that we can get to a second [child]? Because we really did want a second, and still keep our Navy timelines going. You know, should...one of us go on [Career Intermission Program]. It would probably be me in that situation... we're both on back to back carrier deployments because I would have been re-slated. So, kind of a lot of figuring out really, Hey, how can we do this in a way that is workable and is, you know, workable for the Navy? (Interviewee, personal communication)

Though participants planned their pregnancy for shore duty, being single during a shore duty window, having a shore duty cut short, and running into complications that require multiple cycles of fertility treatments caused women to run out of time or come close to running out of time to conceive. Even when participants planned their pregnancy attempts, time limitations imposed by windows do not always align with the body's willingness to cooperate.

3. Permanent Change of Station

Permanent change of station also puts a time limitation on conception as participants are only in a location for a finite amount of time. For those who are single and desire to have a partner prior to starting a family, these relocations may not allow enough time to build a strong foundation that would make a partner want to relocate or commit to the Navy lifestyle. That partner may be established where they are and unable to transfer their career every few years. One participant explained,

I think that there's two different men that I think probably I would have ended up married to if I hadn't PCSed and things hadn't gone south with the distance. I mean, you can never look back and say for sure, but both of those were situations where we had talked about marriage and talked about having a family, and I thought things were probably [going to] go that route. And then the PCS move sort of did it in, you know. And then one was another officer in another service and then one was a civilian, and neither one had the flexibility to just kind of move around or follow me around. (Interviewee, personal communication)

Another participant explained,

I'm still single. I'm in a relationship, but...fundamentally, I've been single, you know, my entire career. And what I've seen is...the woman...[who] came behind me found men who'd been adapted to be supportive either as dual-military or civilians. They could be supportive, and that is what makes all the difference in the world in letting, you know, the women who are getting ready to go be department heads, you know, have a kid. Or women who are in between department heads [tours]. (Interviewee, personal communication)

PCSing caused women to postpone pregnancy. Participants' responses suggest that women wanted to know their job first and/or they felt a need to postpone trying to get pregnant until they had been at their new command for a certain amount of time. One participant recounted,

We came in with a plan. We're like, Hey, you know, we're [going to] be married. And we're going to...wait that year or so, you know, let us get settled into married life before we start trying. And I've definitely put career first, so any time...opportunities come up as far as, like, Pacific Partnership or going overseas, and knowing...that you can't PCS more than a certain number of weeks along, [we] put that into the timeline before we knew we had infertility issues. And so...I was basically planning everything around my career and, Oh, I'm at a new duty station. I don't [want to] get pregnant right away and set that bad example...but [I kind of] had that perception that I'm putting family before career before I get to know what my job is at this new place. And then it was after that is when we had issues... So...there's definitely been a struggle, and now, again, I'm getting ready to gear up for another overseas PCS. We were debating on trying to do another cycle or not before we left. But at this point, I think we're [going to]...just wait until we get to Japan...career side is important as well, as far as...I don't [want to] roll into a new duty station and immediately start going, Oh, sorry I had to take all this time off because I'm having these issues, and I need to go do all this testing, or I need these procedures or whatever else. I [want to] make sure that I'm engrained into the command so that I'm well-thought of, so that if I do have to take that time off, that it's not [going to] hurt me for the purpose of rankings. (Interviewee, personal communication)

Another participant explained,

I tried to wait for a little while until I was in my command and, you know, had a good amount of experience and hours before I pursued it because according to the Navy instruction, you have to actually tell your command that you're doing it. (Interviewee, personal communication)

PCS adds another time limitation for those who would like to pursue parenthood. PCSing can inhibit the ability of a single individual to build meaningful and lasting relationships with a potential partner and can cut the amount of time to pursue pregnancy short.

4. **Required Trainings**

There is a substantial amount of training required for military personnel; the completion of these trainings can impact promotions or next assignments, so individuals tend to focus on ensuring these trainings are completed within a specified timeframe. Participant responses suggest that when trying to get pregnant, some participants tried to avoid pregnancy during certain trainings as it can be perceived negatively and/or can extend or complicate the training pipelines, while others had a positive experience with pregnancy at a training command. As explained by one participant,

I think the medical community is a little bit different than some of the other services in some ways.... due to operational demands. For a little bit, when I was [kind of] early in my career, it wasn't really an appropriate time to try

to conceive. And then I went for, you know, specialty training...when I was in my early thirties and, you know, no medical training system is particularly friendly to, you know, pregnancy or postpartum lifestyle. It's just really, you know, 80-plus hours a week, and it's intense, and so it's not really conducive to having kids during that time. So, I [kind of] waited until I finished all of my specialty training to pursue that. That put me in my mid-thirties when things were a little more challenging. (Interviewee, personal communication)

There was one participant who reported to a training command pregnant and though she thought it would be perceived negatively, she found that her chain of command was very supportive. Her chain of command viewed her being pregnant as a way of showing other females that you can have a baby and still be a CO or XO.

As a pilot...you go to shore duty, and you go back to the training command, and you get requalified. So, I showed up at the training command pregnant. And not visibly pregnant; I was about three months pregnant when I showed up....By this point, I know I can't get an option...the training pipeline and the command pipeline is sufficiently long that we were able to kind of move stuff around, and it all worked out. But when I showed up to San Diego to go to the training and to go into training-and I went to the CO to tell him, Hey, you know, I'm not [going to] be able to fly right now. But a large part of our syllabus is in the simulator and stuff that I could do. He was incredibly supportive and, you know, We'll tailor some of this to you, so that...we can make this happen. And then going to the commodore...I'm one of his future COs, and I'm, you know, pregnant. I was very aware of showing up to command school pregnant and how that might be perceived. So...I really was hiding....I didn't wear maternity clothes for a long time. And in the flight—and, like, things I could do in a flight suit—flight suits can hide pregnancy for a long time... I had some losses too. But I had kept the pregnancy very [quiet] for a long time, like probably...around four or five months when I first started telling coworkers. But...I told the CO immediately. And then when I went to check in with the commodore.... I was a little bit nervous how I was [going to] be perceived. The reception I got was fantastic....He was like, This is great news. And I'm thinking, Who really wants their CO...to have an infant or even...XO-CO fleet-up...my kids...they were about two by the time I took command because it was about 15 months. Yeah, so it's-about 15 months of XO and 15 months of CO. But the commodore's, This is great news, not just for you personally, but also, this will help you with the women that are getting out that like look it. You can have operational command and children. He was great. Thinking of that commodore makes me sad...makes me, like, choke up....I would say that professionally, it wasn't that it helped me professionally, but

I had a lot of professional support.... (Interviewee, personal communication)

While most avoid pregnancy during training or at training commands, having a command that views pregnancy positively can provide encouragement for others going through this experience. For those who continue to postpone pregnancy until after completion of trainings, this creates a time limitation as it is lost time on their biological clocks.

5. Deployments/Operational Sea Duty

Deployments and operational sea duty can have a major impact on service members and their relationships. Participant responses suggest that this impact affects pregnancy not only by nature of being geographically separated, but also by the amount of time spent away and the strain put on the individuals and their relationships. One participant explained,

I really wish I had, like, four kids by now, but...being in the Navy...traveling around so much, I wasn't able to really meet anybody. And I finally met somebody....I'm dating now, but like, again, I'm on a ship, and we've been gone for the past, you know, over a year...almost a year and a half by the time we get back. So, [we] haven't been able to even think about starting a family if we wanted to...or not. So, I was hoping to start [in]...my early thirties or...late twenties, but that just didn't happen. So, I'm 37 now. (Interviewee, personal communication)

These deployments can create instability and cause individuals to question their career choices. One participant recounted,

So, I had a great first tour, but I was underway a lot. So...my first operational sea duty, I was there in Mayport, Florida. I did two full deployments with all the workups, so I spent the greater part of close to...a year and a half to two years underway in that three-year tour when you include all of those work ups and things. And so, I was very burnt out. So, coming out of that tour, I wasn't sure I wanted to continue. And I was also extended. So, actually that first tour, it was pretty close—it was about 42 months. It was a lot longer than—it was a long time....So, coming out of that...I didn't [want to] fly...at that time, [I] wasn't sure I was [going to] continue being a helicopter pilot. (Interviewee, personal communication)

The level of commitment and time required by the Navy leaves some participants contemplating a change of career and in some cases leads to divorce. According to one participant, who was dual-military during her first deployment, after completing multiple deployments her marriage ended in divorce.

Upon coming back from that tour, the marriage was rocky needless to say, and so we decided to go our separate ways and get divorced....Oh, I think I was too focused on work, like, and not my relationship at that time. (Interviewee, personal communication)

She was not the only participant to mention that focusing on the deployment and mission requirements had negative impacts personally. One participant explained,

I got divorced when I was in Pensacola. I think what happened was we had spent so much time apart because he was deployed while we were there. We had been apart for the year that he was in Georgetown. And then when he was in school, I got deployed. And then even when he was in school, even if I had been there, I never would have saw him because his clinical rotations were really, really intense. (Interviewee, personal communication)

Another participant explained,

My first marriage ended in between Afghanistan and Japan. I had a miscarriage in 2006, and that and a variety of other issues kind of brought to the floor the problems in the marriage. You're familiar with the military. I mean, if there's any flaw in your relationship—and this is the tricky little theory of the military's impact upon relationships. You can take it for what's it worth, but I think that if there's any kind of problem with you—with your relationships with family, friends, significant others—that the military will blow it wide open in a very short period of time. Marriages that you could stay in for 25 years, 40 years, 60 years in the civilian will blow up in your face in a year or less in the military just because all of the added pressure. (Interviewee, personal communication)

For dual-military, the factor of time becomes even more challenging as one spouse may deploy after the other spouse returns from a deployment or gets off of an operational tour. This causes individuals to postpone pregnancy until they or their spouse returns. As explained by one participant,

My husband was getting ready to deploy and even though I was getting older, I was not up for being, like, a pregnant, like, solo mom because I knew I might get sick again....I just [kind of] wanted to work and have fun with my daughter and have fun with my friends while he was gone for those 10 months. So, we didn't try, and then I just figured, Oh, hey, I'll get pregnant right away when he gets back. (Interviewee, personal communication)

Another participant explained,

For my husband and I, it has been a challenge....We both know what we signed up for when we serve. The deployments obviously take a personal toll. You know, we hadn't anticipated that the frequency of deployments would take such a toll on our fertility. And then obviously separation for, you know, other reasons that like decreases your chances of being able to conceive naturally. I don't know that there was a lot with my career necessarily because I don't know that I would have made any different choices. But, certainly, it's a huge challenge to coordinate care for couples. You know, there were times when during my IUI...we did the freezing for the sperm...because he wasn't able to be there—for like a fresh specimen. Things like that that were...a challenge for us. Or even like appointment times...we couldn't get there early enough to...pick up from the office in town that did the sperm washing. We couldn't get there early enough to make it [to]...an early day appointment. (Interviewee, personal communication)

After returning from her deployment, becoming dual-military, and experiencing multiple miscarriages, failed IUI and IVF treatments, one participants' husband deployed during the treatments.

So, after two rounds [IVF] my husband has to deploy...to Bahrain for a year. So, what we end up doing is...we had to freeze his sperm, and I'm like, I'm [going to] continue to try to get pregnant even with you gone. And so...we take samples from him, and then he goes to Bahrain, and then I do another round of IVF here. And that one is a success. (Interviewee, personal communication)

This experience of having to postpone pregnancy due to receipt of deployment orders or leaving on an operational tour does not impact all females in the Navy as some career paths do not deploy at all.

Based on career field, I also joined knowing that I am not deployable. I will not ever leave my family...that might change with new [Defense Health Agency (DHA)] stuff, but as of now, I'm—we're not deployable, so personally it works out for me. (Interviewee, personal communication)

Another participant acknowledged that having a family can be challenging for dualmilitary couples, but it is doable with a good support system. You know, with dual mil, it's hard to figure if you're both operational how we do that. I mean, we're very lucky that we have a family support system where both my parents and his parents have said, You know, hey, we would take the children if you had them. But, you know, on the other hand, we've seen lots of people who've done it successfully, so it kind of seems like you just have to do it and not really necessarily worry about the Navy and what they think and timing. (Interviewee, personal communication)

This time on deployments and the time spent rebuilding your life post deployment is essentially time lost from the biological clock. For dual-military, the spouse's deployments and operational tours also have to be factored in. This requires a lot of coordination and in some cases makes an already short shore window even shorter. As can be seen, time is a critical factor in the participants' pursuit of parenthood. Based on what these women have shared, there doesn't appear to be a right time to get pregnant. The only right time is when your body is ready, and there is no way of telling if that will be within the windows established as a part of the commitment to serving in the Navy.

E. EXPERIENCES WITH FERTILITY ASSISTANCE

Experiences with fertility assistance vary dependent on the participants' barriers to pregnancy, location of treatments, types of treatments used, support received from command, and a host of other factors. The following sections address participants' overall experience with fertility assistance, the importance of privacy, the impact of the shared experience, a comparison of MTF and civilian facilities, and the perception of command support.

1. The Overall Experience

The interviews show that experiences with fertility assistance treatments vary based on individual circumstances. While some participants sought treatment due to being single or in a same sex relationship, others sought treatment due to a spouses' diagnosis of a male factor condition, their own reproductive related diagnosis, and/or the inability to get pregnant due to an unknown cause. These treatments occurred at MTFs and civilian facilities both in the United States and overseas. Several of the participants described long waits for infertility clinic referral appointments and embryo donation clinics. Those who sought care at an MTF experienced long waitlists for treatments. Some indicated that they were on the waitlists for the MTF for a year before starting treatments, while others utilized civilian facilities and did not have to wait. Others shopped around to find out which MTF had the shortest waitlist or no waitlist and many commuted to that location for treatment.

The treatments across participants ranged and included medications, IUI, IVF, ICSI, and embryo and egg cryopreservation. In many cases participants required multiple cycles of treatments and in some cases at different facilities. There were a few participants who became pregnant on their first cycle or after stopping treatments. Some participants reported requiring upward of 6 rounds of IUI while others were upward of 8 rounds of IVF. Starting with Clomid, progressing to IUI, and then to IVF was the most frequently cited course of treatments, though some participants sought cryopreservation. The progression from one treatment to another often occurred after multiple failed attempts and was dependent on the individual's situation. The mix of IUI and IVF cycles varied by participant and included hormonal treatments. There were individuals who, due to cost, age, or individual circumstances, decided to skip straight to IVF treatments. There were a few participants who did back to back IVF treatments as they were about to PCS and needed to get the treatments in prior to their departure. Several of the participants had to commute to access treatments. While some commands approved permissive TAD, other commands required members to take leave for the courses of treatments that were longer and further away. One individual took 30 days of leave to travel from Italy to get one cycle of IVF at a MTF due to it being illegal in that country for a single woman to pursue parenthood without proof of having a male partner.

Interviews show that experiencing a loss is often an unfortunate part of the journey to parenthood. Interviews show that participants' journeys included multiple miscarriages, frozen embryos that did not survive the thawing process, unsuccessful embryo transfers, and embryos that failed genetic tests. One participant recounted,

So, our first encounter was we had tried for about 11 months before we had our first pregnancy. I believe we...started in 2014 after we moved to Camp Lejeune. And then we were both deployed...obviously, when I wasn't pregnant, you know, and I had deployed. We were separated for about nine months in 2015. On returning, we did continue to pursue a natural pregnancy. We did have one pregnancy that resulted in a miscarriage in February of 2016. And then my husband deployed again for six months. (Interviewee, personal communication)

Another participant recounted,

So, mind you, I was 38 years old...I think that would put it at about 2013, and it was just a new technology. And I was already 38, so I was pretty old. So, it was a little bit questionable. But we went ahead and did the medication. I paid for everything out of pocket. I did the harvest. Then it was the day before my first final and I asked my now husband if he would be willing to drive me...hours away—so that I could have my eggs harvested. They ended up harvesting 41 eggs. We really—I was really excited. Cryopreserved them. That was kind of my—you know that was my safety net...I decided to go back up to New England, took the 41 eggs, took my husband's sperm because they said that was the easiest thing to do....We ended up with one embryo on day five, out of 41 [eggs] that [were] genetically normal, transplanted it, and it was a failure. (Interviewee, personal communication)

A few participants attempted to utilize donor embryos, but they did not survive the

thaw. As detailed by one participant,

Through one of the Facebook groups, I was hooked up with a woman...a single mother, who had had IVF and carried through a surrogate, I think eventually, but had her child and had two embryos remaining and was looking for someone to donate them. So, we talked, and we connected....She sent the embryos to me. Unfortunately, they did not survive the thaw, which is disappointing because I would have had a relationship with, you know, the biological siblings and that sort of thing, but neither of the embryos survived the thaw. So, that was particularly frustrating because I had already done...shots to prepare and...my body was ready to be pregnant, and they called me and said, No, sorry. Don't bother coming in. And then I ended up basically having to start a search again. (Interviewee, personal communication)

Another participant recounted,

I met a woman who was almost 40, and she was pregnant. And she and I became good friends, I took care of her, actually, and she had gotten pregnant by IVF. And she came back, and she had a mini stroke once she was pregnant, and so she was advised never to get pregnant again. She was Catholic, and she had a bunch of ... blastomas that had been frozen and that were down in Adventist Hospital. And she came in to see me one day, just for a routine exam.... This was after her baby was born.... She was asking me my story, and I said, You know, it's just not working. I'm not making enough eggs and everything. She goes, I'm [going to] go home and talk to

my husband, ...but I've got all these blastomas there. We can't bear to destroy them because, you know, we're really struggling with the idea that that's...killing a child kind of thing. And so, she goes, I'm [going to] go home and talk to him. And she said, ...If we offer them to you, is that something that you would do? ...I went home and talked to my husband and we were like, Yeah, that...is just...like, the most generous thing anybody's ever done for me. Sorry, this is emotional for me. Actually, it's just...amazing the generosity of people....We ended up doing all of the hormones and everything and got me ready to accept these donor blastomas that this woman had given us. And they called me the morning I was going in to have...the IVF done with them and when they thawed them, none of them survived. And so, at that point, the two of us were like, we're done, we can't do this anymore. I mean, we were just devastated. (Interviewee, personal communication)

As can be imagined, the interviews show that the stress and pain associated with these processes left some participants with the decision to stop trying for a second child, and, in some cases, the decision to stop trying for their first. One participant explained,

We did have two other embryos that were frozen, and we did decide to do a transfer...I think it was January of '17, but one of the embryos didn't survive the thaw. And then the transfer...it wasn't successful. We don't have any other embryos frozen or anything and we've decided that we're not [going to] go through another round. I'm just exhausted and...just physically you just get tired of the injections and all the hormones that they inject into you and [the] disappointment. And it's just too much, you know. We're blessed with one, and I can't complain. (Interviewee, personal communication)

Another participant explained,

I guess—in my aspect, I'm not trying again. I'm at this point, 39, and through both cycles, I only got two viable eggs. So, not really a lot of hope there, essentially, so not [going to] try it again for myself. (Interviewee, personal communication)

Participant responses suggest that utilization of fertility treatments requires time, especially when multiple cycles are needed or when individuals need to take a break from treatments due to the stress involved with the treatments or due to their body not responding well. Time is also needed to run tests, get the test results back, and obtain referrals from Tricare. According to participants, depending on the treatment, the work-up to get to the treatments can take months. In addition, timing is everything as MTFs only offer certain services a certain number of times a year. One participant recounted,

[After trying six months of failed attempts to get pregnant and a series of reproductive diagnoses,] ... they said skip IUI, go straight to IVF. Okay. So, [I] do IVF [and] we do our first harvest. I think we got maybe three embryos...And so, they implanted one, and it didn't take. So, we restart up again....I think we got like four embryos. We implanted three or four embryos. And then I ended up with high progesterone, so we had to stop the fresh embryo transfer, freeze them, restart up all the medications after my body...cooled down, and then did a frozen embryo transfer. And I think we put three in and not a one took...And so, we did another cycle. The third cycle with Walter Reed was a long cycle, which was a Lupron cycle. And so, that takes three months' worth of injections. So, I [could not] mess around, you know, because Walter Reed only offers it like five times a year. So, if you miss one, you have to wait [until] the next one. So, we did the full Lupron thing, did the whole nine yards. I think we got six on that try. We implanted three and not a one took. So, now I'm on my fourth IVF frozen embryo transfer and we still have nothing. So, we go through another round. So, this is now my fifth harvest, and I'm approaching the age of 42. (Interviewee, personal communication)

Interviews suggest that same-sex couples experienced differential treatment. Some participants personally experienced or know of individuals who experienced discrimination and/or were not allowed to be as fully involved in the process as a male spouse would be. One participant explained,

But I will say, I guess, one other thing—our experience related to other people's experience, San Diego was very, very accepting of our family unit. And we never had any concerns or that...if for some reason I couldn't carry that my wife wouldn't be allowed to carry either my embryos or try as a dependent as well. But other military family—or other military friends that are in the similar situations on the East Coast or in central like with Army or with other militaries have had some situations where they were—kind of felt discriminated against as a same-sex couple trying to go through fertility or their partner was told, Oh, you would just be a surrogate. You're not part of this whole, you know, biological family, so...you don't have rights. And it was an interesting scenario that some other couples had to deal with, so... I will—we were lucky, but that is the experience some of my military friends have had. (Interviewee, personal communication)

Another participant explained,

We were treated incredibly well with the civilian facility that I went through. You know, being gay in San Francisco is...a pretty normal thing. So...I didn't ever feel awkward about it. California's a really liberal state. We were both on the birth certificates. There was really nothing awkward about that. So, emotionally, for us, we felt very supported and, you know, really well-treated during our time. But, like I said, it was all civilian. I will say, I had the unfortunate luck of having to give birth to my son at Balboa because we transferred when I was pregnant. And that was terrible, I hated it. After seeing what my wife went through at a civilian hospital and the difference between the two, it was like-it was shocking, really, the level of treatment that we provide our service members. And I can't tell you how many times the supervisor, like, of the birth certificate-like at Balboa had to come to my room and personally try to figure how to fill out our birth certificate. I mean, it's just frustrating. Like, you know, Don't Ask, Don't Tell and [the Defense of Marriage Act (DOMA)] have been repealed since 2012-time period, 2013-time period, and they still-all of their forms still read "mother, father." They can't figure out [what] to do with [a] same-sex couple. I was, actually, for the first, like, year of my son's life, listed as his father in [the Defense Eligibility Enrollment Report System (DEERS)], which is just incredibly infuriating. And it's not, like, that hard of a concept for people to wrap their heads around. But I felt, like, constantly affronted by...people acting as though this was...the first time this had ever happened. And I just find it-like, you know, Come on. Get with the program, man. Like, you're the manager of this-at this facility of the hospital. Like, you should probably have some training on how to deal with...couples that aren't your standard Navy military couple. And so...long story short, my son's birth certificate is incorrectly filled out and it's frustrating because the only way to change it is to actually get a new-I can't even get a new birth certificate. I have to get an amendment to his birth certificate and it's a whole process. It's very frustrating. And so, I was really nonplussed about my treatment both emotionally at Balboa, my birth story at Balboa. (Interviewee, personal communication)

Interviews suggest that when seeking fertility treatments overseas, the costs are cheaper than at MTFs and U.S. civilian locations. Participants receive excellent care, but there is an adjustment that must be made to adjust to the culture as well as, in some cases, the language barrier. In addition, the laws of other countries have to be taken into consideration. One participant recounted,

The process is like 10 times harder while you're overseas [in Germany] because at the base, they can't do any of this testing. They immediately refer you out in town, so doctors just sort of speak minimal English, and their service is very different overseas. (Interviewee, personal communication)

Another participant recounted,

We picked a clinic out in town that's—you know, speaks English, but... it's always interesting and different to go to another country, you know, be immersed in their healthcare....Japan has an amazing health care system, but it's different. (Interviewee, personal communication)

The laws along with not being collocated in the same area of Japan as her spouse led one participant to postpone her IVF treatments.

Because we were not collocated in Japan, although we did spend a lot of time together, we chose not to pursue reproductive services there in Japan because IVF...is what we're looking at doing now. And...with the laws, you can't export your embryos and I don't even know if the frozen embryos could make it back to the states from Japan. And with that uncertainty and work schedule, we just felt like it was best for us to wait until we got back to the states. (Interviewee, personal communication)

The overall experience of participants varied significantly dependent on their circumstances. These variations, many of which cannot be controlled, make planning a pregnancy according to recommended guidance extremely difficult.

2. The Importance of Privacy

When dealing with sensitive situations, such as pursuing fertility treatments, privacy is an important factor. The majority of the participants indicated that their privacy was extremely important to them. Because this is such a sensitive and private topic to discuss and because of how emotional going through this can be, many of the participants indicated that they didn't really talk about what they were going through. As one participant explained,

I generally did not advertise that I was going through IVF. So, close family members,...my best friend, my husband [knew], but... at the time, I was not all that public about how hard of a time we were having getting pregnant. I mean, people were kind of aware, like, Oh, you guys... [want to] have a family. When people would ask, like, Oh, yeah, you know... we plan to have children. But we didn't get into the details of how much we were struggling for that to happen. (Interviewee, personal communication)

Another participant explained,

But when you're trying to hide it from your family because...you're on vacation, and...you don't really feel like sharing with them....I didn't want questions. That was the other thing, the only reason I didn't really discuss it is because I didn't want questions. And, again, that's just me....I didn't [want to] talk about it. And I don't [want to] talk about it. I [want to] figure it out, and do it, and then if it works, I'll tell you. And if it didn't, then I don't have to have you sighing over what a pity it was because it didn't work if it doesn't. (Interviewee, personal communication)

Another participant recounted,

Obviously, infertility, slash, difficulty, slash, you know, miscarriages, and all that, it, for so long, has been so private for so many people.... So, there's not a lot of room for discussion, I guess. And then, again, how do you sit there and say like, Oh, I'm going to do this. Like, our neighbors know, and my work only knows that I did two rounds of IVF because I had to put in paperwork and put time off. But other than that, like we didn't-essentially, we didn't really advertise, which is a good thing and a bad thing in our society basically because, like you said, you realize you're not alone. But finding-how do you find out you're not alone until-you know what I mean? So, it's an interesting dynamic in how to, I guess, have that conversation, you know. Yeah. You're like, all right, roundabout. Who's had IVF? Who can't have babies? Who's done—you know, it's not an easy conversation to breach in general. And to be honest with you, with potential strangers, I don't know that I would necessarily, like, you know, sit there and go out and just share like, Oh, can't have babies. (Interviewee, personal communication)

The decision to share this information with the command is not always by choice.

One participant explained,

When you check into a brand-new command, it's the question of, like, is this the conversation you have with your director to say, Oh, by the way, I'm going to be pursuing IVF. According to the Pregnancy and Parenthood Instruction, the addendum for that says that you just have to write a letter to your commanding officer to let them know the time that you'll be gone for IVF if that's what you're pursuing. Which is interesting because how do you predict what the time is? It could be, you know, the four weeks to do the cycle. It's the four weeks plus the three months you'll been gone for maternity leave if it works, or any other time in between. So, like how do you predict—I don't know. I'm a person who reads into a lot of things, so how do you predict what that time is? You know, if your kid is sick, and they can't go to the CDC, guess what? That's another day you're [going to] lose. So, there's all of those different things that happen...how can you predict that time? But that's what the instruction says: Predict the amount of time you'll be lost from the command. The other items are, you know, like, who really needs to know? Probably your PRT coordinator if you have to get waived from the PRT because you miscarry right before the PRT or, you know, who else? Your OB is [going to] need to know, but does everyone else need to know? No one else needs to know what you're pursuing. (Interviewee, personal communication)

Maintaining privacy is not always possible. The OPNAV 6000.1D requires individuals to notify their command if they plan to use IVF treatments. The In-Vitro Fertilization (IVF) paragraph of the OPNAVINST 6000.1D states the following:

(a) Service members undergoing infertility treatment(s) through IVF, intrauterine insemination, or assisted reproductive technologies are required to inform their command with a letter from their provider specifying the duration of the treatment and the potential dates for procedures (e.g., oocyte retrieval and embryo transfer) so that possible duty limitations may be anticipated. Side effects and limitations should be discussed with the provider who will determine appropriate duty considerations and individualized care plans. (DoN, 2018)

One participant indicated that she felt her HIPAA rights were violated.

I found it...was just very invasive. You really weren't able to maintain a lot of privacy. I felt like my HIPAA rights were violated...during my pregnancy journey because I did have...choice words for the CFLs at our commands, like, even though it's nobody's damn business why you have a waiver...you end up having to talk to freaking everybody about your experience when you don't necessarily want to. Like, I'm a private person, and so I just felt, like, kind of violated by having to tell everybody. Like, Well, why do you need the time off? Why do you have a waiver? Why didn't you do PRT? (Interviewee, personal communication)

Another participant explained,

The...biggest thing is flexibility and, like, really respecting privacy. I didn't feel like that many people needed to know about my ovaries...your department head does not need to know...there should be no reason why. There's enough staff members there. There should be no reason why it's a problem. I can understand certain billets, yes, it might be, you know, more challenging. But the larger commands...people are just being a pain in the ass, like you can make it work...some people just choose not to. (Interviewee, personal communication)

For others who work within hospitals, maintaining privacy was also challenging.

The hardest part for me was that everybody in the clinic knew I was going through infertility treatments and they knew exactly what day I was going for what. And so, you know, the days—at the time that I would find out I wasn't pregnant, that was the hardest part for me was to be able to tell everybody it didn't take this time. And then, you know, [I] have to work with them all day long. (Interviewee, personal communication)

Having to inform the command is not always an easy or comfortable thing to do,

especially with such a sensitive and private topic. One participant explained,

I think it's a little awkward that we're required to notify our command that we are going to go through that process. I mean, part of it I understand because there's procedures and, you know, appointments leading up to it, but I don't think that any other part of any job in the U.S. requires you to tell your employer when you're [going to] ...try to have a baby, so I think that that's a little inappropriate in my mind. (Interviewee, personal communication)

Sharing this information without knowing if the treatments will be successful can also be a sources of stress and discomfort. For participants who have experienced a previous pregnancy loss, or complications, sharing this information can also be unnerving. One participant explained,

But then it was a matter of I'm also a very private person because we had such trouble getting pregnant the first time....So the fact that I had to ask leadership. I mean, I understand rules, but at the same time, from a personal perspective, I had to ask leadership. I had to let everyone know....You never know what's happening, you don't, like, spread it around because...obviously the chance of failure—I don't know if it's high or not, but essentially, it's there. And disappointment on yourself, but then knowing other people know you're going up there for that is...difficult, and I had a hard time. Our assistant department head was like, Well, it's military, and you're active-duty. So, essentially, she didn't say, Nothing's private, but essentially, Not everything can be private. (Interviewee, personal communication)

Another participant explained,

I didn't want a lot of people to know because I didn't want—you know; it doesn't always work. And so, you don't want to be like, Oh, I'm [going to] go try and have a baby. And then come back and be like, Yup. That didn't work. Because it's a long time. It's a lot of costs, lot of process. So, I mean those are the things that were trickier. (Interviewee, personal communication) Some participants wanted to request permissive TAD for their treatments, which is at the Command's discretion. Requesting this time off can also be a source of anxiety and stress as the request is routed through several people for approval and approval is not guaranteed.

I, luckily, got TAD orders nonpaid. But still that was stressful because they weren't sure if they were [going to] approve it since I was only less than two years in, at that point, less than a year in. I didn't know if I was [going to] have enough leave. It was stressful in that aspect as well. But it was nice having time off from work because I didn't stress about work, though... I think I got lucky in that aspect because it was far-two and a half hours, three hours—but it wasn't at my command....So, benefit was ... I didn't have to worry about work...but it's also hard because, again, everyone knows you're going through it. And when you are a private person, then essentially everyone knows-everyone's essentially waiting for the response to, Did it work? Did it not work? So it's extra stress, I guess. I mean, they say don't distress, but it's easier said than done. And then it was unsuccessful in my aspects...So, then we tried again in January, and that one was a little more stressful paperwork-wise because since I did it the first time, they weren't sure if they were [going to] approve a second time. And then with that, again, I still didn't know if I had enough leave. And it was around the holidays getting the paperwork, so it was also stressful [in] that aspect. And, again, try not to stress, but you don't know-because then I'm like, well, if it doesn't work, are we trying it again? I have to ask time off again. Do we not try it again? Do we not-like, all these things you try to plan for what if when you shouldn't plan for what if. You should probably stay in the moment. But...that one was unsuccessful as well. (Interviewee, personal communication)

Participant responses suggest that though it is private topic, they have found that

they are not alone and there are many others going through the same things.

And it's not something women really talk about, but once I started going through it, I found out that a lot of my coworkers who are at my same age range and same profession—it's kind of a high-stress profession, to be honest—they were going through similar issues. (Interviewee, personal communication)

Interview responses show that the ability to maintain privacy is important to participants, but dependent on treatments, Navy guidance and the need for time off requires notification to command. This lack of choice in maintaining privacy created an emotional cost for participants.

3. The Shared Experience

The interviews show that sharing experiences can have a positive impact on individuals. Participants have found that shared experiences function as a source of hope and provide an invaluable resource to those who are currently using or are thinking of using fertility treatments. One participant explained,

Yeah. I feel like people are becoming more vocal about infertility. It's not as taboo a subject as it used to be seen. . . . I tend to be pretty vocal about my journey because I want others to know that it's not uncommon and it is hard, but, you know, you need to know other people are going through the same thing for just that support system. (Interviewee, personal communication)

While some participants desired to maintain their privacy, others were more open and willing to share their experiences with others. One participant explained,

Once I started having kids, a lot of people came to me because I was open about my experience, and I was open about the fact that...we used IVF and all that. So, I actually had a lot of folks kind of come out of the woodwork, even people who weren't really friends who just sort of heard, you know, through whatever, got referred to me. And they're like, Hey, can I talk to you about this. (Interviewee, personal communication)

Another participant explained,

And so, I guess this is a very long way of saying that... I had multiple experiences within the journey to grow my family physical, emotional, adopting, going through a successful round of IVF. And it's astonishing to me how many people have either done all those things or some portion of them, and nobody ever says anything. So, I'm probably a classic over-sharer now in the sense that any time there's any type of gathering of people in my community, I always volunteer to be on a panel or stand up and say something. And then I end up getting phone calls and emails because nobody wants to talk about it around other people. And I understand why, because it's horrible. Nobody wants to say I put my career ahead of my family, and now I physically can't have children. So, I'm going to do this incredibly invasive, long, expensive procedure to myself, so that I can give birth. Or I'm going to take advantage of the fact that some poor kid's family failed them and now they don't have a family, and I'm going to take them into my home. Because there's nothing happy associated with the beginning of adoption or IVF. You know, somebody was neglected or abused, and that's why they need parents. Or you have something physically wrong with you, or you're just old, and you have to do IVF. And I think there's kind of an intrinsic shame to it that makes people not [want to] talk about it. But then when people start to talk about it, it's like this logorrhea of sound that just comes out. (Interviewee, personal communication)

Several of the participants acknowledged that the Female Navy Officer Facebook group allowed women to open up and discuss this topic as well as ask for advice. As described by one participant,

So, I think having that support system has been amazing and...where people are open and even on the Facebook group of people willing to share their journey and their experiences and resources that they've used....I've gotten more support from that than I have from going and speaking to providers. (Interviewee, personal communication)

Another participant explained,

Most of us [kind of] don't talk about it all that much. It doesn't come up necessarily in conversation, and there's not that many of us especially in high levels. The female Navy Facebook page is probably the one where that conversation happens the most. And really a lot of it's just been in response to...people posting, Hey, you know, I'm thinking about this, and, you know, being able to say, Yep, this is what I did.... None of my close friends have needed IVF so . . . the ones that I would have, you know, close detailed, conversations with, they didn't need it, so we didn't have those conversations. (Interviewee, personal communication)

Many of the women acknowledged the power of having support from those who have and/or are considering utilizing fertility assistance. Having someone to talk to that has gone through the journey is an invaluable tool that provides resources and support. One participant explained,

But really just knowing, like, you're not alone. There's lots of people that struggle with this. I think a lot of people don't talk about it because it's a painful thing to talk about. And when it's you, you imagine that everyone...has not gone through...this or...you see constant baby pregnancy notifications on Facebook. And so, you tend to just turn inward. And so, it's been super great and beneficial to have females and female leadership that's like, Hey, yeah, I've been through it too. This is what I did. This is what worked for me. This is what I struggled with. And really, you know, kind of how it fit into the career and where they did. And that sort of [thing, such as] raising kids and having a balance, all of that has been beneficial. (Interviewee, personal communication)

Another participant explained,

I have been very open about my experience as I was going through it, so I know that there were lots of women kind of watching from the sidelines as I'm going through this process. And then, you know, eventually as it became successful, I had a lot of women send private messages to me asking me details about the process, details about the cost, the expense, details about whether or not the DoD or the DoN had any programs in place to support, even if not financially, but just other types of support. And it kind of helped lay out a foundational groundwork for them and set their expectations for whatever their diagnosis was and their-you know, their own personal walk with infertility. So, I've had a lot of women approach me via Facebook, now, asking me about this. And a couple of women locally here...as well who ended up needing to do IVF and both of them ended up pregnant. So, it was really, I guess, rewarding to know that even though I had to go through a lot to get to where I was with a healthy pregnancy, to know that in the end, it resulted in a healthy baby, and in the end, it resulted in helping several other women who also now have healthy babies. I think that that reward is just—you can't—the price is totally worth the price. And it's a lot of sacrifice, but you can't put a price on the fact that there are now other families out there in the Navy that wouldn't-may not have been if not for me being able to help them because I was so outwardly vocal about my journey. (Interviewee, personal communication)

Another participant recounted,

I think a lot of women kind of are shy to bring up that, Hey, I'm having issues. And then once they find somebody who's gone through it, all of a sudden, they're like, Oh, a relief, somebody to talk to. The same thing here at my current command, I had somebody come up to me that said, Hey, I know you just had a baby....I'm [going to] guess you're a little older. I'm like, Yes.... And they're like, I...would really like to get pregnant. Can I ask you questions? And I think that's when we need to break down that barrier of, Yes, please. You know, like, We're happy to share our experiences and tell you how we got through this and how we got there. And I found out one of my friends here that I talk to all the time, she had to do IVF for both of her pregnancies, and it was a struggle. And I think once we kind of realize that we're all in the same boat, it makes us a little closer and, hey, we're moms that, you know, we [want to] have a career. We have a career, we're doing our best, and we've struggled and done this hurdle together. And I think it [kind of] makes a neat little bond. And that's why...I love that [Facebook] page because we can share our stories, and we have people who are like, Okay, yeah, hey, here's how I did it. You know, we're here for you. We've been through it. And I think they know that you truly are happy for them. And I think it [kind of] gives you a little bit more of a sisterhood than, Hey, we're just officers together. Or, hey, we're just in the Navy together. It's, hey, we've overcome this....it's almost like we kind of all see it as a barrier. Like, we made it, we made this hurdle. We still have

a career, and we had our families, and we've [overcome] these issues that you know, that got popped up in our way. But I think it [kind of] makes a stronger little bond when you find out, oh, okay, like, you had this, like—I love having someone I can reach out to who knows what I went through. But I think in a way...I don't know if I would say cultured, but in a way...we're not open about it. Like, now I have nothing to be afraid of. You're like, I don't care....I'll tell you I did IUI. I'll tell you that I had issues. But at that time, you're kind of like—you don't [want to] admit that you're struggling... unfortunately, I think.... It's just somewhat ingrained in us, like, well, you're just not trying hard enough...I think it's a relief to people to know that somebody else will say, No, I had issues too. I'm here for you. (Interviewee, personal communication)

The interviews show that shared experiences help guide those who are currently going through treatments and let participants know that they are not alone in their journey.

4. MTF versus Civilian Facilities

There are substantial differences between MTFs and civilian facilities. Some of the participants noted key differences between being seen at an MTF and being seen at a civilian facility. These differences, expressed by several participants, are worth noting as each participant had to make a choice on which type of facility they would use, and these choices are a part of their overall experiences. Based on the participants' responses, those who had care at an MTF described a very phased approach that took a lot of time to get through. One participant explained,

When you're doing fertility treatment at a medical facility that is military so Walter Reed in my case-it's a very cookie-cutter experience. So, they take all of their people, and they put them on birth control pills.... They have what's called a cohort, so you get several patients at once. And they're all on birth control pills so that way they can control when their day one is, when they're [going to] have their period. And so, then they start the IVF process together as a cohort. And it's very cookie-cutter, so you all start off with taking the same medications, the same dosages, and then as you're coming in for your monitoring appointments, they may adjust your dosage, but they don't do any other specialized treatment. And because of the medical diagnosis that I had, I really needed the one-on-one care with the doctor, and I needed specialized treatment. What Walter Reed does and what Navy medicine does with their fertility clinics works wonders for people who have unexplained infertility. So, otherwise they're healthy, but they just can't seem to get pregnant-boom-they'll do IVF at Walter Reed, and they're pregnant on their first go around, and they're off to the

races, and everything's good. But that cookie-cutter approach doesn't necessarily work well for people with other medical diagnoses. So, as I was learning that talking with doctors and reading medical journals, we decided that if we really wanted the best odds for pregnancy and time isn't on our side to try other things first and then default to the more expensive one if it doesn't work out, we just decided to go for it. So, we invested the money in going out in town and doing IVF and eating the cost of that, but ultimately it was worth it because I got more specialized care, and it was closer to home. (Interviewee, personal communication)

Another participant explained,

But before they [want to] take you to any other treatment, you know, they have this protocol of what they want you to do. So, like, we couldn't do anything but IVF because of just our unique situation. But then they wanted us to go through [this protocol]....So, you would think that they would be able to tailor your specific treatment to your particular situation instead of just going through a checklist. So, I would say, like, things like that were the most frustrating out of the whole process. (Interviewee, personal communication)

The participants who considered using or who did use the MTF indicated that they were put on waitlists. One participant recounted,

I didn't know that the wait was [going to] be so long. The doctor was like, I can refer you, but it might take a year to even be seen. —I know. I was shocked. I was like, a year? Oh, okay. But by then, it was like, what do you do because there's really nothing you can do, right? (Interviewee, personal communication)

When put on waitlists and while going through lengthy procedures, time continues to pass and for some, this wait and phased approach felt like a waste of precious time, as their bodies continued to age. According to interviews, participants had to compete with dependents for appointments at the MTF, which was a source of frustration given the tight shore duty windows. One participant explained,

Particularly when I was in Portsmouth Naval Hospital, and the fertility clinic is—all of these clinics are generally very high demand. It's hard to get an appointment. There's a large patient load there. And what I would get really frustrated on because I'm like, hey, I'm active-duty, and I've got a three-year window...I can't wait for a month to get an appointment. Like, that used to drive me crazy when I would sit in the waiting room and it seemed like...very few people were in uniform in the waiting room. Like, there's a lot of who you assume are, like, military dependents that are

going—and I always felt like I should get priority—like active-duty should get priority because we don't have the flexibility. Like, I don't have the ability to go out in town...the health insurance I have makes me go to the military treatment facility, so I've [got to] use this military treatment....I had to use this path, and I'm competing with dependents to get appointments, so that used to drive me crazy.... When you're on shore duty, and when you're active-duty, I always felt like you should have a priority, but that's not the case. But...I understand when it comes to medicine... they open up to everyone. (Interviewee, personal communication)

For some, their perception that the MTF did not want to assist them or their dissatisfaction with care were determining factors in transferring their care to the civilian sector even though they knew they would have to pay more out of pocket. As explained by one participant,

So, by the time I intended for me to do reproductive assistance, I was already older. I was 35 and a half years old, and we had tried without anything for about four months with nothing happening. And the military was extremely hesitant into assisting us. They were actually flat out not going to do it. So, I just went and paid for it out of pocket through a private doctor. (Interviewee, personal communication)

As recounted by another participant,

I came back from the deployment....We said, ...We know that there's already some male factor infertility issues. Let's pursue...assisted reproductive help through the Walter Reed Clinic at Bethesda, and so we stopped there. Had a really terrible experience with them. We saw a doctor in one of the first appointments. He basically drew a picture of the anatomy and tried to explain to us in very condescending terms, like, This is how a baby is made. And we sort of, looked at him like, Yeah, yeah, okay. We have multiple advanced degrees between us. And, you know, we've been trying this for a couple years. And we've had this worked up, and we know there's some issues. And he, again, was very condescending, and just said, Well, you know what? Let's-this is how it works. Why don't you guys try timing, you know, and we'll see what happens after six months. I sort of lost my temper, and I was like, No...we tried having sex naturally for six months trying to time it on the right days....We're ready to move to the next step. So, I had to be pushy. So, finally they agreed to give me some hormones....It like stimulates ovulation...and then do IUI...So, we tried that, but, again, we...had a really horrible experience. Every appointment we had had some sort of just, like, drama to it. Like, they lost my record. They scheduled us, and then we showed up, and they said, Oh, you're not scheduled. The actual day of the IUI, my husband, you know, produced his

part of it. They take it away, they spin it around in a centrifuge, bring it back. You know, they look at it under a microscope and all that. They walked into the room, and they called me somebody else's name, and were like, Okay, Mrs. Jones, blah, blah. You know, and I said, Who are you— What? No. Like, who's sperm do you have right there? Like, you know, don't come near me. So, it was really—we didn't have a lot of confidence in them. So, all that to say that we tried to go down that path and then very quickly realized that if we needed—if we wanted to get the process going, you know, on the sense of urgency that we had, we needed to go out in town. So, we went to Shady Grove. (Interviewee, personal communication)

Some individuals requested referrals to a civilian facility after multiple failed attempts at the MTF and after approaching the age at which some facilities would no longer provide treatments. That was the case for this participant.

So, this is now my fifth harvest, and I'm approaching the age of 42. And so, I had a very frank conversation with [the doctor] there. And I said, Look, I'm [going to] age out in four months, you know. I would really like to have a consult to have a second opinion. And he said, That is absolutely fine....So, I had 10 embryos, and I decided to not do another transfer with Walter Reed. And I carried a huge cryopreservation thing from Walter Reed over to Shady Grove and had-what they didn't do at the time at Walter Reed was...the genetic testing. And so, we did the genetic testing with Shady Grove. But they discovered that seven out of 10 of the embryos came back with abnormal trisomies. So, there were only three normal embryos in the entire batch. So, I'd already transplanted nine embryos, so who knows how many of those were bad. Obviously, all of them I guess were because they didn't take. So, we were like, okay, this is-you know, this is now our fifth transfer. I went through Shady Grove. So, transferred, and lo and behold, two-weeks' wait later, and we're pregnant....We put in two embryos. One took, so that is my two-year-old that I'm looking at right now....We put in that last embryo, and now I'm pregnant with a boy. (Interviewee, personal communication)

One participant made a comparison between treatment at an MTF versus treatment at a civilian facility.

I...did try twice on the inside and I have a comparison of those two....So, outside, obviously, you go to private clinic. It took a long time, but...the place we went to was amazing. The doctors were amazing. I saw the same doctor every single time. The nurses—I mean, I wouldn't call it a small clinic per se, but it wasn't like—it wasn't huge essentially. There were two main doctors and then a nursing staff that you knew and you got to know the embryologist. You got to know...everyone. So, it felt very comfortable.

And then when I tried [inside]...it was a completely different experience. Very robotic essentially. We...tried at Walter Reed, so essentially you go in, you take a number. They call you back, you give blood. They call you back again...for lack of better terms, you don't necessarily feel like a person. And I don't think it's due to, like, the personality of the nursing staff or anything like that. As like...not as a clinician, but like as a business side, I understand it because I have so many people coming in, but at the same time it's not nearly as warm-because trying to get pregnant, it's difficult... You have the stress of...work, finances, everything else. Can I get pregnant? I'm almost-at that point, I was almost 38, you know. So, all those factors, and then the fact that it's not a very warm environment. You sit in a clinic until they call a number, not even your name. It was very disheartening, I guess, it's-lack of better term-it's very cold. Again, I get it from a different perspective, but, again, being a patient with all those thoughts....Are my follicles growing? What am I [going to] do here? Like, once you go to obviously 30 days, you know, and those two days, like, you know, retrieval and then implantation days, obviously, it's a little better. But, essentially, it's roughly the same. You know, when you're in that waiting area to go for surgery, you're with wonderful people in the waiting area-well, not waiting area, I mean, like, in your bed. Then, all of a sudden, four more people are [going to] come in. Kind of like a factory line, I guess-for lack of a better term. On the plus side, it's obviously a lot cheaper. Obviously, you kind of put money in, I guess, for long term investment as opposed to short term, but I didn't realize the short term would hit so hard, essentially. So, then there's financial aspects there when \$6,000 is still a lot. But, again, it's not 20-over \$25,000. So, would I have been able to try if I was on the outside? At this point, no, is the honest truth, so I'm grateful for it. (Interviewee, personal communication)

In the civilian sector, individuals were, for the most part, not put on a waitlist and were able to start their treatments right away. Though the civilian sector costs more, in some cases, such as at Shady Grove, participants indicated that they were given a discount and a money back guarantee if the treatments were unsuccessful. One participant recounted,

And we actually ended up doing something that they call shared risk, which is a—sort of an insurance policy. It's a financial thing where I think it's \$20,000, but they also have a big military discount, so maybe it was 15. I don't know. And then you pay for the drugs and stuff on top of that. But let's say \$20,000, and they say, We'll do six cycles, and we guarantee you a live birth. So, if at the end of those six cycles, if you don't have a live birth baby, you get your \$20,000 back. Or if at any time the doc says, You know what? You're no longer a good candidate, and I...don't want to keep treating you, you get your \$20,000 back. Or if you say, you know, three or four cycles in and this is just too much. And...I don't want to do it anymore, you get your \$20,000 back. (Interviewee, personal communication)

One participant discussed her frustration with dealing with a civilian facility and Tricare.

So, our current pursuit is to find a clinic that is civilian that we are comfortable going to. That, so far, has not gone well. I've been to one clinic and did a consultation and the whole process just has [been]...really frustrating dealing with civilian providers who tell you one thing. And then you call the Tricare insurance line, and they tell you another thing. And they won't contact each other. So, then the person dealing with all of the infertility has to be the middleman contacting each entity, trying to figure out if certain procedures are covered. And one place will tell you one thing, and then the other one will tell you another thing. And then even Tricare, getting different representatives, they will tell you different things about what's covered and what's not. So, we've basically come to a standstill right now of just being, like, frustrated with the system, and that's why we haven't really started...any type of treatment yet. (Interviewee, personal communication)

Though some participants had negative experiences at the MTF, others were satisfied with the care received and the affordable price. The waitlists, commute to facilities, and the standard protocols were challenges faced when participants used MTFs despite the lower costs. Money-back guarantee, level of care, proximity, and lack of waitlist were the benefits identified with using civilian facilities. The cost and determining what Tricare would and would not pay for were challenges associated with using civilian facilities.

5. Command Support

Participant responses show that given the amount of time required to go through this process, having command support plays an important role in participants' experiences. As explained by one participant,

Well, with me being a O-4 who runs teams at a big command...my command was mostly hands off....But I will say that when I did disclose that I was starting to do IVF, because I worked for all men and because the men that I happened to work for all had stay-at-home wives, who, you know, they started families early and they didn't have fertility issues, they didn't really understand anything about the process at all or what I was

going through. So, they were very just hands off and like, Yeah, okay, whatever. Do whatever you have to do. —Which, in a way, is great because I just did whatever I had to do. But, in a way, it would have been really nice to also have the support there of them knowing what I was going through or even knowing some of the details about what is involved in the process. So, they had no idea what it meant to be going through an IVF cycle. They didn't know that it involved an egg retrieval surgery, that I would have to, you know, be out of work for that day. And none of this in the grand scheme of things in my specific case was a show stopper....But when I think about it in terms of young sailors, maybe women who are still in the their twenties who get some sort of medical diagnosis but want to have a family and they decide to do IVF, if they didn't have their chain of command support, and they were in a role where they...had to be at muster at the same time every morning, and, you know, that kind of a thing, without that chain of command support and without them understanding what the process looks like, that woman is more likely to not have a successful IVF attempt, andor even decide...to try for IVF because they may think, Well, this is...just not [going to]work with how my...command does day-to-day ops here. So, for me, it was not an issue, but I could certainly see it being an issue for other women. (Interviewee, personal communication)

According to participant responses, though level of support varied by command, most of the participants felt as though their commands were supportive. As explained by one participant,

My commands were super supportive, and I am really grateful for that. I actually fell into the 18-weeks maternity leave when I had my son, and I was grandfathered into that just due to good timing. And that was, like, a lifesaver because I could really recover from all the emotions of what, you know, we went through for two years and really spend time with him for a while. (Interviewee, personal communication)

Another participant explained,

The command was pretty supportive. They...found out I was doing this, they didn't have to, but they actually pulled me off of a TAD to South America because of the Zika risk. And I didn't even realize that they did that until afterwards, so that was a really nice thing that actually a female member of my chain of command kind of did it as an advocate for me. My OIC and the people who signed off...they really didn't comment on it either way, if that makes sense.... It was a medical, and that's all they needed to know. . . . And I didn't really share it...just a few...people who kind of needed to know. So, I wouldn't say embarrassment, just more of, like, privacy, I think. (Interviewee, personal communication)

One participant, who became pregnant while in command, received support from her chain of command:

But when I was in command, and I got pregnant, you know, I told my boss. He was absolutely supportive. Told the admiral, admiral was absolutely supportive, and it was amazing. It was great. I think it was a great thing for our junior women to see because, you know, we didn't have an example growing up in the Navy where we saw pregnant commanders, or, you know, pregnant [commanding officers]. And I think you're seeing it more and more now, which is awesome because it shows people that you can do it. You know, any time in your career, as long as you, you know, hit the right wicket. (Interviewee, personal communication)

There were participants who indicated that they did not receive the same level of support from their commands as others experienced. As recounted by one participant,

Command support, totally different story because at my previous command they did paid TAD for the active-duty member and their spouse two times for two different couples to go from overseas to Walter Reed for IVF cycles. And so, when I was at this new command and I wanted to ask [my XO] for us to get permissive TAD so I wouldn't have to use my leave and got the response of why are we having—why would a clinician be out of clinic for three weeks, is this really necessary type of thing, and, No, you have to take leave, —was a total shock. (Interviewee, personal communication)

Another participant recounted,

I just think a lot of comments from the XO even when I had a supportive CO were discouraging such as, like, Well, have you thought about waiting? And then he...emails me about the Command Intermission Program, which I knew about, and I just think it was inappropriate for him to just email me about it and...ask me if I'm interested where I think that...should be something that the member goes to their command about instead of kind of being-I mean, he obviously didn't tell me to do it, but it was very obvious that it was something that he would very fully support because he did not want me in the command being pregnant and then having just had a child. So, I think he was really negative influence on the whole entire process. And so, when my CO that was supportive left shortly after I had the baby, it became a lot harder for me because he was not, I guess, very caring about...the stuff that happens right after you have a baby even after you go to maternity leave when your child's in daycare and getting sick. And I just wish...they were more supportive of me and...recognized that my husband works full-time, too, and he did stay home. We took turns with the child, but, you know, she had a sickness that she was contagious for eight days, and so I couldn't send her to daycare for eight days. That's a

little difficult when you both work...You know, we tried to take turns, and I took some leave. (Interviewee, personal communication)

Some participants were proactive and educated the command throughout the process. As one participant explained,

I tend to bring to the command, the policy. That's just because I read up on it, and I know the references. And so, you know, every time the announcement comes out for the PRT, you know, like, Hey this is the ten-week notice or whatever, I go to the command fitness leader with exactly what they need, you know what I mean? I don't just reply to the email, and say, I'm pregnant. I come to them. I'm like, I'm pregnant. Here's the letter from my provider. Here's the exact due date. Here's when I'm exempt from the P—you know, the PFA. Here's...the code that should show up on my FITREP, you know. It's a "N" instead of whatever the other code that always gets confused, you know. It's not a physical waiver. (Interviewee, personal communication)

Other participants shared minimal information with the command. One participant explained,

Since I don't like sharing what I'm going through, I don't know if I can put that all on a command for, like, not being supportive or not understanding just because, like, I don't want to be open about that, and I don't want to share about it. So, I don't think I could fault a command not being supportive in that aspect.... I'm not sure that I wish that anything could be done differently. I'm sure I'll have a different answer if I do to have to go through IVF and experience all that. But I think just from where I'm sitting right now, I don't think that any of my commands could have done anything differently. (Interviewee, personal communication)

Though support varied by command, it was evident that in most scenarios, participants felt that their commands and their professional communities were supportive and that there was not anything the commands could have done differently. Some clarified that because they wanted to maintain their privacy, they did not share a lot of information with their commands due to wanting to maintain as much privacy as possible. Because of this, the opportunity for the command to make changes to the way they handled things did not exist.

V. FINDINGS

The goal of this study is to inform Navy policy by capturing the journey of female naval officers in the pursuit of parenthood, as well as the personal costs associated with their journeys. The previous chapter described participants' journeys. This chapter presents the personal costs of the unique tradeoffs and considerations female naval officers face when they make decisions pertaining to fertility, including emotional, professional and monetary costs. It also presents the impact of experiences on perceptions and participants' recommendations based on their experiences. This section includes a selection of quotes from participants depicting their experiences; additional quotes can be found in the appendix.

A. EMOTIONAL, PROFESSIONAL, AND MONETARY COSTS

An examination of the emotional, financial, and professional costs provides insights on the intangible and tangible outlays expended in the pursuit of parenthood. As it pertains to the emotional, professional, and monetary costs, interviews show that most of the participants felt that the emotional costs associated with fertility assistance were the most substantial.

1. Emotional Costs

Participant responses suggest that emotions are evoked from every aspect discussed thus far and are often associated with pain, frustration, and stress, which was evidenced by several moments across various interviews where the rehashing of their journey tapped into suppressed and painful memories; some of these memories they did not realize they were still carrying. Depression, anxiety, anger, sadness and an array of other emotions were expressed during interviews. Some emotions stemmed from not being able to have children without assistance, failed attempts, going through the process, finances, and a host of other things.

The participants' responses provide a look inside of the hearts and minds of those who have and, in some cases, are still on the fertility assistance journey. These are the thoughts and feelings that often go unspoken as these individuals proceed throughout their work day. The implication for this section is to provide insight that could help leaders better understand the portion of this journey that they do not always get to see as most people choose to keep these details private. As explained by one participant,

If you haven't been through it, you don't know what the physical, mental, and emotional tolls are. And so, for the leadership I don't know how else to better educate them on those aspects because, yes, we're sailors and ... we have a job to do and a mission to meet, but when we do go through these other things...there's not a real visible aspect other than ...weight gain and the swelling and the bloating from the medications. (Interviewee, personal communication)

Another participant explained,

The emotional part's harder because, obviously, you can't put money on the emotional ups and downs. And it's even harder, too, because I played the role of spouse, obviously, with her going through that so not understanding it—because even when she didn't get pregnant a couple times, and she'd be down or blame herself, I was like, you know, this has nothing to do with you. Like, you can't control anything....Obviously, I wasn't condescending; I tried to be supportive as possible but trying to make her realize that she couldn't control it. But then when it was my turn... I clearly understood more because no matter how close you are to the situation, until you go through it you don't understand...what it's like to, essentially, feel like a failure. I feel like I let down my wife and my daughter because I could not have babies. And I know it sounds potentially stupid, but at the same time, I know logically-I'm a smart woman. I know, logically, there's nothing I could do. Again, I don't smoke. I don't drink. I don't do drugs...relatively in good health. But, at the same time, when it happened I felt like I let my family down. And then, again, on top of that, you have to go to work every day and pretend like nothing happened. Again, I don't have a good social support at work. Also, since I'm across the country from my family and most of my friends... I still have a two-year-old that we take care of. So, I mean, sometimes you just want to mope for a day or so but can't do that because you have work and other responsibilities.... Personally, I don't think I have dealt with the-essentially for lack of better terms-the loss of being able to have children. (Interviewee, personal communication)

Participant responses suggest that emotions stemmed from feeling like their body failed them. One participant explained,

So, emotional, probably the biggest one was getting over the fact that I wasn't [going to] be able to do it on my own. I knew I wasn't [going to] be able to do it completely by myself because it takes two, but—you know, but that it wasn't [going to] be my egg, my baby in that sense. You know, it wasn't [going to] be, you know, my genetic material that was getting passed on. That was the hardest part to get over for me. And not because I was wedded to it because I've got, you know, stepparents....The biology didn't matter, it was almost—it was the my body failing me part that pissed me off, and I [kind of] had to grieve over that. You know, all of my life my body's done what I need it to do except this one thing, this one thing that's really important to me. So, that was probably the biggest emotional toll on me. (Interviewee, personal communication)

Another participant's emotions stemmed from the time requirements and financial

burden. She explained,

I would say for the emotional part, like, I would say anxiety...wondering if I would have the time or the finances and how I would do that to be able to... take time off and to pay for it I think is a huge burden as far as considering doing it. (Interviewee, personal communication)

Participants' responses suggest that some emotions stemmed from not knowing why they could not get pregnant naturally or through fertility treatments. As described by one participant,

In terms of the emotional toll, it's been rough. The initial testing, my doctor sort of freaked me out. He misread my blood tests and told me that I had Hep C. Yeah. Or he misinterpreted it, rather, and then sent me to the hospital for further testing, and the doctor there took one look at my paper and looked at me and said, This is ridiculous. I don't know why you're here. So, that was really stressful.... I had like 15 vials of blood drawn for testing within, like, a one-week span. That's pretty draining. The whole, you know, not knowing what's wrong, what's going on, that takes a toll. It took a toll on me and my husband, in some respects, because I was so concerned and so stressed out trying to get pregnant that, for him, it started to stress him out....It got to the point where it was, like, okay, we have this window. We have to go now. I took the pill, or I took the shot, and now I'm triggered, and now we have 24 hours. We [got to] do it. And so, for him, you know, that really weighed down on him. And every time I got my period, obviously could be pretty depressing, so there were a lot of tears. You know, you're younger, you're like, yes, I got my period. Okay, whew, we're good. And now it's like, I'm older, and I'm at the point where I'm ready and... (Interviewee, personal communication)

The interviewee was unable to finish her sentence as the emotions associated with her statement came to the forefront. She was one of several participants who, while sharing their journey, channeled very deep emotions. One interviewee indicated the need to take time off from fertility treatments due to the emotional and physical impact. She explained,

At that point, they decided to continue with Clomid....I did three IUI treatments with no luck....And we decided to freeze some of my husband's sperm because he then got picked up for training, and he's been gone for the last three months. So, we have some of him—his samples frozen to use for IUI, but I decided to put it on pause because it was taking, like, a huge emotional and physical toll on me with the constant, like, doctor's visits and having to leave work. And the testing and the procedure itself was not exactly pleasant...so, that's sort of where I am now. We are seriously considering IVF at this point. My husband wanted to put it on hold, especially since he's [going to] be gone for training for another three months, and then we're PCSing. So, we'll be PCSing, I think, to the DC area, and I've been told Walter Reed is really good about it. And so, we don't—at this point, we don't know, timing-wise, if we should start to try the IVF issue or wait. (Interviewee, personal communication)

Many of the women experienced miscarriages or loss of embryos during their journey, which was described in the interviews as a painful experience that causes depression, anxiety, fear, and a host of other emotions. Participants' responses suggest that the pain associated with the loss of an unborn child, regardless of the stage of pregnancy is something that never goes away. One participant explained,

We went for it. It was a huge chunk of money, of course. And then I ended up having six eggs and then four fertilized, and we put in the three best ones and the fourth embryo froze...And I did get pregnant doing that, but then I miscarried in the second trimester, which was awful because, you know, the fetus starts to develop at that stage, so it's not, like, pleasant.... It was really heartbreaking because I... three good heartbeats, and, you know, I was like 15 weeks along and just thought it was [going to] work. But I went in and there wasn't a heartbeat in... my final ultrasound before I had the actual miscarriage. So, it was pretty devastating. And I just got through that, like, we got through it, and we had that one last embryo who was frozen, and...we were so lucky because it's my son. So, it worked out for us. And I just—it was very nerve-wracking because when we had my son implanted, I just was a nervous wreck the entire time because...I thought I would miscarry again. He ended up being, like, healthy every step of the way....But I feel lucky because, first of all, when I went through all of that infertility, I'm an O-4, I work in medical, like, I'll advocate for myself. But,

I just feel so lucky because I was 41 when I had him, and, you know—I'm sorry, I just—It—yeah, it's very emotional. Yeah, it was hard. And I'm lucky I have a supportive husband and supportive parents and great friends. (Interviewee, personal communication)

Another participant recounted,

I didn't expect it to work, honestly. I felt like I was doing it kind of fatalistically, and if I had to try—the doctors harvested 18 eggs from me and only one embryo survived, and I felt like I had lost 17 children, which sounds so ridiculous, but that's how it felt. (Interviewee, personal communication)

Another participant explained,

I guess part of me feels like it took a little bit longer than I had hoped especially with the fact that I had gotten pregnant so quickly with the IUI, the medicated IUI, and then losing the pregnancy. So, that was definitely a journey, given—I'd given that diagnosis to people but never lived it before, so I think I had a bit of anger, disappointment, and a whole variety of emotions kind of put together with that situation. And then as I went through and went through the egg harvesting and then the IVF procedure, there was a whole other set of emotions. I had bleeding early in the pregnancy and certainly was concerned I was miscarrying even though the previous time with the miscarriage, I didn't bleed. Just having the medical knowledge I had, certainly I was concerned. And then the second trimester, I had placenta previa, so was concerned during that whole second trimester that I might have medical complications related to that and need a C-section. And then in the third trimester, I finally got to enjoy pregnancy and finally felt like—I was like, Oh, so this is what being pregnant was supposed to be like for the past, you know, nine months. (Interviewee, personal communication)

Another participant recounted,

Emotionally, it was awful. Having those losses and just being so hopeful and then having to start over from scratch several times, that was the worst part of the whole thing especially the second trimester miscarriage because that was just—it's just like, physically not good either....I was being devastated, then, like, thinking it's never [going to] happen for you, that's that was the worst part of the whole thing. (Interviewee, personal communication)

The Operating Guide enclosure of OPNAVINST 6000.1D, provides the following guidance under the pregnancy loss paragraph:

The Service member's CO or OIC must be notified as soon as possible following miscarriage, stillborn birth (loss of a fetus after 20 weeks gestational age), or neonatal demise (infant death 0 to 28 days following birth). Due to the sensitive nature of these events, the utmost discretion must be exercised to ensure Service member's privacy. (DoN, 2018)

This guidance does not stipulate standard time off post miscarriage. A PCM or OB-GYN can authorize convalescent leave post miscarriage, but that does not always happen and the number of days authorized varies. Some women go back to work post-miscarriage without taking time to grieve their loss. Some participants find comfort in going back to a normal routine, and others feel that they do not have room in their schedule to take time off. As explained by one participant,

Well, emotionally, I mean, most of it was dealing, I think, with...the miscarriage and kind of trying to figure out how to handle that and still show up to work. and, I guess, process it in an appropriate manner because I think part of me just wanted to push, push, push, and just show up and keep doing my thing so I could continue to move forward and—you know, in my career, which for better or for worse was just kind of how I dealt with it. (Interviewee, personal communication)

According to another participant,

The emotional piece, of course, is the psychological piece—is hard because, you know, when you're a leader, you can't-you're not [going to] go to work and be a basket case. So, I had sailors to lead. I had a command to run because the first time...when we lost the first baby and I miscarried, I basically did an outpatient procedure....I don't like to be knocked out. So, I requested to go in for a D&C. I just did it in the doctor's office. I had them do it while I was awake. Because...as the XO, I had things to do. The next day we had the command holiday party, so I just pushed it aside and went, you know? Because...I was trying to deal with it through work. And then, you know, I talked to, you know, chaplain about it and things like that. So, I used my resources. And then when I was pregnant the second time, I was actually in command. So, I did not let anybody know that I was going through IVF because I felt...it was...my privacy, you know. And when you're in command or in the XO position or anything like that... you're not really putting yourself out there. You're not putting your personal information out there. (Interviewee, personal communication)

For some the emotional costs were not as significant as they were for other participants. One participant explained,

Emotionally, I don't know that the Navy has made it harder or easier. I would almost argue easier because of the ease of—at least in my situation, [convalescent] leave and sick leave—I mean, my leadership has been incredible. So, I think that actually has made it easier, less stressful. I'm not, like, counting hours or trying to figure out when I can leave clinic to get tests done. That's been really great. (Interviewee, personal communication)

Another participant explained,

Since I'm a pretty scientific, objective person, I always kept a very scientific, objective mind frame. And in spite of the fact that I was pumping myself full of hormones, and, you know, I guess I maybe could have at some point been hormonal, I think, say, staying very objective about it and not letting my feelings get in the way of things actually benefitted me because I've had to have discussions with women before who have also been down this road with IVF, and it really wreaked emotional havoc on them. I think I was lucky in that it didn't really wreak emotional havoc on me. As a matter of fact, my husband joked that I was actually easier to deal with when I was on all the medications because likely when I was not on the medications, I was going through menopause. So, I was menopausal, and that in and of itself just makes you all raged and angry, and, you know, hard to deal with. So, I was actually better off emotionally, and I was easier to work with and easier to deal with at home when I was going through IVF, which is ironic because it's usually the opposite for most women. So, I can't say that the emotional task for me was that heavy. (Interviewee, personal communication)

Another participant recounted,

Emotionally, I mean, I don't think you go through any adversity in your life that you don't learn and grow from. So, I think that certainly, as painful and as much pain as I went through doing this, I'm okay with where I am at today with it. And so, anything that I've been through in my life has led me to the point where I am right now. And I'm okay with that. So, there's a cost, but there's also a benefit. (Interviewee, personal communication)

2. Professional Costs

The participants' professional costs varied as some felt as though it did not impact them at all. Several women indicated that it did not impact them because they had their children on shore duty and/or had very supportive commands. Others expressed various levels of actual and potential impacts. The impacts were expressed in terms of time, requirements post-birth, weight gain, and potential impact if pregnancy would have occurred earlier in their careers. A few indicated that having a child definitely impacted them professionally:

Sure. So, professional, I would say I don't think that I suffered at all professionally....I acknowledge that I am very lucky because in other cases, you know, you may not have the same kind of flexibility to do all the medical appointments that are required and all of that. So...professionally...it did not hurt me, which I'm lucky about. (Interviewee, personal communication)

Some of the women mentioned the costs post pregnancy, such as when they have to go TAD as a dual-military family or when they need to leave work because their child gets sick. One participant explained,

It was just-the impact of, like, what do I do when I have to go TAD for two weeks, and, you know, my parents were still working at the time, and my husband's traveling all the time in the Marine Corps. It was just kind of hard. Like, I had to, like, say no to some things that I would really like to do, and I've had to go do some things where... luckily, I had my parents...I was tasked to go to Korea for, like, six weeks, and, luckily, my mom was [able to help]. So, things like that would have impacted my career for sure. Like, I don't know what I would have done if they were like you have to go, and I didn't have help with child care. So, that part of being dual-military was really tough for us, but I...was bitter sometimes because I felt like...you know, my husband is great.... but it was more like, Hey, I'm going away for a month. Like, see you later. But then when I had to go away for even a week, it was like I had to plan for it for, like, four months....I feel like a lot more of the burden is placed on the mother—in a lot of cases, so... It's definitely been kind of tougher on the career like I said. (Interviewee, personal communication)

Another participant explained,

So, you know, on the—on the professional side, it did not hurt me. But motherhood changes you, so hence why I'm retiring. I gave up my look at captain this year because I knew in the end that my heart wasn't in it anymore because I was more concerned about being available for my child because he's essentially been raised by daycare for the past three years....And, you know, I was tired. Because one of the things that...you don't know as a new parent is how often your child gets sick. ... If you don't have family in the area... it's really hard because you have to take leave if you don't have a command that's supporting you because by the time he turned one... I had already transferred. And I went to a command that was mostly male-dominant, and, honestly, a little—I felt it was a little misogynistic. You know, it was, Well, I make the money. My wife stays at home and raises the kid. And I would get the question, Well, why does soand-so need to take care of their kid? Don't they have a family care plan? And even at the level—at the captain level—they still thought that family care plans were to take care of your kid when they were sick, so you could come to work. (Interviewee, personal communication)

The Child Care and Family Care Plan guidance is provided in the OPNAVINST

6000.1D.

Child Care. As directed in [SECNAVINST 1000.10A], Service members must anticipate the responsibilities associated with parenthood and are required to arrange for childcare to cover regular working hours, duty, exercises, and combat contingency deployments. (DoN, 2018)

Family Care Plan. Single Service members with joint or full custody and dual-military couples with eligible family members are responsible for initiating a formalized family care plan as directed in [DoD Instruction 1342.19 of 7 May 2010 and OPNAVINST 1740.4A]. (DoN, 2018)

For a couple of participants, the professional costs were in the form of the impact

of emotions on profession. One participant explained,

Professionally, I definitely look back and realize that I lacked on my military bearing a little bit at my last command just because of everything that I was going through. I didn't have a lot of emotional coping skills to deal with everything at once. I do think now that I'm at a new command where I feel supported, I feel like I can talk about things that I need done. I think I am emotionally in a much better place, so I think, professionally, it doesn't quite affect me as much now. (Interviewee, personal communication)

Other participants related the professional cost to time-time away from work or

the impact that taking time to go through the process has on work.

The career cost was really just related to time. During the 30 days that I was on leave, I still had a command cellphone, so I was able to keep up on email and relate to anything that had to happen. So, I was really only missing which was a setback for patient care....I do think about the fact that it's something that people will kind of look at and be like, Oh, you did what? But I'm kind of at a point in my career where I've reached as many goals as I need to. I think I'll be able to make O-6 without having to worry about how this will affect it. But at the same time, time keeps going and you find you get to a point where you realize you can't stop time to make other things happen, so... (Interviewee, personal communication) A couple of participants mentioned that timing is everything and that if they had pursued parenthood earlier in their careers, they feel there could have been an impact. Because they waited, their careers were not impacted. One participant explained,

I think a different point professionally, it would have closed some doors on the operational assignments...and the deployments, which have been all career-enhancing for me at least on the Navy side. And I think if I had had a child or was pregnant at the time, those opportunities would not have been open to me. And the timing would not have worked out in my favor at all. I see several other women who have gotten-good friends of mine who...think they're not lined up very well for their O-4 boards, for example, because they've had several babies back to back. ... If that's what they want, they should be having that because they're in their mid- or late-30s, but that ... removing yourself from the competitive operational assignments for that critical window, it has-just-impact I think, you know. And I've always wondered why there's...not something like a deferment for your year group or something like that, so that only you take time to have babies before she's not able to have them anymore. But at the same time, not feel like she's sliding behind, you know, have a second time pause or something like that, you know. I don't know. (Interviewee, personal communication)

Another participant explained,

I think earlier in my career there absolutely could have been the threat of a professional cost. I think the fact that I waited until this specific tour when I already have a very well-established reputation—my career field is very small... it's a very small world to be [in my profession]. So, I have a reputation professionally that I've worked very hard to set up for myself, and because I was able to do that and establish that professional reputation in my earlier years-in my twenties and early thirties, I don't feel that there was a professional cost to me doing IVF and getting pregnant later in my mid-thirties. But I will say, had I have attempted to do IVF or get pregnant while I was still working on establishing my reputation professionally, I do think that there could have been a negative cost. And I think that the fear of that negative cost is actually what drove me to not get pregnant earlier and not seek out getting married and having a family earlier because I was afraid of the negative perspective that I would have professionally—or that I was given, I guess, the negative perspective that I was given by others professionally. So, while I don't feel that it affected me once I was pregnant and once I was doing IVF, I do feel that this would have if I would have done it earlier in my career. And, frankly, that's probably what ultimately led me to having to need to do IVF because had I have gotten pregnantgotten married, and gotten pregnant younger, I wouldn't have these fertility issues. I always have really loved what I did and therefore staying late or taking on extra projects that were not necessarily within my job scope, but

they were job enhancing or job enriching in some way, you know, professional development type stuff, I would take on those extra things. And now that I have a son, I'm a little concerned about not being able to give quite as much as I used to, but at the same time, I'm not concerned because I'm still giving what it takes to get the job done, and I'm still giving what the majority of everyone else gives to the job. So, I think it's more of a personal shift for me that I can't take on all of the extra little things that I'm used to taking on, and I have to just be okay with, you know, putting in my 40 to 50 hours a week and then going home. And as long as all of the checks in the box have been made for the job at hand, then I'm good. So, this is more a mentality shift on a personal level, but it affects my profession. (Interviewee, personal communication)

For one participant, there were no professional costs, but it did make her a better

medical provider.

I just thought it would [kind of] round out who I was...professionally....It's interesting because as a woman's health nurse-practitioner, I took care of women all the time who were pregnant. I didn't understand their experience fully. And so, for me, it was important-and this was probably prominent in my thinking—was that for me to be able to fully understand what women were going through, I had to go through it myself. And interestingly enough, when it didn't happen and I finally decided to stop trying, I wanted nothing to do with OB anymore. I just didn't [want to] take care of these women anymore...I probably have a much deeper understanding of women-what women go through. You know, even though my desire was-one of my desires was to be able to understand the experience of pregnancy, which I never will have now, and that's okay. But I certainly gained experience in, you know, people who go through infertility treatments and people who have, you know, struggles with getting pregnant and that sort of thing so . . . And I just think, in general, has given me a better understanding of all adversity that women go through just by virtue of being a woman. (Interviewee, personal communication)

There were some individuals who felt that having a baby hurt them professionally as they either have not selected for the next rank or do not feel that they will. One participant recounted,

Professionally, I feel like this baby at this point in time is killing me professionally. Like, I don't see myself moving up any further...this will be my terminal pay grade. I knew it was [going to] impact me professionally. I mean, just think of, like, an evaluation off of that. Like, I get to a command that goes underway on a ship, but I can't go because I'm pregnant. So, me and eight other new parents, if seven of them are going underway and I'm not, it's the...FITREP. They were like, We're underway on the USS whatever in support of whatever mission. And then, you know, I'm back at the department doing paper work. It just doesn't sound good. If you think a lot is competitive or out of commission for not only the duration of your pregnancy but a year afterwards when you're not deployable or...you don't have to go on TADs or any of that. So, professionally, I'm okay at a place in my career where I'm not [going to] say that I don't like to do anything and go off and retire, but I will retire where I can afford a couple bad evaluations. They're not even bad, but just not as good as they could be. And still retire. And I'm okay with that because...family means more to me now than the Navy ever did. (Interviewee, personal communication)

Another participant recounted,

It would have wrecked me professionally because the time out of the cockpit for a pilot would have been irrecoverable. So, you're med down-in my community, you're med down because we're in an ejection seat, you're med down immediately. You know, if I was in a helo or a P3 or now P8, I think you can fly up to 28 weeks per our NATOPS-our-you know, our policies. But if you're in an ejection seat aircraft, you're med down immediately. And so, if you... know, six weeks or eight weeks, that's at least seven months that you're out of the cockpit. And then all the postpartum period, so it's almost a year that you are noncompetitive even though you're probably still supporting the mission through all of the ground jobs that you're fulfilling. You're not doing your primary mission, and so... That's why I think—you know, that's why I say that as an operator, it would have been completely incompatible—in my field...my pregnancies and maternity leave haven't affected me professionally because I'm not going anywhere. I'm not [going to] promote. Yeah...so, I'm at a dead-end, but it's a very comfortable dead-end. (Interviewee, personal communication)

In one individuals' case, though she is doing well in her career, the inability to start

a family is what led her to the decision to submit her resignation.

My counterparts in civilians... have no problems having kids and running a practice. And they're able to really balance it because they can choose to work part time and, for me, it's almost impossible.... There's no way I could feel like having a child, like, being operational because I'm gone all the time, and I'd [want to] be there for them. And I don't think it's fair to them that I would be gone all the time.... And...also, if I [want to] be competitive with my male counterparts, taking time off to have children is not very conducive to trying to make a career out of this lifestyle. I mean, to be honest...that's a reason, actually...I just actually submitted my resignation because I wanted to be able to be home and, like, have a family, and, like,

this environment is not conducive to that at all. So, I was like—I just chose not to stay in. (Interviewee, personal communication)

3. Monetary Costs

The financial costs varied depending on the facility used, geographical location, and services utilized. Participants reported that some of the civilian fertility clinics offered discounts for military and/or offered money back guarantees. Across all of the interviews, there were varying responses as to what was covered by Tricare or at the MTF and what was considered out of pocket. The most inconsistent response pertained to medications. Some indicated that their medications were fully covered, while others stated that it was partially covered or not covered at all. Some individuals were able to have all of the labs completed at the MTF and then transferred to the civilian facilities, while others paid out of pocket. Tricare did not pay for IVF treatments, which as mentioned earlier, is one of the most expensive treatments. Other costs that were mentioned included transportation for those who had to commute and hotels for those who were unable to stay with family or friends.

People paid for their treatments in a host of ways inclusive of, but not limited to utilizing savings, bonuses, loans, and assistance from other family members. Because the treatments varied, the participants out of pocket expenses varied with some spending less than \$1,000 and others spending over \$70,000 for fertility treatments. For those who are earlier in their careers, have less disposable income due to other responsibilities, are single, or who have a single income family, this journey has posed more of a financial burden for them than it has for some of the dual income families. Some have completely drained their savings and took out loans to pay for treatments. Others contemplated whether or not to pursue more expensive treatments because of the costs and the impact it will have on other life goals. One participant explained,

The whole journey in general has cost us a lot more than I could probably imagine...I don't like debt, but after student loans and trying to get pregnant, essentially, I've come to accept, I guess, more. Doesn't mean I still like it. But I'm in a lot of personal debt, both financial and otherwise. So, getting our first baby...well over \$30,000, just well over that...But then you have life goals, and you're like, okay...I can always make money. As a woman, you can't always have babies essentially. So, it's finding that balance without drowning essentially. (Interviewee, personal communication)

One participant recounted,

And, at this point, we'd already spent hundreds of dollars for all of this because the hospital here...can do the IUI procedure, but they can't do the sperm wash. So, that I had to pay for. And then Tripler, their appointments are so booked all the time that I ended up having to go out in town to get the procedure done. So, we spent hundreds and hundreds of dollars on all of that and plus trying to freeze his sperm. So, the prospect of having to pay upwards of \$10,000 for IVF has really weighed on us because—I mean, we can afford it, but that would put us back from our goals of purchasing a house in our next duty station. And then there's also the length of time and the toll that takes because I do have a friend that is going through IVF, and, you know, the egg retrieval is really terrible. And then having an embryo not take, for example, I don't know if I could handle that. (Interviewee, personal communication)

One participant told the story of a woman she spoke to who only had one shot at parenthood due to financial reasons. As can be seen by the participants' experiences with fertility, most have required several cycles.

Like, I can recall talking to women in the waiting room...who had had to save up money for months, and...they had one shot, and I'm thinking, Oh my gosh, the pressure of that. But...my pressure is time that I'm running out of shore duty time here, but luckily, money was not...a limiting factor for us at all. So, while it is—absolutely financial hardship...I was in a situation where it didn't affect us that much. (Interviewee, personal communication)

There were several individuals who indicated that they did not experience a financial burden from the treatments either because their treatments cost less or because their household income was enough to comfortably cover the costs. The latter was the case for several of the participants.

Financially, you know, we were two O-4s at the time. We could afford...the cost of it only because we were active-duty. But I can't imagine what an enlisted couple goes through or even a single person goes through that doesn't have, you know, two O-4 incomes. Even though the military picks up a good portion of it, it's expensive. (Interviewee, personal communication)

Those who pursued fertility treatments overseas did indicate that the cost of treatment is significantly less at civilian facilities overseas than it is at MTFs and civilian facilities in the United States. One participant indicated that her facility told her that some of their patients fly overseas to receive treatments because the cost of travel and treatment overseas is significantly less than paying for treatments in the United States. She explained,

I would say I guess, again, we were a little bit lucky in Germany. But at the same time, it didn't work, so I don't know if it's the level of care they did there. But IUI in Germany is probably about, I don't know, a couple hundred dollars and then IVF in Germany is only 3500 Euros plus medications, which is probably about 1500 to 2000 Euros. So, we probably spent about 1,500, maybe 2,000....That's not an insignificant amount and, in fact, that's all in cash in Germany. So, it's not like you can put it on, you know, a credit card or loan or anything like that. (Interviewee, personal communication)

Regardless of the level of financial burden, many acknowledged that while they were able to handle the costs, they still considered it to be a significant amount of money and in some cases, they had to shift their priorities around. Several people mentioned the hardship they would incur if they were not in the financial positions they were in, if they required multiple or different types of treatments, or if they were enlisted.

I had means because I had bonus money, but had it taken more rounds, or I hadn't had that bonus than I think the financial impact would have been more. And I still, unfortunately, kind of waffled with, like, okay, this is kind of a big chunk of money. Can I really spend this on this?...So, again, when, ideally, you [want to] be doing this mid-twenties, people say, well, not everybody's [going to] have some sort of bonus or extra source of income to fund this so that they can continue giving their all and focus on the Navy and that being their number one priority until they get to whatever point they want to get to then start having that family. (Interviewee, personal communication)

Those who utilized an MTF paid less per cycle than those who received care in the civilian sector. One participant explained,

So, I mean, I was talking to a coworker...and she was like I spent \$30,000 to have my baby. And I was like, wow, I'm [going to] only have to pay like \$600 each where she was paying thousands and...it was very eye-opening to me to make me grateful that at least I did have some access because it was—although the stress and the anxiety—it was a lot cheaper for me to be

able to use the facilities there than having to go out in town. (Interviewee, personal communication)

Another participant explained,

Tricare's amazing, right? Like, we get free healthcare and that's incredible and that's a benefit that all—most people in our country do not have. So, I generally have nothing bad about Tricare. I am disappointed that there is no assisted reproductive technology covered for Tricare, not even like intrauterine insemination. Nothing is covered. So, that's disheartening. Certainly, incurring a financial cost, however, I will say...I am able to get my meds through Tricare, which is a significant chunk, probably \$4-5,000. And then the fertility clinic gives a 25% discount to active-duty, so instead of \$15-20,000, we're looking at \$8,600. So, it's like half off, but still is a significant financial investment, which, of course, the end result is totally worth it to us. (Interviewee, personal communication)

One of the participants expressed gratitude for paying less at the MTF, but also mentioned her frustration with having to pay out of pocket for a treatment that was supposed to be covered by the pilot program previously mentioned.

So, financial cost was—it was arguably better than if I had gone out in town. I ended up coming out of pocket about \$5,000, which would have been closer to about \$11,000 in town. And I paid for half that, and then my parents paid me the other half as a Christmas present, so they're supportive of me in this journey...I chose to do it at Balboa Naval Medical Center San Diego because, at the time, the Secretary of Defense had come out andthat 21st century sailor's speech...he had come out and one of the points in his speech that he made was that Tricare is now [going to] cover the costs of cryopreservation reproductive materials for both male and females on active-duty. Not for spouses, but for the active duty member. ... that, you know, fiscal year, it was supposed to come into effect. And then... October 1st, no instruction. October 15th and nothing coming out from BUMED. Nothing coming out from DHA. I eventually reached out to my congressperson. I reached out to the Undersecretary for Health Affairs at the Pentagon, just kind of Googling people, and eventually found out that, yep, he had said that, but no, we don't really have the means to do it. And I could never get-like, DHA blamed Tricare. Tricare blamed DHA. Everybody blamed Congress. Congress didn't know what they were talking about. I read through the whole NDAA, there was no language in there prohibiting it, but BUMED said there was...bottom line is it never came to fruition even though it was a policy put out by the secretary at the time. And so, I ended up coming out of pocket for that. (Interviewee, personal communication)

There was also one participant who indicated that if it were not for the military, she would not have been able to afford treatments.

Well, my career...actually had quite a bit of influence on whether or not I would...do infertility treatments and mostly because of the financing of it. If I had been out in the outside world, I never could have afforded it. But I had the advantage of...Tricare and then the support...of my Navy family as well. So, I'm not sure I would have been able to pursue it. (Interviewee, personal communication)

4. **Repressing Emotions**

In one particular interview, while sharing the story of how her expectations compared to her experience, one participant stated, "I think my experience is a pretty good one....I'm probably like a success story....There's no reason I should be upset about this, but I'm sure there [are] a lot of people that you're [going to] talk about that are [going to] be very—it's a very emotional subject. So, I'm sure you have a lot of very emotional interviews, and mine shouldn't be" (Interviewee, personal communication). I later learned her story. This phenomenal woman has completed several deployments, has been an operational department head, and in command. She's been separated from her dual-military spouse on several occasions. Essentially, she, like many women in this study, gave the time and commitment required of service in the Navy. This successful woman has also experienced several miscarriages and a host of heartache on her pursuit of parenthood, yet she doesn't feel like she has a reason to get upset as she is a success story and feels others have had it worse than she has. This is a testament of the strength of women, the burdens women carry, while somehow finding a way to hold their heads high because they feel that someone else is worse off. Every journey matters, every experience molds us into who we are, and we each should have a right to express the emotions attached to those memories without feeling like they don't matter as much as someone else's journey. There were several other women in the study who mentioned that they didn't realize how much they compartmentalized their experiences until these interviews. A couple even mentioned not taking time to grieve and having to keep pushing through with their heads held high because their job or family still needs them.

In my aspect, I'm not trying again. I'm at this point, 39, and through both cycles, I only got two viable eggs. So, not really a lot of hope there essentially, so not [going to] try it again for myself. But...time off to grieve is—I guess sounds stupid a little bit, but at the same time I don't think I have grieved the fact that I can't—for whatever reason, [I'm] unable to bear children essentially. Or get pregnant or whatever it is...and you just put your head down and you keep going essentially. So, I mean, yes, you have leave days...but at the same time, then you have to plan leave days. And then...when it's being in a clinic where... tomorrow you have 10 patients, so I can't just say, Oh, I don't feel good today. I mean, you can to a point, but then you can't to a point. (Interviewee, personal communication)

Whether consciously or subconsciously, emotions have been repressed; perhaps it's because, as previously mentioned, having fertility issues is not something that many people openly talk about. Based on these experiences and the commonalities found amongst these 30 women, it can be seen that there is power in a shared experience as people find strength through those who have also gone through their journey.

The emotional, financial, and professional costs of pursing fertility assistance are important aspects of participants' overall experiences. These costs provide insights on the intangible and tangible outlays expended in the pursuit of parenthood.

B. IMPACT OF EXPERIENCES ON PERCEPTIONS OF PREGNANCY IN THE NAVY

The majority of participants acknowledged that their perceptions of pregnancy while serving in the Navy changed overtime. Several of the women indicated that their experiences have made them better leaders. For the most part, participant interviews indicate that they thought getting pregnant would be easier or not take as long. Some participants indicated that they looked down on other women who became pregnant at what they thought were inopportune moments. Interviews show that the stigmas ingrained in the Navy culture pertaining to pregnancy during specific windows is the reason that many of the women's perceptions prior to their own personal journey were negative. One participant explained,

Oh, gosh. Well, you know, as a junior officer, of course, I saw everybody getting pregnant. And I was like, man, you can just turn around and get pregnant. This is great. You know, it's easy for everybody, especially the

people that don't want kids yet, you know. I was a little jaded because...I would see people...these young girls that are barely 18, 19 years old getting pregnant, not taking the birth control that the Navy offers free. And at first...not being a parent...I kind of looked down my nose at them, and I feel horrible that I did that because...things happen. And then...when I was XO, and my sailors needed to take time off to take care of the kids because they were sick, and they couldn't go to daycare or they were dual mil andor single parenting...I did...always question, well, what kind of support system do you have, etc., not knowing how difficult it is for everybody until I had my own child. And then...it totally changed my perception of everything. Everything that I didn't know people were going through, I started going through it. And I...became a better leader becoming a parent. Of course,...I'm just getting to that point with the struggle....The Navy really doesn't paint a good picture of parents and single parents or people who are not currently parents, if that makes sense....They make it [seem like] it's a burden and it's something you shouldn't even think about...while you're at work. (Interviewee, personal communication)

Another participant explained,

I would definitely say [my perceptions] changed. When I was enlisted, in our command—you didn't see anybody get pregnant, because if someone...got pregnant, they got removed from the squadron. I wasn't familiar with the female side in addition to their leaving...the squadron. But the guys that had babies would get time off or whatever. It was really irritating to say like, Oh, you get to—get out of this deployment because you just had a kid. Like, I guess I have to come to bat for you. But I'm pregnant and I understand now that you can't schedule a baby like scheduling a doctor's appointment, you know. It's not that easy. And so, definitely my perception has changed going through the struggle. I guess...due to the position of authority that I have now... I would be a lot more lenient for a doctor's appointment for people who are going through this type of thing. (Interviewee, personal communication)

These same stigmas are what caused women to postpone their pregnancies. As one

participant described,

I went from the beginning of my career being deathly afraid of ever being pregnant and not wanting a pregnancy to supposedly ruin my career to, now that I'm later in my career, experiencing a lot of fertility issues and not able to get pregnant when I'm married and want to start my family, and I'm on a shore duty tour, and I, you know, am trying to do everything right. And I can't because I wasted most of my most fertile years just desperately trying not to get pregnant because I was afraid of what people would think of me

and afraid that I would be viewed as less professional—and negatively. (Interviewee, personal communication)

As previously mentioned by participants, their experiences and the resulting shift in their perceptions helped them to become better leaders and more empathetic of others who are pursuing pregnancy. As explained by one participant,

As a mother, in general, I've become a lot more empathetic. Because before children, I feel like I was probably—I was much more black and white, and, like, you know, you have your children on shore duty...people that get pregnant on sea duty are irresponsible. I really was like you have these windows. Then when you plan for something...[and]...you don't get pregnant you realize...it's not so cut and dry. So, I certainly have much more...[empathy]...to people's situations. And now my advice is like, you do what's right for your life, and the Navy will flex. You know, that's not what is most important. (Interviewee, personal communication)

One participant shared that she had a shift in her priorities and now takes into account what is more important to her, a career or a family. She explained,

And it's interesting because the older I get, the more interest and the more priority I put on being pregnant, when I have children and kind of a better work/life balance than my mom had. And I felt like—you know, my mom retired in 2007, so she was in the Navy...it's progressively gotten better for women, but she saw some really rough...days in the Navy. And so, she was very committed to work, and she kind of had to be in order to excel. And I think that's great, but I've...definitely had a shift of perspective. I've kind of been like, What is important to me? Like, do I want to be a captain in the Navy, or do I want to be a soccer mom? You know, like—and does it—can you do both of those things, or, you know, whatever. So...as I come to an age where I'm looking to have children, I think about it more, and I really have to weigh how the lifestyle of the Navy is going to affect my family. And me, personally, just like on an emotional level, is that what I [want to] do? (Interviewee, personal communication)

A couple of women recalled conversations with senior female naval officers who encouraged them to think about their fertility. One participant described how this changed her perceptions.

—Do you want to have a family? And I'm like—it just seemed—it was a tough—it was a surprising question from a kind of perfect stranger. And I was like, Yeah. Why are we talking about this right now? And she's like, Well, let me tell you why. Freeze your eggs. And I'm like, what?...I thought she was crazy. Now, looking back...as I struggled to get pregnant, I thought,

Oh my gosh, like four years ago when I talked to [the Captain]...she was right. I should have frozen my eggs....it never occurred to me. I didn't know about how...your fertility deteriorates very quickly...so now when I see [junior officers] and people talk about wanting to have a family, I'm like, You know what? Freeze your eggs, because...now I know a lot more, that even with freezing your eggs that is, by no means, a sure thing, too. I mean...they may not take, and they may not fertilize and all that stuff. (Interviewee, personal communication)

For others the shift in perception was going from thinking that the Navy and pregnancy were not compatible to realizing that it is compatible, dependent on specialty. One participant explained,

So, if you'd asked me this when I was a lieutenant or a lieutenant JG, especially in my field...I would have said that it was completely incompatible for an active-duty pilot in an operational environment or even when I was at the Pentagon as an aide, you know, there's no way. There's no way I would have been able to be pregnant, you know, take care of a newborn. I read on the Facebook page, the Female Navy Officers Facebook page about these women who are deploying with these young kids. Like, now that I have young kids, I honestly-I couldn't imagine leaving and leaving even for short—you know, even for a three-month [detachment] or something like that. It would be really hard....So, my perception now, you know, in the last four years [that I haven't been in an operational environment]...it was completely different. It's very conducive to having kids and...I know I'm not deploying. And I know I'm...easily going to be able to make all my medical appointments and things like that. So, I think it really depends on your rate and your...designator and where you're geographically located. (Interviewee, personal communication)

There was also the perception of it being harder for females serving in the Navy

than for males. One participant recounted,

So, now I really, like, take a step back and think about how having children, as the woman who's active-duty, is drastically different than my male counterparts whose—who have a lot of wives who stay home. They take care of the kids. They don't have to worry about childcare. And the men just keep on working. They don't miss the 12 weeks of work that you get for maternity leave. They are not out of the loop for a long time....I do think that it's a lot more difficult for the female to be, like, the primary breadwinner in the household. I do think that, as the female, it's something that we have to really consider prior to having children how that's going to affect our career of not wanting to stay late and work those hours anymore

and not being flexible with our schedule because we have to worry about picking a kid up from daycare. (Interviewee, personal communication)

For others there was not a change in perception, but they acknowledged that things have gotten better for women. She explained,

So, my thinking hasn't changed. I think it's still hard for all of us who are implicated in this mission first sort of mentality to let go and to do things that will take us away from the mission for an extended period of time. But at the same time, we're getting better at finding supports both with-as far as supporting each other and as far as finding people who are accepting of that sort of marrying or partnering one way or another with somebody who wants both a military career and a family....I don't think my thinking has changed, I think it's been-become more acceptable. I think women have an easier time being able to-you know, being accepted. There's much more acceptance in the senior leadership saying, Yeah, you should have a family. You should be able to have a family, too. And I think that's the biggest change, you know, in the last 25 years is when you stop being a micro-minority, and you're just a minority, or, you know, and a growing one at that-things like that are-become more accepted and they start working with you. You know, they worked pretty hard with me. You know, I have 23 years in the Navy; they could have just said, Yeah, congratulations on getting pregnant. We're [going to] take your screen away. And, you know, you can just stay on shore duty and do the mom thing. And they didn't. They pushed back my operational screening, you know. They pushed back my slate date. They made sure that I was comfortable with the job that they were offering me because my timing required me to pass upto waive the-you know, the one year non-deployable. (Interviewee, personal communication)

The shift in perceptions of pregnancy while serving in the Navy shows that until a person experiences this journey, they are unable to fully understand the costs associated with pursuing pregnancy through the use of fertility treatments. Despite the challenge that these experiences present, the women became even better leaders because of their journey.

C. COUNTERARGUMENTS

It is important to note that the Navy offers opportunities and benefits that some individuals do not have in the civilian sector, such as maternity leave, insurance, and the ability to go to the majority of doctors' appointments without putting in leave. These are things that do not always exist in the civilian sector. One participant explained, I decided to join for a myriad of reasons, one of which was the fact that I had never worked in a law firm that gave me a maternity leave because they were always under the threshold of employees for, like, the Federal Leave and Family Care Act. And so, they were also under the threshold for being required to provide me with any kind of maternity leave or any kind of maternity policy. So, I had never worked in an environment where I felt safe enough to get pregnant without risking my job. I...also...didn't really work at law firms big enough to provide me great health care or health insurance. Most of them did not. The last one I worked at did, and they actually did have a four-week unpaid maternity leave policy, which was the best and most liberal I had encountered. I had talked to a lot of women in my industry in my city who had talked about basically retaliation once they got pregnant. Couple of them had had to go on bedrest due to, like, health complications, and basically their careers suffered, or they ended up getting let go later, you know, once they returned. So, a lot of that sort of impacted my decision to join the military. And, in fact, that's one of the major driving forces because I wanted some protection. (Interviewee, personal communication)

It is also important to note that many women in the military have children and are able to maintain successful careers.

I mean, I know women who've had multiple children and, you know, still kept up a deployment schedule and everything, and so I really admire them and think it's amazing. (Interviewee, personal communication)

There were a couple of participants who indicated that they did not feel that they would have received the level of support they received if they were not in the military. One participant explained,

I don't know if I've ever put it in the context of being in the Navy because for me, having a child whether I was in the Navy or not—I've never focused on the limitations or on the struggles that women go through just because they have—they wear a uniform. So, I don't know if my perspective of having a baby would be any different if I was active-duty, wearing a uniform or if I had never been in the service. I'm not sure. I mean—and I have—I also have a—kind of a different perspective probably than many people that you talked to because I took care of pregnant women for most of my career. And so, I even saw some of the struggles that women went through, but I'm not actually sure they're any different than anybody on the outside. You know, ideas like that people get pregnant just so they don't have to go on deployment? Yeah, that does happen, but it's not really the it's not common, but it does happen, and I've seen it happen. And it made me angry when I was trying to get pregnant and wasn't able to. And these girls were getting pregnant just because they didn't [want to] go on deployment, not because they wanted to have a baby. I mean, I never thought that having a child while I was wearing a uniform was [going to] be any kind of challenge that I wouldn't be able to overcome. As a matter of fact, I feel—as someone who wears a uniform and someone who went through a nasty divorce the first time when I was active-duty and got so much support from my command and so much support from the Navy, I'm not sure that I would have come through it as well as I did if I wasn't wearing a uniform. And so, I actually feel like women in the military have more support than people on the outside. You know, we're a family. It's a huge family. (Interviewee, personal communication)

It is important to keep these comments in mind as these are benefits to serving in the military that help not only for the purpose of retention, but also for recruitment.

D. PARTICIPANTS' RECOMMENDATIONS

Participants' recommendations for the improvement of processes and policies provide invaluable information and feedback from those who have used or considered using fertility assistance while serving in the Navy. The recommendations included an array of responses including, but not limited to, the following:

- funding fertility treatments,
- providing better education on family planning and available fertility resources,
- instituting miscarriage and neonatal policies,
- standardizing policies as opposed to command discretion,
- implementing fertility assistance coordinators,
- lifting age limits for treatments,
- implementing liberty policy to allow time off for treatments, and
- shortening the treatment process.

One participant questioned why fertility related issues are not treated as other diseases are treated and recommended the funding of fertility treatments.

I think that infertility is treated so differently than any other disease. And it's a disease. I mean, there are physiological reasons why people don't get

pregnant...the quote, unquote natural way. And so, I think we treat it like it's not a medical problem, that it's some frivolous thing that women [want to] do. And so, it's not treated like other diseases or other medical issues....We'll pay for Viagra, but we won't pay for women to get medications to try to get pregnant. I mean, it's [kind of] crazy. But I will say that, you know, in the last 18 years that a lot has changed, as well—that things have been better defined in terms of what they cover and not cover. The pregnancy policies have changed probably two or three times in the last 15 years, and they do-where the pregnancy policy never used to address infertility and now it does. And it talks about things like, you know, how long you have before you have to take a PRT after you've gone through fertility. Yeah, I just think it needs to be regarded like diabetes. I mean, when you have diabetes, you don't make insulin. When you have infertility...it's a hormone imbalance and all sorts of things. So, I think it should be treated for and paid for just like any other disease. (Interviewee, personal communication)

Another participant provided the recommendation to remove the commanding officer discretion as it pertains to those seeking fertility treatments, which would create a more standardized approach.

I wish there was more of a standardization across the board, and it wasn't just left up to the CO or XO's prerogative of what level of support they would give. Like I said, I wasn't expecting to get a fully paid TAD like the people at my previous command had gotten, but to not get any support from them was something that did leave a little bit of a bad taste in my mouth. I'm going for a medical procedure and, yes, it's technically elective, but it's likely the only path to parenthood for me. And we're supposed to be, you know, such a family-centered...command, or where...we [want to] make sure everybody's supported so that they can take care of their families and have a good family life to, Oh, no, you've [got to]...take leave before the convalescence leave kicked in. I wish there was some kind of standardization of if somebody's going through this, then the command will support by...permissive TAD where the command's not really incurring a financial cost, but that it's supportive of the member to not have to take their personal leave. (Interviewee, personal communication)

Given the increase in the number of women having children at advanced maternal age and the increased use of fertility technologies, one participant recommended increasing the available resources so that treatments are more accessible.

I think it's a resource issue. The fact that we do not have the number of doctors—infertility doctors—in the Navy that the waiting list is so tremendous. Because, I mean, not only do they see active-duty, but they

also see dependents. So, the availability of infertility doctors at a major you know, or a major fleet, you know, concentration area as well....It would be great if they had them closer....I don't know what the availability is, but they probably need to up the numbers. But I know it's a resource issue when it comes to getting the infertility doctors in and recruiting and everything because the waiting lists are just amazing. It's mind-boggling that our infertility rates have gone up so much in this country, but, you know, it would be great if they had that resource to increase the numbers and shorten the waitlist. (Interviewee, personal communication)

Another participant had the same recommendation, but added that, given the small window of opportunity provided on shore duty, active-duty women should be given priority access to treatments, and the treatments should be funded.

The first thing I would say is military treatment facilities giving priority to active-duty women I think is a policy that needs to be met. . . because we have such a small window and having to wait a long time to get an appointment just makes it—or what's already hard—even harder....If they could expand...so it's available in more locations so people don't have to travel so far.... Definitely expanding the capabilities so that it's available to more people. Because...we're [going to] continue to operate like we operate and we're [going to] deploy people. We have to be aware of that. We're limiting their ability to get pregnant and the other thing that I find-we were talking about how there are all of these, like—you talk about birth control. Like, if you need any kind of birth control you can come up with the military funds it. And so, we did a fantastic job at, like, family planning on the don't get pregnant side, but then you turn around, and now, Okay, now I'm ready to get pregnant. There's not the same amount of help when it comes to the other side. So, like, I prevented getting pregnant all those times getting pregnant, and now it's my time to get pregnant, but, Oh crap, now I need help. (Interviewee, personal communication)

One participant indicated that women should be educated on the challenges of balancing career and pregnancy earlier in their careers. Emphasis should be on educating women about their options to preserve their fertility, baseline testing, as well as education on potential barriers to pregnancy. She explained,

I would say having—I don't know if you want to call it counseling, but I would say having the conversation with women when they're younger. So, instead of being isolated in the middle of nowhere California with a contracted midwife who was, you know, just terrible to me, you know. If instead there had been...not a workshop, but, like, a group or something where you could get together with somebody who has—is an expert and has

answers and could—you know, you could talk to peers. You could talk to a doctor or midwife or a fertility expert and they could give you facts and talk to you about options. You know, egg freezing or just getting a baseline testing. That would be nice; having earlier in your career, earlier in your life some baseline tests to say, Oh, you know, yeah. Everything's totally clear. Or, Oh, did you know that you have a blocked fallopian tube?...You know, those things that you might not know that could help you decide how aggressive you want to be...because I think we have these arbitrary milestones in our head of like, Oh, over 30; over 35; or over 40, but, I mean, those are really, completely arbitrary and should depend on individual circumstances. And so, if you don't know what your own anatomy is doing and prospects for conceiving and all that, I think that could be helpful...and then financially, obviously, I think Tricare should cover egg freezing and more of this-You know what, if you have to go out in town because if we expect women to-if they don't change the career paths to be more flexible, but we expect women to shoehorn their family planning into these very small windows, then we need to provide them with the means to do so. (Interviewee, personal communication)

Another participant explained,

I think family planning needs to be a part of [indoctrination] for officers and enlisted both. And it needs to be more than, you know, STD coverage and make sure you have an IUD. I know a lot of young, female lieutenants who just are very ignorant about how the military works, you know, from a detailing perspective, from career progression perspective and how we're supposed to think about what we want our personal lives to be like. I mean, it's-the conversation-the seed needs to be planted really early with everyone. And it's not just a woman problem. It's a man problem, too because, you know, if you're going to be in the situation where you're planning a family, and you're in a high stress occupation that may lead to family planning at a later time of life, meaning 35 and older for men and women both, there's all kinds of mental health and physical health issues that need to be addressed from a family planning standpoint. I mean, infertility is half caused by men. And—but I don't know—I don't think very many men know that. And I definitely know that not very many women know that. And a lot of women don't know what their options even are. How many young lieutenants might choose to have their eggs harvested and frozen when they're 23, when they have tons of them that are super healthy instead of finding out at the age of 30 after their, you know, husband dies or their first divorce, and they're trying to figure out what they're [going to] do now. I would just like those conversations to happen earlier in the pipeline as just part of an overall holistic training on family planning in general because it's a big spectrum that's applicable to everyone, and I don't think that you can tell somebody about that stuff too early. (Interviewee, personal communication)

Many of the participants' recommendations included fully or partially funding fertility treatments; clearer, more accessible guidance on treatment coverage and options; and better education for leaders. One participant explained,

I think Tricare should cover something. Maybe not 100%, but I think—I don't know...I think that there are probably higher levels of infertility among females in the military than [there are in the] civilian sector. And I think a lot of that is related to our job and career progression. And, you know, if you're deployed for year, that's obviously where you can't get pregnant. And I think women wait a little bit longer, particularly on the officer side, to have children. And I think it's a fair thing to cover. I think it's appropriate and warranted. So, I would definitely say on that end, I would cover it....I think education and awareness maybe, too-like, both for leadership and for members that, Hey, lots of people go through this. Lots of Navy officers go through this. And this is their story; this is how they do it. This is the support-you know....So, I'm at Fertility Centers of Illinois, where I'm going, and my nurse has been there for, like, 20 years, and... I said, Well, I can get all my meds for free from the hospital. And she was like, Wait. You can? And I'm like, Yeah. And she said that she's had multiple Navy families come through that did not know that, and they've paid out of pocket for meds. So, little things like that, I think, would be most beneficial—just kind of an educational awareness standpoint. I can't think of anything specific when it comes to policy. (Interviewee, personal communication)

Another participant explained,

I wish that Tricare would cover reproductive services because that would make everything much easier and much cheaper. But having a realistic viewpoint of it, I wish that there was an accessible pathway of, This is what happens when you need to use reproductive services. Like, This is what is covered by Tricare. This is what's not. This is what...you or your spouse can have done in a military facility versus...civilian. I think that having the guidelines laid out and having contact points who actually know what they're talking about at Tricare, and they don't switch the answer every time you contact someone different, that would be so beneficial to people who are already going through a difficult time. And if that was just on the Tricare website, and you could just look at it from home, that would be so much easier than trying to call all these places, explain your situation over and over and be told a different answer every time. In regards to, like, a Navy policy... I do think that the Navy does a good job of, like, realizing that people do go through IVF or similar procedures. I know on the PARFQ that we do every PRT cycle, it asks if you're going through any reproductive cycles to waive you from that PRT if that is what you are going through. So, I think that they do realize that it's something their sailors are

experiencing....I think talking about it more would help just because, like, I don't really know who to talk to about it. I don't have, like, an IVF mentor that will guide me through, telling me who I need to contact, and what to do because it's still such a taboo subject that people don't really want to share about. And I'm definitely on that train. I've told you how many times now that I don't like talking about it because I'm private, but . . . I know that there are people that would be willing to share their stories and just knowing that other sailors are experiencing [it] is helpful. (Interviewee, personal communication)

One participant also recommended that treatments should be funded, and she indicated that doing so would help the Navy with retention and recruitment.

Perfect, ideal scenario would be having all of the care for reproductive assisted technology covered for all sailors and officers. I think that it shouldn't matter what your gender is; it shouldn't matter what your diagnosis is; it shouldn't matter what your age is or [your] situation. If you are trying to get pregnant and you're unable to do that, I think that we should have policy in place where that service is covered... I do understand that that would get very, very expensive or could get very expensive. I know that there have been analyses done that show that it's actually not that expensive and that the people who would be, you know, asking for these services aren't that many in number that it would kind of just be a drop in the bucket in terms of cost and expense. But I do think that when you're talking about retention and you're trying to increase the number of women in your ranks, when you look at the number one reason why women leave, it's to either start a family or because they have recently started a family and they don't feel like family life is compatible with maintaining an active-duty military career. So, when you're trying to remove those barriers to increase your retention numbers and your recruitment numbers, the thing you need to look at is how can we help these women have the families that they want and have the careers that they want. And I know that there are a lot of naysayers out there that say you can't have both, but there are plenty of women walking around that prove that that's not true. So, you can have both, and if you want to have both, you should be afforded the opportunity to have both. And so, the only way you can be afforded the opportunity is for those services to be available if you need them. And they're not very easy to access....So, the policy needs to be not vague. One of the worst things that I've seen in terms of being in the military with policy is when a new policy comes out, and it's so vague; and it's open to interpretation; and everybody is left scratching their head and shrugging their shoulders and not really understanding how to implement that policy. So, not only do I think that they need to put a policy in place that's for these women, but they need to do the research, and they need to make sure that it's a well-planned and well-written policy. (Interviewee, personal communication)

One participant recommended removing the age limitations associated with receiving fertility treatments.

I think lifting the age limits. I mean, I realize that there's—you know, that there's success issues there, but I think given the population of military women, saying, We're not [going to] help you after you're 42 is—you know. Especially with women increasing life expectancies and that sort of thing, you know. Yeah, make us sign a waiver that says...that there's a...lower likelihood of it happening, and I understand that I still have to pay for these things whatever. I also think paying for more of it would be helpful... lifting some of the financial burden, especially for the women who are using it through the military system. (Interviewee, personal communication)

Another participant recommended covering the cost of treatments and personalizing the treatments at the MTF as opposed to having women follow cookie-cutter procedures.

I think that should be entirely covered by Tricare. I think given the stress that they put us through in these jobs and the constant moving around, it can be very difficult to establish, you know, with one doctor, you know, then you move and try to reestablish, and that can take a toll on you. So, I feel like, you know, Tricare should really cover everything since it's all within the military system because now some of my records are out in town. And if I did IVF, that would be completely out in town, but it could potentially have an effect on my overall-like, if something went wrong or there were complications or whatever, that would be something Tricare would end up having to pay for anyways, like, to pay for the mistakes of the doc out in town because they forced me to go out in town. At least this way, I feel like it should be all under the Tricare umbrella and all under the military, like, purview. So, I would make that the policy. There's no reason why thesethis day and age that we shouldn't be covering this for families. It's-it can be expensive, yes, but so is the year and a half of me basically dragging my feet. I think the process should be shortened a little bit. It should be a little bit more customer- or client-driven, for example. Like, while they want us to wait-they-so, [what] they dictate to us is don't even come in to talk to us until you've been trying for a year. But at that point, you're a year in, and then it can take a whole other six months to a year just for them to get through their whole checklist so that you're waiting quite a while. I think it should be a little bit more patient-driven. Like, as a female who's coming up on, you know, getting closer and closer to 35, if I [want to] stay with the process, I think they should let us. There's no reason why we have to try, you know, three to five IUIs before we go straight to IVF. If we do two IUIs, and it failed, we should be able to go to IVF. Or we should be able to,

I think, shorten the timeline a little bit because you can do that out in town. (Interviewee, personal communication)

These recommendations provide information and perspective from those who have used or have considered using fertility assistance while serving in the Navy. THIS PAGE INTENTIONALLY LEFT BLANK

VI. CONCLUSION AND DISCUSSION

A. CONCLUSION

This study provides Navy leaders with a better understanding of the unique decisions military women make pertaining to fertility and captures their recommendations to guide policy. This study documents the personal experiences and perceptions of active duty female naval officers who have used or considered using assisted reproductive technology (ART) services and examines the emotional, physical, and monetary costs through an analysis of in-depth interviews with 30 female naval officers.

The qualitative research approach allowed the researcher to examine a vital, and yet heretofore missing, perspective, the first-hand experiences of active duty female naval officers who have used or considered using ART services. The abundance of information provided by the participants answered the initial research questions:

- What factors of military service contributed to your decision on when to pursue childbearing?
- What are your experiences with assisted reproductive technology?
- How have these experiences affected you personally, financially, and professionally?
- What is the organizational culture when it comes to childbearing and how did this affect your experience?
- What changes to Navy policies would you recommend?

The findings provide valuable insights to help decision-makers assess whether adopting the practice of funding ART treatments, which the civilian sector is increasingly doing, would function as a viable retention tool for the Navy.

The experiences of the women in this study varied based on treatment, treatment location, experience with loss, level of support from command and family, as well as type of career. Many of the participants experienced barriers to pregnancy related to medical concerns, partner-related issues, and the inability to conceive for unknown reasons. Participants' commitment to the Navy and time limits imposed by biological clocks, shore duty, permanent change of station, required trainings and deployments exacerbated the barriers to pregnancy they faced and added to the emotional, professional, physical, and monetary costs they experienced. Participants often postponed pregnancy to fulfill their Navy commitments and avoid actions associated with stigmas surrounding pregnancy in Navy culture.

Participants experienced emotional, monetary, professional and physical costs along their journey. Emotional costs, which participants often did not share or hid from others, were the most prevalent. Participants did not always take the time to grieve their loss of a child or loss of childbearing years; participants often quickly returned to work and to their normal family duties immediately following a loss, to execute their commitments. While financial costs were not as burdensome for dual-military and couples with two incomes, for those who did not have a significant amount of disposable income, the financial burden was more significant.

While command support and the experience of the costs varied, participants consistently expressed that sharing experiences with others who have gone through similar situations was beneficial. Most participants received the support that they needed from their commands during their pursuit of parenthood; however, the level of support varied by command. The costs, likewise, varied among participants. While maintaining privacy was important for participants, they found that there were benefits from sharing experiences with others who have gone through treatments. Sharing their experiences functioned as an invaluable resource as women were able to gain knowledge about treatments, receive emotional support throughout their experience, and find hope in the examples of women who experienced similar situations.

The majority of the women's perceptions of pregnancy and a Navy career changed over time. The participants provided a host of recommendations for changes to procedures and policy that could help to lessen the burden and costs that women endure on pursuing parenthood through fertility assistance treatments. The most prominent recommendations included the following:

- Access to treatments and information regarding treatments should be more readily available,
- Fertility treatments should be covered under Tricare, and
- Women should receive education on the barriers to pregnancy and their options to preserve fertility earlier in their naval careers.

B. DISCUSSION

Having the participants describe their experiences with fertility assistance provided intimate details about their unique journeys, which are generally untold stories. These heretofore untold stories provide insight into the complexity of fertility treatments, the personal struggles that are often unknown to others, and the various factors that come into play throughout Navy women's experiences seeking parenthood. As mentioned in several of the interviews, there are women who have been able to have children and maintain their operational and deployment schedules, and it's not impossible to find a partner to start a family with; however, as seen by these interviews, there are individuals that are affected emotionally, professionally, and financially by these issues. Career planning and pregnancy are not as clear cut as they may seem. Biological clocks do not have a pause button; they tick away with each training, deployment, and operational duty. Balancing a career and planning a pregnancy is further complicated when women postpone pregnancy to avoid stigmas and when they are discouraged from getting pregnant in order to pursue certain career milestones.

Women can schedule their pregnancies within the more accepted windows, but as can be seen from this study, no matter how much they plan, their body has to be ready for conception, and they need time to go through the various stages of fertility treatments. This means that their pregnancy may not fall within the shore-duty window. The shore duty window to have children does not always coincide with each individual's journey to pregnancy: a journey that is outside of their control, riddled with multiple failed attempts, miscarriages, and geographical separations from their dual-military spouse who may be on sea duty while they are on shore duty. They planned within these constraints and were stifled by the limiting factor of time. When a woman gets pregnant outside of the opportune window, she should not have to worry about stigmas or the impact that pregnancy will have on her career. Yet, this is exactly the concern that many of the participants experienced along the way.

The commitment to the Navy comes with a lot of stressors and exposures that can impact the overall health and functionality of a woman's body. This, added to the stress of the body not cooperating, approaching advanced maternal age, and time limitations that exist because of the commitment are all costs that women pay. In addition, participants' career fields within the Navy may further complicate their ability to plan for pregnancy and for fertility treatments. Career Intermission Programs are not always the answer.

Most of the participants in this study took the necessary steps required to either preserve their fertility or increase their chances of having a live childbirth through the use of fertility assistance treatments. Many of the participants are using fertility assistance because they have reached advanced maternal age while fulfilling their commitments and following the provided guidance.

One might say that postponing pregnancy is a personal choice that women make and that their inability to conceive as a result is not the Navy's problem. However, society and civilian organizations are increasingly acknowledging that women should not have to put their careers on pause in order to have a child in a family-friendly organization. Further, many civilian organizations are recognizing that women should not have to take out loans or spend their savings to pursue parenthood because their medical insurance does not cover fertility assistance. The Navy is a diverse and leading organization. The experiences that participants related and changing views in society illuminated by this study suggest that if the Navy seeks to be a premier employer of highly qualified women, the Navy cannot just retain the parts of women that are convenient for service; we must also consider, accept, and address all barriers that impact women who serve. One of these barriers happens to be that some women on active-duty require the use of fertility assistance either to preserve their fertility for later use or to assist them in procreating in the present. Societal changes are likely to push the Navy to make a decision. Given the unique environment of the Navy, which involves substantial commitments and time, what is the Navy's obligation regarding the issues shared by the women in these interviews? Time and commitment required for

service in the Navy intensify the barriers to pregnancy and worsen the emotional, professional, and monetary costs that women experience. "In terms of justice, one might argue that if women dedicate their most fertile years to their careers, it is only fair that their employer – who benefits from the delay to parenthood– bears the costs of their attempt to safeguard their fertility for the future" (Mertes, 2015, p. 1207). As stated by one participant,

I think a lot of this is very personal. And it may be difficult to create institutional change because of its personal nature. There's always [going to be] people in the military who say this is not the military's problem. You knew that this was going to be a difficult lifestyle when you came in. You need to figure out how to manage it. It's not the military's problem. But in all situations where the military has put us in danger or has put us over the horizon away from friends, families, and support networks, I think the military has a duty to take care of us. And not in a, We're helpless, kind of way, but in a, Hey, we created the situation, and now we're [going to] at least give you the education to understand what tools are available to you to mitigate some of these problems....My father always likes to say, Well, you knew what you were signing yourself up for. And, with all due respect, I have to say, I don't think anybody knows what they were signing themselves up for. I didn't know that I was [going to] be in Afghanistan by myself for 10 months. I didn't know I was [going to] be on a ship, you know, alone for months and months at a time. I mean, you know in your head that you're [going to] go to sea, but you don't know what it means until you're doing it. And I don't think it's fair to expect people to know how to solve problems that they don't understand. And that's where I think the military has a duty to all of us, men and women, people entering their career, people mid-career, people at the end of their career. I mean, we've given our lives to the military. I don't think it's unfair to ask for support in solving the problems that-even if the military didn't cause them, they've exacerbated them. (Interviewee, personal communication)

C. FUTURE RESEARCH

While this study provided a host of invaluable insight and recommendations, it also raised several questions that require further research. While female Navy officers were the focus of this study, there are other female service members in other branches, as well as in the Navy's enlisted ranks, who also have experiences with pursuing parenthood through the use of fertility treatments. Their stories are worth exploring as well. Though some men do not have the same experience as women where the pursuit of parenthood is concerned, some are impacted when their spouses are required to pursue treatments. Others are impacted when the treatments are required due to a male factor. Their experiences and perceptions are also worth exploring. Based on this study, further research and exploration of the following is recommended:

- Does the Navy have an ethical duty to ensure that fertility services are readily available for women who serve, and should they ensure that the costs are covered?
- Could coverage of these treatments under Tricare, as well as increasing the availability of these services for active-duty women, help improve retention?
- If this is the experience of this group of female naval officers, what is the experience of our junior enlisted?
- How do the contributing factors impact them, and how do they handle situations that our mid-grade to senior officers found incredibly hard to deal with?
- Do they have the command support that is needed throughout the process as well as upon their children's arrival?
- Do they have the means to pay for fertility treatments, or does the lack of coverage for these treatments function as an additional and more prominent barrier for enlisted?

As stated in several of the interviews, there are active-duty spouses whose wives require fertility assistance, whether it be for medical reasons or due to same sex marriages.

- What are the experiences of those spouses, and are they receiving the support that they need throughout and after their spouses' journeys?
- Would allowing women in the military to function as surrogates be a viable option for women who are unable to conceive?

Women willingly serve their country as they honorably wear the cloth of our Nation. This service to country often comes at the expense of their most fertile childbearing years, which is something that does not impact their male counterparts. The time that is required by this commitment ticks away at the biological clock and leads many women to pursue or preserve fertility through the use of fertility treatments. This pursuit comes with emotional, professional, physical, and monetary costs that are often unknown and not shared due to stigma and the desire to maintain privacy. This study provides invaluable insight and recommendations that will assist in better understanding the experience of women and the challenges and barriers they face balancing career and the pursuit of parenthood. THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX. SUPPLEMENTAL QUOTES FROM PARTICIPANTS

THE EXPERIENCED BARRIERS TO PREGNANCY

Partner: Geographically Separated

So, we had just got married, but we're long-distance. But this is when we started trying to have children ... we see each other like twice a month basically ... And so, we ... [work] ... on trying to have ... a child because at this point, I'm 34 years old. And so, we realized that, you know, we got married a little bit later, and so it's time ... we had to get on it clearly. So, ... we do not conceive. Now we get to Norfolk ... Now we're living together, and so now [we] start to get more serious about this because ... now ... we're both on shore duty. And we're co-located, but, again, we're not conceiving. (Interviewee, personal communication)

We didn't plan to have a child until we were co-located to Camp Lejeune. So, we ... had used birth control prior to starting to attempt to conceive. So, that was certainly a ... barrier ... we didn't anticipate having difficulty getting pregnant. And that was about a year after we got married that we started trying. (Interviewee, personal communication)

COMMITMENT TO THE NAVY

Career Planning and Pregnancy

I think also just seeing other people, other officers being able to balance a family life and a career life, made me go if they can do, I can do it, and I ... I knew I couldn't wait because I knew I wanted to do a career with the Navy. I knew I wanted to do twenty years, and I know that there was no way that I could do my career and then have kids. Just there's no biological way or a sane way because oh, my gosh, my brain -- I would implode ... if I was at 45, 50 deciding to have a baby, I just was like I can't do it. And I'm amazed at women who can. But I knew I couldn't do my career and then have kids. Like, I was [going to] have to find a way to balance my career and having a family. And I knew that just because I wanted to retire from the Navy doesn't mean the Navy was [going to] let me retire from it because things come up, things happen. And so, I went with the mindset of although this is what I want to do and I love being in the Navy, things can come up. Injuries can happen ... I might not be in the Navy anymore. So, I didn't [want to] hold off on having a family knowing that that could happen. So, in my mind, I was like, I'm [going to] have a family, and I'm [going to] do my best in the Navy because my family will always be here for me. The Navy, as much as I love it and as much as I want to be a part of it, may tell me, you know what? You're done. You know, you're broken, we've passed you up for selection, you're out ... So, my goal was to always try to balance it and looking at coworkers and looking at people who are higher-ranking than me and seeing that, hey, here's a successful Captain who's got this great Navy career, and I see they have kids. Okay, if they can do it, I can find a way to make it work. (Interviewee, personal communication)

I would say for aviation commands ... You can fly the first few months of pregnancy, so ... walking out the door pregnant and flying is not a big deal if you're not deploying. My command was okay with it. I wouldn't say happy. But that is one that I know some commands apparently since then have got less happy with and at the end of the day, like, there's a very small window for people to try. But my actual commands at the time, not really. Like, our limiting factor was our overall career progression timeline not individual commands. Like, we knew how much time we had on shore duty ... one other negative I would add -- and it's in no way a fault on the command is when we got to our shore duty, I ended up in a billet that is TDY that is up to 20 plus weeks a year, and that was an additional significant stress on us of just knowing that we had very limited time to try with at all. And I was [going to] be gone one to two months -- weeks a month, and if that, you know, took away an opportunity, now I was losing a shore duty opportunity to try as well. (Interviewee, personal communication)

Avoiding Stigma

I didn't think it was [going to] hurt me professionally, no. Because in the HR community, we didn't have -- I didn't have any billets that were eligible for me to go to sea because we only have one sea ... billet on each carrier. (Interviewee, personal communication)

I was the only female officer in our command at the time. And yeah, I thought that ... things would change. And, I mean, they did. I mean, I thought that ... they looked on negatively. I would say, while I was pregnant, I felt [they] ... were ... pretty supportive. I did have ... a couple people like my XO feel like I shouldn't be flying. I think they thought I was like dangerous or something, but that's ridiculous. And people were very helpful when I did my long trip ... They helped carry bags and stuff because I was about 15 or 18 weeks

pregnant at the time, and so most people were very supportive ... Now I will say afterwards when I went back to work ... I felt like people ... especially my XO that became the CO at the time, he sort of always seemed like I was just on a vacation, and I just came back from vacation, and I hadn't done anything for the squadron recently, and ... that was very frustrating because I didn't feel like I was accepted as, like -- you know, it's Navy policy, and I'm allowed to have that maternity leave, but yet I felt like it was kind of being held against me. And then, you know, what goes along with it; like, I breast-fed and so the pumping I kind of got some slack, you know, about having to take breaks and go into a locker room and pump. And then when my daughter inevitably started daycare and started getting sick ... I took leave sometimes. I just remember one time I was at the ER with her because she was really sick at 5:30 in the morning, and the only thing my XO said to me -- or my skipper at the time said to me was "Make sure you put in a leave chit today." I was just blown away by the fact that, like, that's what you're thinking about. My child's in the ER. Like, she's five months old, and this is what you're [going to] tell me, so ... those types of things I guess I didn't expect. I thought that like ... [I] might catch a little slack here and there for the pumping and things like that. But I guess I didn't expect some of the treatment I got for ... just normal parenting stuff happens and ... it's not like we choose to have our children be sick and in the hospital, and it was just ... surprising and upsetting. (Interviewee, personal communication)

I think I did feel that way. I kind of knew that was [going to] happen because I had had some female role models that were more senior, like, mentors in my time in my fleet squadron. One in particular that has maintained a life -- like, you know ... she kind of bucked the system a little bit and got pregnant when it was convenient for her family, not for the Navy. And I really watched how she suffered from that, and her career suffered from that. I think she's also just really standup individual and officer, and I think that her qualities still kind of was able to shine through. But, you know, I mean, she was not treated very well in the squadron, and I think -- she was dual-military, so watching her struggle with another O-4 in the military and the sort of stress and workload she had and like people not understanding that she had to leave at 3 p.m. to pick up her kids, like those kind of things were just not warmly received-- from the sea duty perspective. So, yeah ... I mean, I think that it's hard. It's really hard as both a mom and an officer. There really aren't very many examples of people that can do it well. You know, especially because their spouse typically has a working situation as well that makes it hard for them to be a stay-at-home parent or more of a primary caregiver. (Interviewee, personal communication)

I definitely think career-wise I was concerned. Like, every time I had to miss ... a meeting or take time off of work to do ultrasounds or lab tests ... I was lucky to be in a supportive work environment where they didn't make me feel bad about doing these things, but I actually felt bad. Like, I was ... neglecting my patients and ... not being as strong of a physician and officer as I could have been. Very rarely did any of ... the people I work with ... point that out or say like, "Oh, my gosh. You [got to] leave to do another ultrasound" or "Oh, my gosh, this and that." But I also worked all the way through my miscarriage too and ... showed up every day even ... through the whole thing. So, for right or wrong, they definitely didn't question my dedication at that point in time. (Interviewee, personal communication)

TIME LIMITS

Biological Clock

I truly thought that I was going to start having a family before I was 30. Yeah. Not even close ... I have been one of those that I've always wanted a family, and I always knew that. But it didn't need to necessarily happen right away. But I truly thought, you know, by about 30, things would kind of be in place. (Interviewee, personal communication)

I'm a very healthy person, so ... I never thought I would have any issues. Even though I got married at age 33 and ... met my husband when I was ... in my lower thirties, I just thought like, hey, I'm healthy. I have time ... I'll never have an issue ... you just don't think about that. But, fertility and being ... healthy and being active, I don't think they all go hand in hand because we could still have issues ... so, when he got back from deployment, you know, we start trying and six months goes by, a year goes by. You know, I'm like 38 at that time, pushing towards 39, and I just thought we probably could use some help. So, we got referred out to a reproductive endocrinologist who ... did a whole bunch of tests, and then he was basically like, "You're just advanced maternal age. Plus, you're missing a tube, so your chances, you know, are a lot lower than they were, say, six or seven years ago." (Interviewee, personal communication)

So, at first, I did not expect it. I felt reassured that hopefully I'd be okay to have kids for a while. However, I also, from a medical point of view, realized that ... as I got closer to the age of 35 or 40, my

risk of miscarriage and ... the journey getting pregnant was [going to] be a little more challenging. And even through the fertility journey, like, when I got pregnant off of that first IUI, I'm like, well, I guess I'm fertile. I guess maybe this is [going to] happen ... I know statistically it's twenty percent every time ... five more IUI's after that and then it didn't take. So, at that point I started to get a little discouraged. (Interviewee, personal communication)

EXPERIENCES WITH FERTILITY ASSISTANCE

The Overall Experience: Overseas Facilities

So, when I was in Japan, I think I dealt with actually two or three other same sex couples ... Okinawa was very accepting of same-sex couples and the fertility clinic out in town was actually great. It was a little interesting as a physician to try and interact sometimes because all the medical instructions would come in Japanese with an English translation sometimes. So, that was definitely a unique experience. Some of my friends that used fertility over there were lucky enough to find a bank that was going to ship overseas, which is a unique challenge to many of our service members. Other ones who were not so lucky ended up in locations that actually don't allow any same-sex couples to conceive or use fertility out in town. So, in certain areas in Europe, I know it's a still a bit taboo and still difficult to find a fertility clinic to work with. But Okinawa, Japan actually many of the same-sex couples that I was friends with out there actually were able to do fertility treatments out there successfully so ... (Interviewee, personal communication)

now I'm stationed in a foreign country and my only option is to go to a Japanese facility, which ... the Japanese are amazing and they have amazing abilities and facilities ... now ... I'm stuck going to a completely different healthcare system, which I don't understand, with no translator. It's all on me to try to figure out how to have a second one. And, I mean, I get that though. I get that the Navy's kind of like, well, we're doing our best, but we can't give you a translator. And you're in a foreign country, we're doing our best for you ... moving to Japan and looking into how am I [going to] do this again, I was like, this is crazy ... I've [got to] try and figure out a day off and I [got to] try to figure out how to call this clinic and schedule an appointment and make this work. And then I got lucky and right after I started looking into it, I found out I was pregnant again. And then I ended up miscarrying that one, that pregnancy, but at least it gave me confidence that, okay, I've been able to get pregnant again ... I don't have to stress as much with trying to find a Japanese facility. But, I mean, I think that's part of it too is we get stationed as military in remote locations where there's not the access to these types of assistance. (Interviewee, personal communication)

I had always said that ... and I always tell my patients this as well -- before you even start the very first infertility treatment, you have to have a discussion with whomever the people are in your life that are supporting you with this and decide ... what is your quit time. What is the thing that's [going to] indicate that you're done trying? Because people will spend their entire life savings, they will just destroy their relationships. They will do anything to get pregnant. I mean, I've seen ... people just go through this torture. I mean, it just envelopes your life. And myself, I can remember for probably seven, eight years of my life, I knew exactly what cycle day I was on every morning when I woke up because I was so obsessed with my time that I was fertile. It was crazy. So ... I've watched people become so obsessed with it. They come in with all these charts that they're doing their temperature and they're doing this and they know and I'm like, oh, my god. Sometimes you just [got to] let it go. And because ... just that stress of obsession will keep you from getting pregnant. You know, your body just doesn't -- it reacts that way to that stress so ... I honestly can say that this -- that whole thing -- I never realized what an impact it had on our marriage until we were going through our divorce, and we started -- we tried for a little while to see a counselor and that was really, really big for him. It wasn't for me. For me ... I thought it was my failure. I never saw it as his failure. But he saw it as a failure for him, and so I never realized even how much it impacted him and how much it impacted our marriage until our marriage had already fallen apart. So, that's the other thing I tell people all the time is if you're [going to] go through infertility treatments, you [got to] keep the communication lines open. You've always [got to] be talking with your spouse or whoever your significant other is about what's going on with you because you just never know. You assume what the other person is feeling. (Interview 22)

The Importance of Privacy

One of my other sets of friends who was dual-military Marine Corps ... always felt like she had an up-tempo that she had to keep up in order to continue promoting. And she didn't feel comfortable talking to her higher-ups. They don't think about their desires to start a family. And, you know, she did have some lab work that initially looked like everything was [going to] be okay. And eventually when they decided to start trying and they repeated her lab work, she

actually had low ovarian reserve at that point in time. And so, basically, she went through this whole process of feeling like she had basically been career, career, career, and now she wasn't [going to] be able to carry a baby. Luckily, her spouse was able to but, especially with dual-military especially LGB couples that I've interacted with, it's definitely a challenge sometimes. And they've had some unique opportunities for unique challenges that some of the just gender, opposite gender, heterosexual couples have not had. (Interviewee, personal communication)

And then one other female at my current shore command went through IVF, and I [kind of] found out after the fact, so we sort of shared that afterward. I didn't know while I was going through the process that she had been through the same thing. Like, it's not really something people talk about ... I shared it with my immediate chain of command and a couple of close friends. I didn't really share it with anybody else. (Interviewee, personal communication)

The Shared Experience

The most that I've been able to read about has actually been on that Facebook group of people sharing what they've gone through, and that's been beneficial. (Interviewee, personal communication)

I've had a lot of people who reached out to me who are like, "Hey, I am just starting my, you know, IVF journey." And it's a really hard one too because you don't know if it's PCOS. You don't know if it's embryo quality. In my case, it ended up embryo quality. I was already prepared to have a surrogate, you know, because I also heard, well, maybe you have an inhospitable womb. Okay, great. I don't care, just get me a baby. I don't care how it comes. (Interviewee, personal communication)

And so, it's not even just women, it's other men, like, who are active duty who I've served with whose wives are going through the process. It's like once somebody has done it, and if you're willing to talk about it and answer questions, it helps put everybody so much more at ease because it's such a weird unknown. (Interview 29)

MTF versus civilian facility: MTF

I'm so grateful for military medicine to even have allowed me Bethesda because one of my coworkers who was a civilian had had to do IVF. And she's like, it cost me \$30,000 and ... It cost me there \$263 to have my son. And I was like I'm grateful that at least the Navy allowed me to ... use the ART Institute and I only had to pay, like, the cost of running the labs and the cost ... to go forward to do the implantation. (interview 23)

When I did my orientation [at Walter Reed], one of the girls who was doing orientation with me was discussing the fact that she was -- you know, if you look at the costs ... she was [going to] harvest and freeze eggs, not freeze embryos. I was doing harvest and embryology, so the cost is about the same. But if you do two parts in two different sections, if you do egg harvest and freeze, and then you want to defrost and do embryology, that cost is greater ... you can just do the whole process and then freeze the embryos instead. The problem is if you have the right guy; if you're waiting for a guy; if you don't know if you're still [going to] like that guy later; or if you're [going to] just do a sperm donor. So, those kinds of things ... they are on the list of, like, pricing, but if you don't really know what you're needing, you probably have no idea what the differences are. There's also the difference between IVF and ICSI, and that's something that a lot of time people didn't understand what the difference was. And then you also had the difference between, you know, if they had to have ... their husband there who previously had a vasectomy and was trying to have that reversed or, you know, the other things that people were doing. So, lots of different questions that happen at orientation. (Interviewee, personal communication)

MTF versus civilian facility: Civilian facility

I just feel super lucky. I think we picked the right clinic for us. They treated us like gold. I'm still a little bitter over the fact that it was all out of pocket so ... But, like, we had the best experience ever. I still send Christmas cards to my doctor with, you know, pictures of my kids. Because we were treated so well. And I realize it's a business, but I feel like they really, really cared, and they really wanted to make families happy and to make people become parents so ... we were happy. (Interviewee, personal communication)

And then in terms of, like, going out to the clinics in Japan, you know, I've never done fertility in the states, but talking -- you know, being part of different Facebook groups and talking with different individuals, it sounds like it can be kind of a long process. You know, you have to get referred, and then seen. And it can take a long time before you're even getting started in the whole process. And when we were seen for our first appointment out in town in Japan, it was kind of like they had our plan kind of already laid out for us. And so ... all of our labs and stuff were kind of already done, so that helped. But we [kind of] just hit the ground running with our different treatments that we, you know, were pursuing. So, it was a

very seamless process once we got out in town. (Interviewee, personal communication)

Command Support: Supportive

I didn't really have any issues. I felt very supported ... so, we're kind of in the middle of the country here, so the options for people here are to either go to an MTF elsewhere or go to a civilian practice here. Because I already have a child and it would have been logistically difficult to travel anywhere. I ended up going to a civilian practice here, which had we needed IVF would have cost more than at one of the MTFs. Some of the other people here have chosen to get, you know, TAD for a short period of time and go back to Bethesda or San Diego to pursue IVF. But I think everybody ... I know who has gone through the process has felt pretty supported. And, you know, they didn't really have any issues with the command, which is probably, you know, leadership dependent, but, currently, everybody's been very supportive in this kind of environment. (Interviewee, personal communication)

I haven't actually gone through the cycle yet. We are ... at the very beginning portion. I will say I have felt incredibly supported by my leadership. My department head also did IVF, so I think that is -- obviously she's a female, so I think that is huge. My division officer is also a female and has friends who have ... had the infertility struggle and then also did IVF. So, I think those factors have been huge in how supportive they are of me I mean ... I'm a provider, so I have like a booked schedule and it books in advance, have already like blocked my COM leave time and have just been really, really -- bent over backwards to meet my needs as far as medical appointments go and make sure that everything's easy on my end, which I can't even put into words how much that means and how much I appreciate it. Yeah, like really that portion of it has been great. The support there either between GYN or my leadership -- my current leadership has been really wonderful. So, I really don't have anything bad to say and so far, it's been great. (Interviewee, personal communication)

So, when I did get referred to IVF ... the first shot of IVF actually, I seriously would drive up -- I would drive from Norfolk to DC, like, for the day. I would drive up in the morning. I'd have the appointment and then I would come home. And then when that cycle didn't work, I'm like, this is crazy and part of the reason maybe this isn't successful is because I'm spending so much time on the road. So, for the second round of IVF, which ... they gave me like no cost TAD. So, I went up to Maryland ... when it first started, I'd just go

up, but ... for the actual, like, harvesting ... I went up and I stayed there ... they didn't charge me leave. They were ... very supportive there too. (Interviewee, personal communication)

I was in a joint command, working for civilians. And so, really, I kind of could make my own schedule. They weren't aware of ... any kind of rules, ... in the shore duty that I was in, they were like, go ahead. You get done what you have to get done ... I cannot complain about the joint staff, you know, the position that I was in. And I will say ... now having done what I've done, any person that comes in contact with me that has any kind of issues, I'm like, you know, trust me. Like, I understand how important this is. I understand how difficult this is, and we can ... be as flexible as we need to be to make this happen for you ... my experience certainly has changed as a leader that way In my situation, my command didn't need to do anything differently because they didn't limit me in any way ... I was, again, very fortunate that I didn't have any kind of restrictions or anyone pushing back on any kind of medical appointment I had to go to or anything like that. (Interviewee, personal communication)

Command Support: Dependent on Role

And I would say also it really depends on what role you're in because I'm admin here, and they've been nothing but supportive, and it's been easy. And it was pretty easier to have -- to take maternity leave and the need to do appointments and what not. But when I was a shift worker, it was -- they were not supportive. They would put you on night shift. They'd make you work crazy hours. [At one command], my department head was a father of four. His wife was active duty ... two of his kids were the same age as my kids ... I would have thought that he would be completely understanding and supportive especially since his wife had just gone through all the same things, and he wasn't. Like, I came back from maternity leave and he put me on night shift because he said, "Oh, well, you're used to being up at night." And I'm like, I have a brandnew baby at home, you know, that I'm trying to ... breast-feed ... I'm trying to do things. I'm trying to, like, bond with my baby, and you just put me on night shift. (Interviewee, personal communication)

Command Support: Not Supportive

So, that would probably be the one education piece that a lot of people need is if you are going through IVF and if you're taking the medications ... and this is for men and women because spouses go through it as well, not just military service members. But I can't tell you how many forums I was in where ... the wife is like, "My command won't let my husband drive me two hours, you know, to go do the transfer on this date because we didn't give them seven days' notice." Well, you can't. You can only give about 32-hours' notice because that's when you take the trigger shot. So, trigger shot timing is probably one of the biggest education pieces that people don't know about. And then ... a lot of ... it depends on ... how your eggs grow. If you have six awesome eggs, you're [going to] be a day five transfer. If you have three that are struggling that are a low grade, they might take all three and put them in on day three. So, you know, now you've ... budgeted for a transfer day and you've budgeted for a harvest day, but it's really a really wide, wide open window. (Interviewee, personal communication)

Command Support: Nothing they could do differently/position of authority/unique position

I think that ... it's such a sensitive topic. I mean, now it's becoming more and more prevalent and people are talking about it more often. I honestly don't think my command could have done anything because I was the XO and you know, I had to basically ... just do it. I didn't have to really ask for any extra time off. I did what I needed to do. So, yeah, when it came to my command, I guess I'm in a different position because -- being that I was so senior, I didn't really share too much about it because I didn't have much of a chain of command to have to do with that if that makes sense. (Interviewee, personal communication)

Nothing really. Again, I didn't share. I was working directly for a three-star. ... I pretty much could dictate my own schedule ... I didn't share because I didn't [want to] share the same reason I didn't share with my family. So, I can't say there was ... anything I wish they knew because I intentionally didn't tell them anything. (Interviewee, personal communication)

EMOTIONAL, PROFESSIONAL, AND MONETARY COSTS:

Emotional Costs

I think I was really ignorant to the fact of how emotionally difficult the whole process would be. And my husband and I are ... really private people. So, like, I told you we've been trying for about two years and we just told our families about ... a couple months ago ... everything that we were going through because ... we don't typically share things like that with others. So ... I think I was just like really ignorant to the emotional toll it would take. I think because I can understand the medical side of it, it did help a little bit. But it was really -- that first year was really difficult for the both of us. (Interviewee, personal communication)

The first time I went through the process, I only ended up getting like five eggs. So, it cost me ... I don't know, \$8,000 or \$9,000, and I got like five eggs. Super, super frustrating. I cried all the time. So, then I ended up doing it again, so I spent double that and got about the same amount of eggs so ... The whole experience I just felt completely sorry for myself all the time. I felt so alone and super depressed. You're bringing back a lot of emotions. (Interviewee, personal communication)

you don't think starting a family is [going to] be a hard thing, but then once you have to go through that, you realize, you know, how many women out there it is difficult for and not such a natural thing that everyone thinks it is. So, you know, emotionally, it was difficult. But I felt very supported by my family and my husband, you know. I feel like, as a female, you know -- not that it's not hard for the men that are going through it too. You know, it was hard for my husband as well because he wanted a family just as much as I did. But I think as a woman because ... not that this is your sole purpose in life, but you're like I'm supposed to be able to do this. You know, like, my body is ... supposed to be able to get pregnant. And so, when you can't naturally, that's kind of hard to ... deal with sometimes. So, emotionally, it was difficult. (Interviewee, personal communication)

So, other than a lot of stress over two years almost? I think that would kind of be the biggest one for us is -- I think the biggest emotional issue, kind of twofold, just one not knowing why it's not working like anybody, you know, and knowing that we have a shorter time window. And then the second big part would be the just -- the stress is a lot more increased when you know you have a very small window especially in the matter of months ... And I think the one thing we were right on the edge of but hadn't really walked down was -- we had talked about it a lot but hadn't resolved was the stress of if we did hit the end of this kind of three months that we had to try for number two, what then? And would we be honestly okay looking back on it in five, ten, forty years. And knowing, you know, that for a job for a couple years, we potentially gave up the second kid when we wanted one. (Interviewee, personal communication)

Well, I mean, emotional ... it's not an easy process. You actually, like, know a lot more about everything and so it's more stressful ... every two days, you're finding out more information if it's good or bad and it's just a very stressful process to see how your body's reacting. And then when you have the retrieval to see how your embryos are doing, and they call you with updates, and it's, you know, just all emotionally exhausting. (Interviewee, personal communication)

So, emotional, it was very -- it was hard to admit, like, why can't I get pregnant. And then it was very stressful and very emotional trying to go to a department head who was not supportive and basically told me that it was my career or a family and trying to justify to them why I should be given time to try to have a family. I mean, it was very, very stressful to ... the point where I didn't even [want to] come to work ... I started actually having physical illnesses. Like, my body started acting -- I started getting physically ill. I would, like, cry walking into work because it was just such a stressful environment -- or, I mean, it wasn't just the wanting to have a family. I mean, the whole situation was -- I mean, such a horrific place to work, such a hostile place that then wanting to try to have a family at the same time ... there's probably a reason why my body was like, nope because, like, literally having to sit in her office and try to justify why I should be allowed to do something that is a natural process was just horrible ... I was so full of anxiety ... I would come home and my husband would be like how was your day? And I would just sit there and cry and, like, vent to him for like an hour about how horrible my day had been and how I'm ... I just [want to] have a family, and I just [want to] do this ... he would, like, regret like asking me how my day was. But he was trying to be supportive to this ... I'm sure I'm not the only one that you're basically being told to pick. And I was trying to go, well, why should I have to pick? Like, you know, guys can have families. Like, why am I being punished because I'm a woman, and I [want to] do this job, and I [want to] be in the Navy. Why am I being punished that I [want to] have kids when my male colleagues -- oh, your wife's pregnant again. Congratulations, yay." And, like, I know that it's a little different because I'm a female and I'm [going to] have to give birth and then there's other things, but it was [kind of] disheartening that I felt like I was being told pick. Pick one or the other. (Interviewee, personal communication)

And I guess I kind of went in a little blind. I didn't realize ... how emotional it would be. ... And I am lucky because my first transfer worked, which is my daughter ... although it was very stressful going through the process ... I didn't have to experience, you know, loss on that first round and I did get pregnant, so that was good. And then we had a frozen embryo after my daughter and just in last February, we transferred him ... I knew the gender because I did genetic testing, but we transferred him and it did not work. And that was very difficult and I guess I went into that one thinking it was going to be just as ... not easy, but like just as good of an outcome as the first time. And I did genetic testing, so I thought he was good ... but unfortunately, genetic testing only tests for the main chromosomes, and there's a lot of stuff that could go wrong that you can't see. So, when he didn't work, I was just, like, really devastated, and I guess I didn't expect that. (Interviewee, personal communication)

Professional Costs: Did not impact

I really didn't think it would, and I don't think it did. I think the thing that impacted my career and why I'm hitting statutory retirement is just the functions of the fact that, you know, weird timing, [lateral] transfer, you know, didn't do the one big tour that I was supposed to do. And I chose to do kind of a one off. So, I don't think having a child impacted my career at all. [Interviewee, personal communication]

Professionally, I think I was very, very fortunate that I ... literally, was in the same building that I was going through all of this, so if I needed to be somewhere, it was much easier for me to be there than if I were [going to] have to come from a different location. So, again, I was very lucky in that sense, but it's, you know, still not easy. Their appointments start at 5:30 in the morning, and you have to be there almost daily. And, no, you're not—your peak -- you're not feeling a hundred percent. So, going to work all day can be affected. (Interviewee, personal communication)

I didn't think it would. I [kind of] waited to get to the point when we were [going to] try that I knew that it wouldn't have an impact. Earlier, it probably would have been detrimental to completing my training on time. And, you know, I think career-wise and in Medical Corps, I would have been able to promote just as easily. But I don't think I would have necessarily been able to complete my training program or at least on the designated timeline had I had kids. Nor would I have had the time for the kids that I would have wanted. I kind of thought professionally there wouldn't be a huge impact virtually because I waited to get to a stage of my career where I knew that I had the flexibility to do it and you know, it was fine. There wasn't really any difficulties professionally with incorporating having a kid. But I think had I, you know, done it at a different time in my life, it would have been kind of detrimental both personally and professionally to try to juggle it all. But I [kind of] waited to a point where it was a right time. (Interviewee, personal communication)

Professional Costs: Impacted

I think, professionally, having a child hurts a female military member's career because they can say all they want that it's not [going to] affect it, but when the female is the one who ends up taking care of the kids, period. I mean, sure there's exceptions to every rule, but it's the female who has to be home on time to fix dinner, clean the house, pick up the kids, and stuff like that. And when you have a female leaving the office at 1700 compared to a male who's usually free to come and go as he wants, it absolutely affects their career progression. (Interviewee, personal communication)

But, professionally, I started getting anxiety attacks and panic attacks, which I had never dealt with before. So, I mean, that's a personal thing, but it impacts me professionally more especially as a Department Head. But when I had to go to Department Head school, she was a year old. And since we were dual mil, I had to leave her behind for nine months. And so, I flew home every three weeks or so, but it was all the way across country. We didn't get a ton of time. So, I missed a ton of milestones. And being back East and not seeing her, like, I didn't know what it was at first, but now I have to deal with pretty considerable anxiety and panic attacks, which I did not deal with before. (Interviewee, personal communication)

Professionally, probably did not really think that one totally through until I was about six months pregnant. And more I would say we were focused on up until that point was how to have a kid within our career progression versus what it would actually be to have a kid within our career progression if that kind of makes sense especially once we were having to kind of work through fertility issues ... We were both -- very focused on just how we get to having kids versus what it would be like to have a kid. And then kind of got the everything piling up at once ... we basically both knew it was coming. Basically, finding out that we were [going to] be going to dual command tours at about six to seven months pregnant and realizing, if we had a chance, we want to try and fit a second kid in. And that again kind of moved more of our focus to ... is there any way we can make this timing work because we have a very small window, and it took us a very long time the first time. Not very long, but it took us longer than we would have anticipated. And then kind of working with the Navy honestly on how to make that timing work. And then now ... that kind of pushed us into the okay, so, now we're [going to] have one or two kids, now two. How can we work that with dual command? ... I'd say probably biggest impact for us is really how does childcare work. (Interviewee, personal communication)

And through the whole process, another layer that I was always concerned about regarding my career was using assisted reproduction, I gained probably about 10 to 20 pounds from my baseline weight, which always had me concerned on could I pass standards and ... being a good military officer's one thing, but being able to beat your weight standards -- which is something I've never had an issue with until I started fertility treatment but definitely a real thing. I never had to get taped until I took Clomid, ... I mean, shouldn't cause me to gain that much, but between the Clomid and the pregnancy, it did. And then dealing with the [kind of] guilt as far as trying to figure out what I could and I couldn't do at my job and speaking up and being like, no, I shouldn't do this. With my first pregnancy that I ended up miscarrying, I talked to people and I was like, "Look, we're going through IUIs. It's not clear in the instruction on if I can take a PRT while undergoing medicated IUI. It seems like it's only written for IVF. You know, we're spending all this money and, you know, can I be waived from this PRT? Or should I be waived from this PRT?" And everyone's like no, no, it's fine. And then miscarrying after, you know, taking a PRT, they're like, "Well, you passed it, so we're not [going to] mark you pregnant." So, it's like that pregnancy didn't ever matter in regards to my weight standards and ... on the PRT cycles and things like that. So, it definitely was an interesting emotional kind of process to go through for a variety of reasons so . . . (Interviewee, personal communication)

Professionally, you know, I think it changes your balance of how ... important the professional aspects are in some ways, you know. Staying an hour late just to finish something that probably could be finished tomorrow probably has less significance when you have children at home to come home to. Yeah. Professional, I mean, it's -- there are a lot of appointments that go with this. You know, I was pretty lucky because in Germany they were physically located close to my job. But, you know, if I had wanted to have any of the more advanced fertility care covered by the Navy, they would have required me to go up to Ramstein, which is over two and a half hours away and that was accessible, which in my mind ... I can't do that as a professional working member of the military. That would take me out for an entire day. And, yeah, but here in the states, if I want to have, you know, IVF or anything kind of partially subsidized, I would have to go out to ... Walter Reed, which is a four-hour drive. And/or take, you know, two weeks off to do this, you know, convalescent leave or leave. But all of that sort of professionally makes you not as effective. (Interviewee, personal communication)

Monetary Costs

Financially, it was terrible. We didn't put any money away for savings for a couple years. You know, probably spent all said and done about \$15,000 ... which is a lot of money. (Interviewee, personal communication)

Financially, it's been nice because I'm an O-4 and my husband's like a GS-15, so we ... can afford a comfortable home and we can afford babysitters and child care. You know, we're not clipping coupons for bargain diapers and things like that. So, there is an advantage to having -- you know, to waiting until -- and being, you know, dual income, no kids for a while to save up. (Interviewee, personal communication)

Yeah, financially . . . I mean, lucky my husband and I both have good jobs and we didn't incur any debt. We kind of planned for it since we had scheduled it in July and we knew we weren't doing it till October, so we were able to save the money and ... not have big debt afterwards. But, I mean, of course it's a financial issue because there's other things that could be done with that money, so it's not something that you prefer to spend your money on because a lot of people get kids for free. My kids are expensive so . . . And not just when they're born. (Interviewee, personal communication)

Financially, we were lucky that Europe is cheaper and we happened to be in Europe for all of our fertility treatment. With that being said, it was a little different doing all of it in a place that doesn't speak English as first language especially in medical fields. (Interviewee, personal communication)

IMPACT OF EXPERIENCES ON PERCEPTIONS OF PREGNANCY IN THE NAVY

Well, I mean, at each one of the commands, it was a different mindset and different obstacles. When I was enlisted at my first command, we were literally, purposely, physically separated for two and a half years. And I go move on to another command and again I'm immediately physically separated from my husband. Later when I had got to a shore command, with the timing and everything ... I'm on the right track, I had not really the perception that it wasn't a good time to try to start having a baby even though that's where everybody says that it will affect my follow-on tours now. And that was simply said to me by the detailer at that time. So, I got worried when I was there ... from my stance, I don't think that a female in the Navy can do both. I don't think they can have a good relationship with their children or the pursuit of children and be deemed a superstar or with the best FITREP. Now, that's just my opinion, but it seems to be true. I mean, the higher up the ranks you go, the less and less, you know, you see. The few that you do, they usually don't have children. So, I mean, I'm not saying it's impossible, but it's not easy. (Interviewee, personal communication)

I pretty much, you know, have been looking for Mr. Right for a long time. Like I said, I'm 38 years old. I just haven't been lucky to find that right person. And, you know, sure, I thought about it, but I always thought it would happen in good time until my XO at my last command ... when she checked onboard ... to our command, she got pregnant pretty quickly ... wonderful woman, beautiful, extremely accomplished, and she had just decided she wanted kids more than she wanted a husband. So, she actually had two kids while I was there through artificial insemination. But she's the one who actually approached me and told me ... "Listen ... you're getting older, you need to start thinking of alternatives." And she was kind of pushing me to have kids on my own, but I want a husband more than I want to have kids. So, that wasn't the right fit for me. So, she suggested I just look into freezing my eggs. I put her off probably for about a year, but then I started to hear, you know, about some other people who had done the same thing. So, it was artificial insemination and then also just freezing their eggs. (Interviewee, personal communication)

when I was younger, I was like, you just do it, you know. You can do it all ... but that's not always ... You absolutely can. But there are ... sacrifices ... I think I used to think that yes, you could give all of it a hundred percent all of the time. And I think that's probably

what's changed for me is that it's just -- your priorities shift, and your way of thinking shifts ... I still think that being in the Navy is a challenge more so for a female than the -- a male counterpart having a family. (Interviewee, personal communication)

I'm not being a man-hater, but a lot of the men in the military who are in leadership roles have stay-at-home spouses. And although they try to be understanding, they've probably never taken their kid, you know, to a doctor's appointment. Like, they don't realize that we have to do all of that stuff and -- you know, it's just not something that comes to mind with a lot of the leadership still. So, that's what I think. Like ... it's just different when you're a dual working family. And, like, a dual traveling family. (Interviewee, personal communication)

COUNTERARGUMENTS

So having a baby slash being a parent to a baby when she was born I got six weeks paid leave essentially. Not 100% leave, but it was under like disability or whatever, and I notice here, if I do not have the next baby, then I get like 12 -- I'm guessing 12 days off just like any man would, which is obviously a big change. But on the other side, since I was on the outside, any IVF or anything I wanted to do had to be either before or after work. And with military, if it is medical, for the most part you're allowed essentially to miss work and still get paid for it, which is a huge benefit obviously. (Interviewee, personal communication)

I think part of it is been a lot where I've allowed my career to dictate when I would try even back before we started doing fertility treatments of, you know, oh ... we can't really try right now because I've got this, you know, TAD coming up, or you can't try now because of this or whatever. And then on the flip side of that, had I not been in this career path as far as active duty and not met the people I've met, I don't think I would have known as much as I know about fertility treatments. And I don't know if I would have gone as far in pursuing it as I have at this point just because the subsidy of being able to go through Balboa where it's a fraction of the cost of out-of-pocket was probably one of the things that allowed me to go that -- to that point. If I had to do straight civilian care out of pocket, I don't know if we would have been at that point. And if we had, it would likely have been from a loan from my parents that I would be paying back for years to come. (Interviewee, personal communication)

PARTICIPANTS' RECOMMENDATIONS

I wish on a Big Navy level that the policy more addressed the process of undergoing assisted reproduction and [kind of] gave us, I guess, a window of being able to ... not necessarily be in our top standards -- I mean, not necessarily be morbidly obese, but not feel guilty about gaining ten pounds on Clomid and feel like less of a military officer ... I think just being able to be more supportive of women during this time whether it's just during medicated IUIs, in any situation that has to go to that round or during implantation of embryos just saying, "Hey, look, we're [going to] ... treat you like a pregnant person right now even though you may or may not be pregnant until we prove that you're not pregnant." So, you know, kind of having more cushion during that two-week window ... I mean, in theory, in the policy it says we're supposed to have this timeline written up for our chain of command and pushed all the way up to our chain of command, so they know, "Hey, we're trying to get pregnant now. And we're needing to use assistance so from, you know, this date to this date, understand that we're [going to] be undergoing this" and "Oh, by the way, sign off as a CO that you understand I may need convalescent leave." (Interviewee, personal communication)

I would like to see the option for reproductive assistance for people who don't have just these combat injuries. I think if the Navy wants you to plan your family around shore duty, then they should let you, you know, freeze your eggs at the Navy's cost. They should have a referral to, you know, reproductive assistance that could happen through, like, the Navy, not two or three months ... I think that having the information more readily available. Like, they say refer to this instruction somewhere. It's hard to find. It's not the updated version. The one tool that they give you, there's a pregnancy app, it's not very good. You try to talk to the doctor during your 15 min PHA You know, that's not very good. I think it's during that PHA or during your yearly flight physical or whatever, you actually had a OB that you could talk to -- like, a on time, not once every three years, or once every whenever there happens to be one available, it would be more useful. Now, I understand that my situation was a little more unique with all the deployments and then the other deployment, but we do come back ... They ask do you have PTSD. Do you have this, do you have that, you know, why couldn't a reproductive person talk to you when you're doing all those post-deployments things anyway? I think it would be useful. I would say that the Navy hasn't done much of anything to help me, and in fact, kind of tried to make it difficult; timing of the paperwork and policies and slow referral time. (Interviewee, personal communication)

it would be nicer if there were more senior level leaders who put family as a priority, no matter what that family consists of. So, you know, the opportunity to be able to see people who have had success stories. Or even if, you know, the Navy showed successful stories, not just for dependents or whatnot, but for those of us on active duty who are pursuing those kinds of -- that assistance ... you feel sometimes that they point the Career Intermission Program as being like a time to go have a family. And I don't think that's necessarily appropriate ... you shouldn't have to take a three-year intermission, two-year, or one-year intermission to be able to pursue having a family ... I think the policy I would change would be the Pregnancy and Parenthood Policy. The Pregnancy and Parenthood Policy ... it's not very motherfriendly if you're active duty. There's a lot of things in there that are -- you know, if you get pregnant at this point, this is what happens to you. If you get pregnant here, this is what happens to you. There's a lot of things that are not well-defined or well-thought out for those of us who are trying to pursue something particularly if you're in a deployable status or you're in a type of work where you are deployed frequently. You know, you want to be able to say, hey, this is my shore duty. This is the only chance I have to try and get pregnant. And then if you are the person who tries to get pregnant and can't, you don't necessarily have the ability to get assistance because you had to follow -- I mean, if you have a spouse, you have to follow their ... Have you tried for six months? Have you -- like, have you done this, have you done that? Before you can actually get to the assistance part, you have to have done all these other things first. So ... I mean, it's easier for me to go straight to assistance because I don't have a spouse. (Interviewee, personal communication)

unfortunately, I feel like it's been trend lately of them coming out and saying things and then either it's radio silence or it doesn't happen or it gets blurted out and then there's zero thought behind the implementation process of it ... they were [going to] have a pilot program for female fertility where they were [going to] pay for egg freezing or IVF. And it was [going to] be somewhat of a retention tool, so that you could, you know, focus on your career and those prime childbearing age range, and then, you know, have options. So -- but it is expensive, and I get that ... I would love to say that they should pay for it, but I don't know that that's realistic ... I don't know where the line is for how much they do cover versus how much they don't. I think if they're not [going to] pay for the whole thing itself, many, many, many practices will give discounts for the IVF ... and that sort of thing, but they don't give a discount for the medication. So, maybe, you know, getting Tricare coverage for medication would be one policy, potentially one change. If we can't get everything covered, then if you go to a civilian practice, then you get your medication covered. Because everything else for whatever reason ... or at least in my experience, medication was separate from all of other services. So, all the other services were lumped in together with the doctor's visits and consultation, nurse teaching procedures, all of that. And medications was strictly separate. So, I think those would be the two things to potentially change. (Interviewee, personal communication)

So, I guess kind of Big Navy-wise, I don't know how you would do this, but the only piece would be detailing beyond [colocation] and to actually making it family care supportable as well. You know, if you're both deployed for months then physically there's really no way to have a kid at home. And some people do. Some people have great family situations or, you know, closer to care but ... To be honest, I don't know how much of Navy policy is driving this versus Big DoD on some stuff. I think the off-ramp programs are good. More opportunity to have off-ramps and allow people to get back on the career path. That would probably be the one ... I think ... if we wanted to try during my department head timing, realistically we could have. [Career Intermission Program] was very new and we weren't really sure what it would mean in the long run on timing at that point ... so, keeping those programs so the people can pause and still come in back in without, you know, having to leave the ability to promote or move forward. (Interviewee, personal communication)

So, I would recommend that the Navy at the about six to eight-year timeframe talk to women about how to preserve their fertility. And whether that is, you know, a co-share program, a -- you come to the MTF, you know, they don't have to pick up the tab, but having an educated conversation about what your options are at a place, like, to meet, a Joint Women's Symposium, is important. And, you know, I can't tell you how many of my friends got to, you know, age 40, and, you know, they say there shouldn't be fertility issues because the 35 is an old study ... if you're in the military, you have done different things to your body. I have [been exposed to radiation] out in a Prowler. I have, you know, been exposed to chemicals. There are a lot of things that we as military service members have no idea that we have done to our bodies, and it will probably not become apparent for a very long time ... So, you know, preserving the fertility is one of them, but when I was at the six-year mark, egg preserving did not exist. So, I would have had to have picked a donor, and I wasn't prepared to do that at that time. So, education is key. And I think educating females after a certain age and time in service is where it's at. (Interviewee, personal communication)

It would absolutely be that it ... was covered by insurance. Number one, because they promised that it would be, you know, and that was stated, you know. At least a percent of the cryopreservation, not all of the IVF costs, but the retrieval portion for both genders. It was stated by the secretary at the time that that was going to be covered, and then it wasn't. That was retracted. Never formally retracted, it just never happened, which I feel like leaves a lot of people hanging. So, I think covering costs is the main thing that the military could do to support service members in terms of this journey ... So, the cost, the financial part, is the biggest piece where I feel like they could take action, and the costs would be extremely minimal compared to the costs they spend on everything else with the number of people that are affected by this. It would really, really help out I think. I don't know, so . . . I've written kind of a forceful letter to Congress about it and to this undersecretary defense lady about it, and obviously you never hear anything back. (Interviewee, personal communication)

Well, I don't really think that we should have to tell our commands about going through IVF. I get that, you know, it does have some factors and especially in my circumstance, like, I wasn't supposed to fly during my treatments because the hormones can have effects on your body, and they don't want you to be flying. So, I do get that, but I wish we would just like get a down chit that said like, you know, we're unable to fly during treatment. I don't really think it's necessary for everyone to kind of know ahead of time and -- unless you want them to, I don't like how it's, like, mandatory to tell them. So, I do wish that would change because, again, no one has to go and say, "Hey, I'm trying to have a baby and having sex every night." Like, nobody has to tell their command that, so why do I have to tell them? ... I felt like it put a bull's eye on my forehead, and I feel like that's why my XO started to kind of hound me a lot more because he knew it was coming, and I don't think that's, you know, necessary. And this is not related to me, but I have had two sailors in, like, my commands who have had babies very early, and I am very frustrated that there is no policy about babies that are in the NICU and mothers that are discharged and, like, how that's handled with convalescent and maternity leave. So, I think that definitely needs to be addressed. And leaving it kind of up to the command is dangerous because, again, I didn't have a good experience with people in my command and I think that that happens a lot. And so, I just think that that's kind of a dangerous way of going about it. So, I wish that they would write kind of a policy that sort of like when the family member's sick terminally that they get kind of TAD. Then they have to phone muster and check in, but they don't physically come in and I wish that's what they would use while the baby was in the NICU. And then they allowed you to take all of your time after the baby gets home because I think

that time is being wasted that is supposed to be used for bonding and creating routines and especially if you're breast-feeding. The female I have right now in my command ... she's still pumping, but she's never been able to breast-feed her son because he was born at 25 weeks. And he's two-and-a-half pounds, but he's still not able to, like, suck and breathe at the same time, so he can't breast-feed. He's still being fed through a feeding tube. And so, when that baby finally is able to get to that point and gets released from the hospital, she needs to, like, start over and, like, basically start from the beginning, and she's not [going to] get as much time as I am. And I don't think that's fair. I don't think we handle those cases as good as we should whereas, you know, I've known people who've had terminal ill parents and other family members that are very sick and I've seen commands be very lenient about TAD and things like that. And I don't know why -- I feel like we treat it differently when it's a newborn. It's like -- that gets even more important to be -- to have as much time as possible with the baby. (Interviewee, personal communication)

That's a great question. I think maybe, like, step one would be [to] be more open and honest about this problem specifically for female service members. And just be more open and up front about, you know, career planning. Like, they do a lot of career planning with people, but I've never once heard anybody talk about, you know, hey, like there are these challenges that you might face, you know. There's choices that you're [going to] have to make with your career. Everything is just so -- I don't want to say it like this, but it is; it's like a male-dominated -- like, centric -- like, you do this, and then you do this, and then you do this. And it's really like cookie-cutter way of following these sea shore rotations. And I just felt like that conversation wasn't even brought up ever for me as a younger female, you know, JG or lieutenant just talking about it and what options could potentially exist. I think, you know, the CNO came and spoke to us at Monterey and I've read recently that the Navy had made some changes, but this is something I've been advocating for forever with -- especially with officer retention. Having these rigid timelines for when you are looked at for O-4 promotion is just insane. Monterey, which is an unobserved FITREP, for almost two years. Then I get pregnant, and I get sent to this, like, you know, bullshit tour for the next two years where I'm practically a one of one. And I have now accrued four years of throwaway FITREPS. And it's nonsensical. Like, it doesn't make sense that, you know, I am being equally judged with a male peer who has had all the time in the world to successfully promote himself and his career and do the harder jobs. I would have much preferred the Navy had some sort of policy that allows you to be flexible about the timeline in which you're seen for O-4 being

based on actual like wickets that you have to hit in terms of qualifications or types of tours or duty. So, for example, I never got to do a second sea duty because I was sent to a shore duty because I got pregnant. Or in my opinion, I should have been able, after this tour, to go to a sea duty, fulfill that sea duty, and then get looked at for O-4 because that's the requirement to be even seen on an O-4 board. So, I think that there's a lot of ways that they could change the rigidity of the promotion structure and the timelines associated with it. It would be so much more helpful for women because it would give us the ability -- like, you know, this happens. I know friends it's happened to. They try all two-and-a-half years of their shore duty to get pregnant, and they get pregnant, like, on their last try of shore duty. And now they're pregnant rolling into a sea duty type billet. Or I had a friend who took a year sabbatical to have a child. She was pregnant right before her sabbatical started. So, she timed it perfectly and then she miscarried, and she spent the rest of her sabbatical recovering from the miscarriage and then trying to get pregnant like four more times. Finally, gets pregnant, like, the month her sabbatical ends. And so, she went through that whole painful sabbatical process, owed the Navy two years for essentially a throwaway year in terms of her family planning. (Interviewee, personal communication)

Like, I know that they've -- with the advent of, like, transgender care, they've had, like, coordinators. And like, they had to have a command coordinator. But even something similar where there was either coordinator, case manager, somebody that even though you were not -- we were coordinating with another hospital, having somebody as a point of contact would have been great. (Interviewee, personal communication)

I just think they could pay for more of it or, like, offer some type of incentive ... this might be an unpopular opinion, but I think it should just be for active duty women. But even just some type of financial assistance. I think they could come up with a liberty policy regarding IVF. Like, I don't know what the policy would say but just allowing women this many days to handle fertility -- infertility appointments while they're going through an IVF cycle something like that. So, that you're not -- so, that people are not worried about, like, taking four days off that month to go get ultrasounds and have the procedure actually done and four to seven days off. Maybe some type of guidance like that ... it's hard for me to say like, yes, the Navy should definitely pay for my infertility issues, but -- I mean, I don't know. I don't know how to change the idea of, you know, our most hard-charging job opportunities are, like, during our childbearing years. I'm not sure how to fix that. (Interviewee, personal communication)

I mean, I think the big ones are dealing with miscarriages and talking about it and making sure, again, that people can be protected and not feel guilty if they're not right in standards right away and things like that. Which is very fuzzy in the current policy as far as especially early pregnancy losses. And then maybe finding some way to have some sort of a protected dwell time for women that express a need for reproductive assistance that have been in the military for five or ten years and say, "Hey, I've put it off this long. Can I have time to try and make my family now? This may take a year or two, can I be granted shore orders now?" Because I feel like if you verbalize things like, often times you're viewed as -- like, you're putting family first and not your career first, and it's viewed as a negative. Yeah, I think those are the biggest things that I would like to see, I guess, in the future but ... In a perfect world. (Interviewee, personal communication)

Ideally, I think that, you know, after people reach a certain amount of time in the service that additional reproductive assistance should be covered. I don't necessarily think that every ten-year seaman coming in should, you know, have fully-funded IVF, but I feel like, you know, people who have, you know, paid their dues and served for a certain amount of time should have those benefits covered kind of, you know, on par with some of the civilian HMOs. Having to ask, you know, military families to come out of pocket \$10, \$20, \$30,000 to start a family is a lot given that, you know, for most of us especially in the medical professions where, you know, we're markedly underpaid relative to our civilian colleagues to begin with that -- you know, that's a huge sum of money. And some of the services were covered, and we're certainly grateful for that. But, you know, it was advised that we start IVF a lot sooner, and the reason we didn't was because of the potential cost ramifications. And I just -- I think that variable should be removed if at all possible. I mean, again, I don't think it's necessarily entitlement that people should have from day one because it is expensive, and I think it would be abused if made universally available. But, you know, maybe after five or ten years in service or whatever, if there were additional assistance with that, it would be helpful. I mean, you know, we could have done it if we had to. I don't think many of our junior enlisted folks would have the ability to come out of pocket \$10 or \$20,000 if needed. (Interviewee, personal communication)

Absolutely. They need to -- they should help fund -- they should help pay for these type of procedures. I mean, their paying for people to change genders, yet they won't help pay for this type of thing. And the reason that there's so many females in the Navy who are turning to this type of stuff is mostly because of the nature of the Navy deployments, separating families, things like that. So, it's usually directly related to the reason why we're in the Navy and what our job entails that's why we're single. So, I think it's absolutely disgusting that the Navy does not help pay for things like this. (Interviewee, personal communication)

I would say that ... if single women are coming in especially or ... people that are ... married maybe and ... they don't [want to] start a family right away ... if the Navy ... could pay for and ... cover the costs of like freezing our eggs for example, so that way we ... don't have to worry about them being so old and by time we can actually start thinking about having children. I think that would be a huge difference. And make a big difference, I think, for a lot of ladies just even having that option. And then maybe some more training or education on it. And I think with the training and education part, having people that are maybe very successful career ladies that have struggled in this to do some type of brief to us, to our little bit younger, not thinking about it -- I think that would really help guide us a lot in having that mentorship. So, kind of a mixture honestly. Because I didn't really think about that when I came in and now that I'm like [kind of] at this point, you're just like in the middle of everything, you're like, holy crap, I've been doing this for eight years. Like, I have no prospect, you know, of having children right now. And I definitely can't for the next year or whatever. And I'm like, crap, my eggs are old. I wish I could have frozen them back, you know, when I first came in so at least I wouldn't be worried about that. So, that's kind of my thought process on the -- on this specific topic. (Interviewee, personal communication)

If there was more accessible research of how the process works, because I know other than Walter Reed and Balboa, there are other MTFs, non-Navy MTFs that offer a similar program. But I've only seen, like, blog posts about them or, you know, people's personal experiences, and they're from years ago versus if there was some kind of -- and it seems like a lot of times, it's the patient educating the provider that these things are a thing, that these programs exist. So, more from the top down of distributing the information even to the provider so that they are aware of what can be offered and where. (Interviewee, personal communication) THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Advanced Fertility Center of Chicago. (n.d.a). Cost of fertility treatment for women and men: National averages, ranges—and our prices. Retrieved September 30, 2018 from https://www.advancedfertility.com/fertility-treatment-costs.htm
- Advanced Fertility Center of Chicago. (n.d.b). Ovulation problems and infertility: Treatment of ovulation problems with Clomid and other fertility drugs. Retrieved September 30, 2018 from https://www.advancedfertility.com/inducovu.htm
- Alter, C. (2015, July 23). Working women are planning more, which is why some are freezing their eggs. *Time*. Retrieved from http://time.com/3969601/working-women-are-planning-more-which-is-why-some-are-freezing-their-eggs/
- Baldwin, K. (2017). 'I suppose I think to myself, that's the best way to be a mother': How ideologies of parenthood shape women's use of social egg freezing technology. *Sociological Research Online*, 22(2), 1–15. https://doi.org/10.5153/ sro.4187
- Baldwin, K., Culley, L., Hudson, N., & Mitchell, H. (2018). Running out of time: Exploring women's motivations for social egg freezing. *Journal of Psychosomatic Obstetrics & Gynecology*, 39(2), 1–8. https://doi.org/10.1080/ 0167482X.2018.1460352
- Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113–291 § 729, 128 Stat. 3292 (2015). Retrieved from https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf
- Carter, A. (2016). Department of Defense press briefing by Secretary Carter on Force of the Future Reforms in the Pentagon press briefing room. Retrieved from https://www.defense.gov/News/Transcripts/Transcript-View/Article/645952/ department-of-defense-press-briefing-by-secretary-carter-on-force-of-the-future/
- Cil, A. P., Turkgeldi, L., & Seli, E. (2015). Oocyte cryopreservation as a preventive measure for age-related fertility loss. *Seminars in Reproductive Medicine*, 33(6), 429–435. https://doi.org/10.1055/s-0035-1567819
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approach*. Thousand Oaks, CA: SAGE Publications, Inc.
- Denzin, N. K., & Lincoln. (2011). *The Sage handbook of qualitative research* (4th ed.). Thousand Oaks CA: SAGE.

- Department of the Navy. (2016, March 12). *Naval military personnel manual* (MILPERSMAN 1300–1000). Millington, TN: Author. Retrieved from https://www.public.Navy.mil/bupers-npc/reference/milpersman/1000/ 1300Assignment/Documents/1300-1000.pdf
- Department of the Navy. (2018, March 12). Navy guideline concerning pregnancy and parenthood. Washington, DC: Author. Retrieved from https://doni.documentservices.dla.mil/Directives/ 06000%20Medical%20and%20Dental%20Services/06-00%20General%20Medical%20and%20Dental%20Support%20Services/ 6000.1D.pdf
- Dichter, M. E., & True, G. (2015). "This is the story of why my military career ended before it should have": Premature separation from military service among U.S. women veterans. *Affilia: Journal of Women and Social Work*, 30(2), 187–199. https://doi.org/10.1177/0886109914555219
- Diergaarde, B., & Kurta, M. (2014). Use of fertility drugs and risk of ovarian cancer. *Current Opinion in Obstetrics and Gynecology*, 26(3), 125–129. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4217689/
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532–550.
- Ezzedeen, S. R., & Ritchey, K. G. (2009). Career advancement and family balance strategies of executive women. *Gender in Management: An International Journal*, 24(6), 388–411. https://doi.org/10.1108/17542410910980388
- Fertility IQ. (n.d.). The FertilityIQ family builder workplace index: 2017–2018. Retrieved September 30, 2018 from https://www.fertilityiq.com/fertilityiq-dataand-notes/fertilityiq-best-companies-to-work-for-family-builder-workplace-index-2017-2018
- Fletcher, W. (2009). Women warned not to freeze their eggs for social reasons. *Bionews*. Retrieved from https://www.bionews.org.uk/page_90948
- Harwood, K. (2015). On the ethics of social egg freezing and fertility preservation for nonmedical reasons. *Journal of Medicolegal and Bioethics*, 5: 59–67. https://doi.org/10.2147/mb.s66444
- Hodes-Wertz, B., Druckenmiller, S., Smith, M., & Noyes, N. (2013). What do reproductive age women who undergo oocyte cryopreservation think about the process as a means to preserve fertility? *Fertility and Sterility*, 100(5), 1343– 1349. Retrieved from https://doi.org/10.1016/j.fertnstert.2013.07.201

- In Vitro Fertilization, IVF Process, and Embryo Transfer (IVF-ET). (n.d.). Retrieved September 30, 2018 from https://infofru.com/health/pregnancy/infertilitymanagement-recent-advancement/in-vitro-fertilization-and-embryo-transfer-ivfet/
- Kime, P. (2016, January 29). Military's new fertility benefit will let troops freeze their sperm and eggs. *Military Times*. Retrieved from https://www.militarytimes.com/ pay-benefits/military-benefits/health-care/2016/01/29/military-s-new-fertilitybenefit-will-let-troops-freeze-their-sperm-and-eggs/
- Lorenzetti, L. (2014, October 14). Apple and Facebook will now pay for women to freeze their eggs. *Fortune*. Retrieved from http://fortune.com/2014/10/14/apple-and-facebook-will-now-pay-for-women-to-freeze-their-eggs/
- Mathews, T. J., & Hamilton, B. E. (2014). *First births to older women continue to rise* (NCHS Data Brief No. 152). Retrieved from the Centers for Disease Control and Prevention website: https://www.cdc.gov/nchs/data/databriefs/db152.htm
- Medline Plus. Assisted Reproductive Technology. (n.d.). Retrieved August 15, 2018 from https://medlineplus.gov/assistedreproductivetechnology.html
- Mertes, H. (2015). Does company-sponsored egg freezing promote or confine women's reproductive autonomy? *Journal of Assisted Reproduction and Genetics*, *32*(8), 1205–1209. https://doi.org/10.1007/s10815-015-0500-8
- Midwest Fertility. (n.d.). Cryopreservation. Retrieved September 30, 2018 from https://midwestfertility.com/what-we-do/cryopreservation
- National Center for Chronic Disease Prevention and Health Promotion. (2010). Assisted reproductive technology: National summary report. Retrieved from https://www.cdc.gov/art/pdf/2010-report/ ART_2010_National_Summary_Report.pdf
- National Center for Chronic Disease Prevention and Health Promotion. (2015). Assisted reproductive technology: National summary report. Retrieved from https://www.cdc.gov/art/pdf/2015-report/ART-2015-National-Summary-Report.pdf
- Navy Personnel Command. (n.d.a). Career intermission program. Retrieved October 30, 2018 from https://www.public.navy.mil/bupers-npc/career/ reservepersonnelmgmt/IRR/Pages/CIP.aspx
- Navy Personnel Command. (n.d.b). Pregnancy and parenthood. Retrieved October 30, 2018 from https://www.public.Navy.mil/bupers-npc/support/inclusion/Pages/ Pregnancy%20and%20Parenthood-Women%27sPolicy.aspx

- Office of the Secretary of Defense. (2016). *Report to Congress: Efforts to treat infertility* of military families. Washington, D.C: Government Printing Office. Retrieved from https://www.health.mil/Reference-Center/Reports/2016/02/26/Report-on-Efforts-to-Treat-Infertility-of-Military-Families
- Office of the Secretary of Defense. (2018). Report to congressional Armed Services Committees on Force of the Future Pilot Program on cryopreservation of gametes. Washington, D.C.: Government Printing Office. Retrieved from https://www.health.mil/Reference-Center/Reports/2018/03/26/Force-of-the-Future-Pilot-Program-on-Cryopreservation-of-Gametes
- Oncofertility Consortium. (n.d.). Turner syndrome. Retrieved August 15, 2018 from https://oncofertility.northwestern.edu/turner-syndrome
- Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization science*, *1*(3), 267–292.
- Ralston, K., Gayle, V., & Lambert, P. (2016). Gender, occupation and first birth: Do 'career men' delay first birth too? *Sociological Research Online*, 21(1), 3. https://doi.org/10.5153/sro.3862
- Redrock Fertility. (n.d.). Intrauterine insemination (IUI). Retrieved September 30, 2018 from https://redrockfertility.com/intrauterine-insemination-iui/
- Rosenblum, E. (2014, April 17). Later, baby: Will freezing your eggs free your career? *Bloomberg*. Retrieved from https://www.bloomberg.com/news/articles/2014-04-17/new-egg-freezing-technology-eases-womens-career-family-angst
- S. 881, 113th. *Family Act of 2013*. Retrieved from https://www.govtrack.us/congress/ bills/113/s881
- S. 965, 112th. *Family Act of 2011*. Retrieved from https://www.govtrack.us/congress/ bills/112/s965
- Sandor, J., Vicsek, L., & Bauer, Z. (2017). Let us talk about eggs! Professional resistance to egg vitrification and gendered medical paternalism. *Medicine, Health Care and Philosophy, 21*(3), 311–323. Retrieved from https://link.springer.com/article/ 10.1007%2Fs11019-017-9805-y
- Shaw, G. (n.d.). Egg freezing: Is it for you? *WebMD*. Retrieved August 14, 2018 from https://www.webmd.com/women/features/egg-freezing#1
- SIMS IVF Dublin (n.d.). Intracytoplasmic sperm injection. Retrieved September 15, 2018 from http://www.sims.ie/treatments/intracytoplasmic-sperm-injectionicsi.1040.html

Spradley, J. (2016). The Ethnographic Interview. Long Grove, IL: Waveland.

- Sunderam, S., Kissin, D., Crawford, S., Folger, S., Boulet, S., Warner, L., & Barfield, D. (2015). Assisted reproductive technology surveillance—United States, 2015. *Surveillance Summaries*, 67(3), 1–28. Retrieved from http://dx.doi.org/10.15585/ mmwr.ss6703a1
- Teachman, J., Tedrow, L., & Anderson, C. (2015). The relationship between military service and childbearing for men and women. *Journal of Sociological Perspectives*, 58(4), 595–608. Retrieved from http://journals.sagepub.com/doi/ pdf/10.1177/0731121415569604
- Tricare. (n.d.). Covered services. Retrieved April 27, 2018, from https://tricare.mil/ CoveredServices
- U.S. Department of Health & Human Services. (2018, August 30). Infertility. Retrieved from https://www.womenshealth.gov/a-z-topics/infertility
- WebMD. Infertility and artificial Insemination. (n.d.a) Retrieved August 23, 2018 from https://www.webmd.com/infertility-and-reproduction/guide/artificialinsemination
- WebMD. Infertility drugs. (n.d.b). Retrieved August 23, 2018 from https://www.webmd.com/infertility-and-reproduction/infertility-medications
- WebMD. Infertility and in vitro fertilization. (n.d.c). Retrieved August 23, 2018 from https://www.webmd.com/infertility-and-reproduction/guide/in-vitro-fertilization#1
- Womack Army Medical Center. (n.d.). Infertility–endocrinology services. Retrieved April 27, 2018, from Womack Army Medical Center website: http://www.wamc.amedd.army.mil/HealthcareServices/SitePages/Infertility%20-%20Endocrinology%20Services.aspx
- Wu, M., Henne, M., & Propst, A. (2012). Tax credits, insurance, and in vitro fertilization in the U.S. military health care system. *Military Medicine*, 177(6), 745–747.

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