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The Experience of Freezing Eggs for Social Reasons

Almost since their very inception social scientists have critically examined the social, legal and political ramifications of assisted reproductive technologies, exploring the ways in which they have given rise to new family forms and generated new questions and ethical debates in relation to the shifting boundaries of human reproduction (Almeling, 2015; Franklin, 2013). Research has also explored the practice and delivery of assisted reproductive technologies within and beyond the walls of the fertility clinic (Nordqvist, 2011; Thompson, 2005; Wahlberg, 2018) and has examined the experiences of a variety of actors in the realm of assisted reproduction, including patients undergoing IVF (Barnes, 2014; Franklin, 1997; Inhorn, 2012; Sandelowski, Holditch-Davis, & Harris, 1990; Throsby, 2004), donors providing genetic material for third-party use (Jadva, Freeman, Kramer, & Golombok, 2009; Mohr, 2018; Nordqvist & Smart, 2014) as well as the accounts and experiences of those conceived via assisted reproduction and their families (Blake, Zadeh, Statham, & Freeman, 2014; Golombok, 2013). However, due to the relative novelty of social egg freezing, there are currently very few detailed accounts which explore how women report the experience of undergoing social egg freezing or their attitudes towards their frozen reserve of eggs (Baldwin & Culley, 2018; Lehmann-Haupt, 2009; Richards, 2013). As such, this chapter seeks to begin to address this current gap in knowledge by providing a rich, nuanced and detailed discussion of the experience of egg freezing as described by the women in this research.

This chapter is organised in chronological order exploring women's accounts of egg freezing from their initial perceptions of the technology right through to their reflections on the procedure which was, in some cases, several years after they had frozen their eggs. It explores how women described, understood and balanced the risks and costs of the technology with what they saw as the potential benefits of the procedure, as well as how they experienced the embodied process of egg freezing. In particular, this chapter explores how women reported the physical and emotional effects of undergoing egg freezing and how they described the support structures they drew upon or needed throughout this process. The chapter then closes by exploring the participants' attitudes and intentions towards their frozen reserve of eggs as well as their future hopes and expectations regarding motherhood.

6.1. 'Choosing' Social Egg Freezing: Ambivalence, Risk and the Chance of 'Success'

6.1.1. Ambivalence and Anxiety

As explored in the previous chapter, the decision to undergo social egg freezing was a multi-layered and complex process shaped by a variety of factors in the participant's lives. As such, the decision to engage with the technology was often not simple, or quickly made, but was often the result of much deliberation and thought. Indeed, this research found that several of the participants had been aware of, and had been considering, egg freezing for a number of months, or even years, prior to undergoing the procedure but had felt ambivalent about making use of the technology themselves. This ambivalence was in part linked to the participants' perception that egg freezing was unreliable and unlikely to work.

The women in this research underwent the process of freezing their eggs between 2006 and 2013 and as such were among some of the first women to draw on this technology for fertility extension purposes whose detailed accounts still remain as yet unheard. At the time that these women were considering the technology, very little information was available about the success rates being achieved with frozen eggs, but research showed that in some cases many eggs which were frozen did not survive the initial thaw. This was because many UK and US clinics were still using the traditional slow freeze method of cryopreservation. As a result, many women initially rejected egg freezing as a potential option due to the low levels of success being achieved with this technology. In some cases, it wasn't until they later heard about the technological improvements made to the egg freezing process via vitrification that they reconsidered their use of the procedure believing it to be more likely to result in a live birth. As Charlotte and Ellen explained:

So, I just never thought the procedure was good enough. I did read about it like when I was younger, but everything was like so many of the eggs get damaged in the process of thawing and they didn't have the same techniques, so it really wasn't until like I said almost a year ago that I looked into it again.

- Charlotte (42 years)

I found out that the technology was such that although some women were having this done that the technology for freezing would not be likely to yield good results so I kind of let it go for a bit [...] When I was around 39/40 I thought, oh I will have a look into this again, and I read that in Japan they had developed a new technology around egg freezing [vitrification].

- Ellen (45 years)

Whilst new developments in the process of freezing and thawing eggs were seen by some women as signalling that the technology may be worth investing in, for others the high cost of the procedure, and the fact that the technology still offered no guarantee of a future live birth, continued to leave many of the participants ambivalent about undergoing the procedure themselves, as Johanna noted:

I was aware of the technology, but it appeared that in terms of the amount of money you have to put in to it, you were better off freezing an embryo than freezing your eggs [...] I went through thinking about, you know, how much money it was going to cost, did some investigations, weighed it up [...] it just didn't seem to warrant spending that amount of money for the results you would get back out of it.

- Johanna (42 years)

As well as sharing concerns about the high costs of the technology and the low rates of success being achieved with frozen eggs, many other women also commented that they had not undergone the procedure at an earlier age as they had hoped that they would have enough time to find a partner and conceive without needing medical intervention. As Patricia explained:

I looked into egg freezing when I was 36 as it is the sort of thing that people talk about, but I hadn't known anyone that I had done it, and when I looked into it I sort of thought that it seems like a lot of money and I am still quite young, and I have still got a chance to meet someone so I sort of just let it go.

- Patricia (41 years)

In some cases, it wasn't until the participants were coming closer to the end of their fertile years that they decided to freeze their eggs, when the likelihood of finding a partner and conceiving naturally had begun to become more remote. As Katie told me:

I think I just wasn't motivated enough given that there was still plenty of time at that point to have it happen more naturally, I just wasn't motivated enough to invest the time and put my body through that when I was that young. It wasn't really until I turned 37 and, you know, I felt the door a little bit closer to closing [...] [that she reconsidered egg freezing].

- Katie (38 years)

For many of the women in this research, the possibility of undergoing social egg freezing was a difficult prospect to consider and was the cause of much anxiety and distress. This was often because many of these women would have rather been actively pursuing motherhood naturally with a partner than 'having' to freeze their eggs. As Amber explained:

It really was that I was hopeful that I would meet somebody actually, so it's not, this having a child on my own, or using my frozen eggs [...] it's not where I saw my life going.

Amber (39 years)

Thus, for some women, their engagement in egg freezing was experienced as an unwanted recognition that their life had not gone the way they had anticipated and that they were, as a result, having to plan for an alternative lifecourse. Such a trajectory could be one which may not include motherhood but, if it did, would almost certainly involve older and perhaps even single motherhood. Therefore, whilst some of the participants hoped that undergoing egg freezing would mean that they would not have to make immediate compromises about how, and with whom, they wanted to 'do motherhood', their use of the technology was nevertheless an indicator that they still might have to pursue motherhood in currently unforeseen and undesirable ways. As such, some women experienced something akin to a period of mourning both before and during the process of freezing their eggs that they had (as yet) been unable to pursue the normative construction of motherhood which they had in some cases always envisaged.

6.2. Awareness and Understanding of Egg Freezing 'Success Rates'

After deciding that social egg freezing may be something that they wanted or needed to consider, the women in this research described trying to find a clinic which could provide them information about how likely their frozen eggs may be in providing them a live birth in the future. However, nearly all the participants reported difficulties in accessing accurate and reliable information from the clinics they attended. This was because at the time they were undergoing egg freezing, as well as at the time of writing, very few clinics (particularly in the United Kingdom) have had large numbers of women return to use their eggs in an attempt to conceive. As such, the clinics that the participants attended did not yet have their own 'in house' data on which to base their predictors of success and instead had to rely on limited published data from other centres or clinics. This lack of information and clarity about the chance of having a baby from previously frozen eggs was often frustrating for the women who were trying to decide whether or not to undergo the procedure. As Livvy and Anne explained:

It's just frustrating with something like this you know, they never give you complete straight answers to your questions [...] You want to know precise answers to your questions but it's all very vague, every individual is different [...] So, it was really hard really for me to gauge what my chances were.

- Livvy (37 years)

You know it's hard for them to give you really good statistics on egg freezing as there is not that many women that have actually unfrozen their eggs.

- Anne (36 years)

The success rates of IVF using fresh eggs are known to vary considerably by age; indeed, the recent HFEA data have shown that 23% of women undergoing IVF aged 35-37 experienced a live birth compared with 15% of women aged 40-42 (HFEA, 2018a). Similarly, the age of a woman at the time of freezing her eggs has a significant impact on the likelihood of those eggs one day resulting in a child. Recent figures from the USA (Goldman et al., 2017) estimate that if a 35-year-old woman freezes 10 eggs she may have up to a 50% chance of having a child using those eggs in the future. However, the chance of a live birth falls to 26% for women who froze the same number of eggs when aged 39 and stands at 11% for those who underwent the procedure at the age of 44. As such, women presenting for egg freezing should be provided age-specific success rates to help them estimate how likely the procedure may be in providing them with a child in the future (Baldwin & Culley, 2018; Saumet et al., 2018). Despite the utility of such information, the participants in this research reported being unable to access this data from their clinics; instead, they quoted a variety of different success rates which they had most often gathered from reading online sources such as fertility clinic websites, news stories and published academic research. Whilst these alternative sources helped some women contextualise their decision-making, much of the published research and data on social egg freezing comes from highly specialised and experienced treatment centres sometimes using eggs taken from women in their 20s. Thus, the results being achieved in such centres should not be considered directly comparable to the average fertility clinic where the typical user of egg freezing is more likely to be in their late 30s (von Wolff et al., 2015).

Most of the participants stated that they had been made aware by their clinic that egg freezing was an experimental technology and described a clear understanding that they would require further fertility treatment in the form of intracytoplasmic sperm injection (ICSI) should they wish to make use of their frozen reserve in the future. The participants also explained that they knew the viability of their eggs would only be 'proven' once they were thawed and used in fertility treatment and that, as live birth could not be guaranteed, they should not view their eggs as an 'insurance policy' against future infertility.

She (clinician) told me very candidly there is no guarantee that you will have a child, there is no guarantee that any of these eggs will work.

- Rae (39 years)

The chances aren't brilliant but also, I suppose in a way it's a little bit disheartening as it like a less than 50% chance of it

working but they were very upfront and honest about it really. There is no magic wand and you shouldn't use it as an insurance policy really.

- Holly (38 years)

However, as they were unable to access accurate information about how likely their eggs may be in providing them a live birth, and despite being advised to not rely on their eggs or treat them as an 'insurance policy', some women nevertheless disregarded these warnings and appeared to overestimate the efficacy of the technology.

He did point out that it is all very experimental, and you can't bank on it, it's not an insurance policy, but I tend to ignore all that because I think it is. And I know I shouldn't think like that, I shouldn't, but I do think of it like that.

Aleen (35 years)

Despite having little information about the likelihood of achieving a live birth with their frozen eggs, several participants perceived IVF and egg freezing technology to be constantly improving and suggested that in the time between freezing their eggs and using them to conceive, their likelihood of achieving a live birth would most likely increase.

It's getting better every year as it goes on like when I first had it done [clinic name] were the only clinic in the country to have a child to my knowledge and now they've come on leaps and bounds.

- Amber (39 years)

Technology is ever changing, and it has come on leaps and bounds [...] so who knows even if it's not 100% now, then by the time they get defrosted they will be able to improve the system by then.

- Shu (39 years)

Thus, the participants sometimes had significant faith in technological progress which they hoped would enable them to pursue motherhood in the future. Nevertheless, it is important to note that whilst the introduction of egg vitrification has resulted in a larger proportion of eggs surviving the initial thaw, egg freezing as a form of fertility extension is likely to only ever be as successful as its 'parent technology', IVF, which isn't particularly efficacious. As such, even if the same results can be achieved with frozen eggs as are currently observed with fresh, it is still likely that only one out of every four IVF treatment cycles will result in a live birth.

Whilst many participants struggled to access clear data on the likelihood of their eggs providing them with a child in the future, some did suggest that they believed

their chances to be quite slim. However, it was very common for them to nevertheless suggest that it was better for them to undergo the procedure, and bank some eggs for potential future use, than to not engage with the technology at all.

So, it's not 100% safe, it's not 100% certain, but I'm in a better position that I could possibly have been before.

- Amber (39 years)

I am a big 'Googler', by the time I got the doctor I had read journal papers and I was just going on and on. I thought they (success rates) were really bad, but better than nothing.

- Claudia (41 years)

I think I came up with a statistic of maybe 25% based on different books and different things that people have told me [...] so I thought that's better odds that sitting around not doing anything.

- Effsie (40 years)

All the participants shared a concern and interest in the likelihood of the technology resulting in a live birth in the future, yet few discussed at length the procedures they might encounter when coming to use their stored eggs. Rather, many women described how they hoped to never need to use their eggs and instead expressed a desire to conceive naturally with a future partner. It appeared that the likelihood of achieving a live birth with their eggs in the future was one type of success which women considered, but a successful egg retrieval and having a sufficient number of eggs frozen was also a marker of egg freezing 'success', which had significant implications for women in the present. This was because egg freezing was not just about enabling reproductive options for the participants in the future but was also about ensuring they made the right choices, such as in their choice of a partner, in the present.

6.3. Cost and Issues of Access

During the interviews, the participants sometimes articulated an awareness that they were part of only a small group of women who were sufficiently economically empowered to access and afford, what was at the time, a very new technology. The amount of money the participants paid to access the technology varied significantly depending on the country where the women froze their eggs. Of the 31 participants, 20 froze or attempted to freeze their eggs in the United Kingdom, seven underwent the procedure in the USA and four underwent the procedure in other countries. The cost of the technology varied the most for the American participants with some of the women undergoing the procedure with

¹These participants underwent the procedure in Spain, Thailand and Argentina.

cost covered in part or wholly by their health insurance and others having to pay for the procedure themselves, costing them up to US \$10,000 a cycle. By comparison, the women who underwent the procedure in the United Kingdom paid between £4,000 and £5,000 a cycle and all but one participant, who funded the process through a freeze and share scheme, paid for the treatment out of pocket. Similar to results described by De Groot et al. (2016), this research found that whilst all the women in this research were in full-time employment, often in highly professionalised fields of work such as medicine, law, media and higher education, 40% of them reported receiving financial support when paying for the procedure. This included financial contributions from their parents, as prospective future grandparents, (n=8) or through making use of money from family inheritance (n=4). The remaining participants without access to such funding reported paying for the procedure themselves using their own savings, bank loans or credit cards. This led several participants to note how the cost of egg freezing was quite exclusionary and only available to those who were either financially secure or who had families who were able to pay for the procedure. As Sofia remarked:

I have this girlfriend now who is 33 and she wished, she is in such a craving to find someone, and she contacted me as she wanted to freeze her eggs [...] but she hasn't got the money to actually do a cycle, so I wish it was cheaper and more accessible for those women.

- Sofia (39 years)

Egg freezing technology can sometimes be accessed free of charge in the United Kingdom through the NHS; however, funding is only provided for medical reasons and applications for such funding are often managed on a case-by-case basis. As a result, the only means by which women can access subsidised egg freezing in the United Kingdom for social reasons is through a freeze and share scheme² whereby a woman receives treatment free of charge if she donates half of her eggs to another woman. One participant, Rachel, froze her eggs through such a scheme. However, as she was required to donate half her eggs to another woman, Rachel needed to undergo two cycles of the procedure to bank enough eggs for future use, with the concomitant risks. She explained:

I would love to tell you that it was completely altruistic, but the reality is that it was a financial decision, that I was able to freeze my eggs with absolutely no cost to myself and at the same time help somebody else. I wouldn't have chosen to do that if the financial incentive wasn't there [...] But that was definitely the reason for doing it because I couldn't have afforded to do it otherwise, without taking out a bank loan or something.

- Rachel (34 years)

²Freeze and share programmes currently only accept women below the age of 35 with an AMH of seven or higher, which indicates their fertility is still likely to be high enough to warrant the procedure.

6.4. Awareness and Perception of 'Risk'

All the participants reported being informed by clinics about the potential physical risks of the procedure such as ovarian hyper-stimulation syndrome (OHSS), bloating, nausea and tiredness, and many also reported spending sometimes a significant amount of time researching the process of egg freezing online. The physical risks that the participants most often identified and were concerned about were the risks of overstimulation and the likelihood of negative side effects from stimulation drugs, as well as the risk of the stimulation cycle failing, or not yielding what they believed to be a sufficient number of eggs for freezing. In discussing these risks, it was common for the participants to suggest that egg freezing was simply 'half' an IVF cycle and therefore lower in risk or bearing the same risk as those undergoing IVF, which they believed to be safe. As Livvy told me:

Essentially, it's just IVF isn't it, it's just one half of IVF [...] the actual harvesting process which has been done loads, so it can't be that dangerous.

- Livvy (37 years)

Participants also explained how they believed IVF, and therefore egg freezing, to be safe or at least 'low risk' due to its widespread practice.

It's become more of a norm, as I said at the beginning, to do IVF is now something that most women will, maybe not most, but a lot of women would consider if they had fertility problems. They would assume it was fairly safe because it's been around for a long time [...] it is really quite a mainstream kind of thing.

- Emily (44 years)

I wasn't worried, I read around it [...] It's the same as doing IVF. If it was super dangerous then people wouldn't be doing it.

- Sofia (39 years)

A smaller number of women also suggested that the lack of available data proving ovarian stimulation to be dangerous led them to feel more confident about considering using the technology because they believed this was further evidence that the procedure was likely to be of low risk.

I suppose I just decided to do it even though there are unknowns because there wasn't evidence to say don't do it. I think I probably did as much research as I could, but you know there wasn't enough information about that and I am sure there won't be for maybe another 20 years.

- Emily (44 years)

I think if there was anything huge I probably wouldn't have done it and then obviously, like some of the literature said there may be a slightly higher risk of ovarian cancer, but then there was other literature which says that they haven't really proved it.

- Effsie (40 years)

A further factor which helped normalise the procedure for some of the participants was their awareness of other people who had undergone medicalised fertility treatment. Twenty per cent of the participants disclosed knowledge of a close friend or family member who had undergone some form of fertility treatment, which led some women to also comment that their decision to undergo egg freezing was thus not unusual or out of the ordinary.

I knew lots of people who had done IVF, because egg freezing is just the first part of the IVF process, so that did influence me and make it sound pretty mainstream in a way [...] [egg freezing] obviously wasn't standard, you know, when I did it seven years ago. But I am sure it's becoming more and more popular [...] because it's the same as IVF in a sense, it is really quite a mainstream kind of thing.

- Emily (44 years)

When discussing their decision to make use of the technology, two participants (Effsie and Helena) explained how they decided to only undergo one round of egg stimulation and retrieval to manage or minimise the risks they believed they were exposed to. They suggested that one round of egg freezing was much less risky than the practices of others who underwent repeated rounds of IVF treatment when trying to conceive a child. Effsie explained:

I don't like the idea of putting a lot of things into my body that aren't particularly natural for it, so I thought I'd do it once and that is enough. I've heard of people who have 15 rounds of IVF, for me I would just, I wouldn't want to.

- Effsie (40 years)

Thus, for Effsie, such a measured and cautionary approach to egg freezing was seen as a proportionate response to the risks posed by age-related fertility decline. However, it is worth noting that should she seek to use her eggs in the future, she may need to undergo multiple rounds of IVF using ICSI before she secures a live birth.

Even though most participants believed that they were exposing themselves to some physical risk by freezing their eggs, similar to the findings of De Groot et al. (2016), several of the participants suggested that any of the physical risks to which they were exposed were offset by the potential gains they would

experience if the procedure was successful and they were able to use the eggs to conceive a child in the future. As Emily and Helena explained:

With any invasive procedure there is a risk of infection, but the risks are very low, so it wasn't something that worried me, and I thought the benefits far outweighed the risks.

- Emily (44 years)

Well I suppose I felt that these risks, that the benefit that I would have from this treatment outweighed the fear of the risks really, as simple as that.

- Helena (37 years)

When deciding whether to undergo egg freezing the participants sought to balance concerns related to the risks of the procedure, the cost, as well as likelihood of success. For many of the participants, the risks associated with egg freezing were perceived to be sufficiently low enough to warrant their engagement; egg freezing was normalised as half an IVF cycle and as something routine which would be unlikely to cause them any harm. Equally whilst they were aware that the technology did not guarantee a live birth, the potential benefits of the technology were perceived to outweigh the high cost of the procedure with women suggesting that by engaging with the technology they would always be increasing their chances of a future live birth, even if it was only by a marginal amount. The problem with such an articulation, however, is that many women who drew on this technology at this early stage of its availability were not provided and could not access, accurate information about the extent to which the technology may increase their chances of a live birth and as such had to make the decision about whether to engage with the technology in the absence of such key information.

A further factor which also appeared significantly important for the participants to consider when deciding whether to pursue egg freezing was the risks associated with not engaging with the technology. The risks the participants identified as posed by their non-engagement included the physical and emotional risks associated with having to attempt conception at an older age such as an increased chance of experiencing a miscarriage or conceiving a child with genetic abnormalities. However, the main risk the participants identified as shaping their decision was the social or emotional risk that they could one day experience involuntary childlessness and that, should they choose to not undergo social egg freezing, they could one day blame themselves or be blamed by others for not making use of the technology when it was available to them. As Livvy and Katie explained:

I kind of thought that if I was still in the same position as I was in a year later then I would do it because even though there was a very small chance of success, in the whole scheme of things

I think it was going to be a couple of thousand pounds you know which isn't a massive amount of money [...] I just didn't want to finally meet perfect man a couple of years down the line and then realise that I'd missed the boat and thought oh my god if only I had done that when I had the chance [...] I didn't want to in five years' time to look back and regret not doing it.

- Livvy (37 years)

That's another reason I pursued this, it's just like ultimately no matter what happens I was just trying to minimise the amount of regrets I might have [...] I just thought that if 5 or 10 years down the line, if I totally pass my fertility window and was really sad that I didn't have a child, and then I could look back and think why didn't I do that, that that was not a place I wanted to be.

- Katie (38 years)

For these women, the act of freezing eggs appeared to be a valuable undertaking in and of itself, possibly even if it failed to provide them a birth in the future as it guarded against the risk of future regret and blame of any future unwanted childlessness. The role the fear of future regret played in women's use of this technology was explored in the previous chapter as was the other 'risk' the participants identified of not using the technology: the risk of 'panic partnering'. Thus, the risks of not engaging with egg freezing appeared to form a significant part of the participants decision-making process, and for many women, the risks posed by non-engagement were seen to outweigh the risks of undergoing the procedure, even if the technology failed to provide with a child in the future.

6.5. Experiencing Egg Freezing

As the above discussion has indicated, the decision to pursue social egg freezing was for many women a complex and difficult choice not only due to the highly emotive nature of such decision-making but also because the participants had to make such a decision in the absence of critical data about the likelihood of achieving a live birth with their frozen eggs in the future. This chapter will now turn to examine how the participants reported their experience of social egg freezing, paying particular attention to the physical and emotional impact that the procedure had on them and the support they drew upon or needed throughout this process.

6.5.1. Physical Effects

Most (68%) of the participants in this research underwent, or attempted, just one cycle of egg freezing (n=21), almost a fifth of participants also underwent a second cycle (n=6) and a smaller number underwent three (n=3) or four (n=1) rounds of stimulation. Following egg collection and freezing, women had between zero (due to a failed cycle of stimulation) and 62 eggs stored, the

average number being 16.3 Most of the participants who underwent egg collection, and thus completed a full cycle of egg freezing, reported experiencing some kind of side effects of the stimulation process, such as water retention and stomach bloating. As Charlotte and Lacey described:

Your body bloats out almost like at a pregnancy level and I'm not talking like normal period bloat, I'm talking like a whole chunk of your body, from like your chest down it was crazy [...] it's really an uncomfortable feeling like think of having your period but for weeks straight.

- Charlotte (42 years)

I really massively bloated you do feel like you are pregnant, your ovaries feel like a dead weight.

- Lacey (40 years)

A quarter of the participants reported experiencing bloating that was so severe they believed that they looked pregnant, with one participant, Mary, even describing how this led to strangers repeatedly offering her seats on public transport. She told me:

There were five or six occasions where men offered me a seat on the train and I thought well I better go along with this pretence. The first week not a lot happened but then the last week it just shot out it really went out and expanding and it was like the most perfect little bump.

- Mary (49 years)

The participants also reported other perceived side effects, including tiredness and weight gain.

It made me incredibly tired [...] I was physically wrecked for about two or three weeks it just really conked me out. I would get up in the morning, go out to work, come home and go to bed at 7 o' clock I was so tired.

- Aleen (35 years)

I am super lean. I know what my body fat is because I had it monitored recently, I am 18% body fat now, but I don't fit in my clothes. I still can't fit in my jeans properly from how I was before I started this regimen [...] so you know the whole process has caused me quite a lot of changes in my body

- Johanna (42 years)

³If the participant who had 62 eggs stored is excluded from the sample as an outlier (the second highest number of eggs stored was 34), then the average number of eggs frozen drops from 16 to 15.

Several (n=5) of the participants reported either being diagnosed with ovarian hyper-stimulation syndrome (OHSS) or experiencing several of the symptoms such as significant nausea, stomach pain and weight gain during the stimulation process or shortly after the egg retrieval took place. For some of the participants, this experience was highly distressing.

I had OHSS, I delivered too many eggs and after they took them out [...] I was super swollen, constipated and in a lot of pain.

Lindie (34 years)

I really don't like being nauseous so when I was really nauseated and being totally irrational, I remember at one-point crying to my dad that I thought I was dying.

- Katie (38 years)

Three of the participants also experienced further serious side effects and complications; this included Anne who experienced a severe form of OHSS which ultimately required hospitalisation after she gaining 10 lbs of fluid during the stimulation process. She explained:

I ended up getting ovarian hyper stimulation, I got it on the 5th day. I basically woke up and I had gained 4 lbs and I was in so much pain I went to the doctor. They looked at the fluid in my stomach and they said there was a lot there and the next day I woke up and had gained another 4 lbs and so I went back to the doctor [...] then the next day I gained like another 2 lbs which was now like 10 lbs all just in your stomach, like hard big stomach, like you are pregnant and I am like a thinner girl so it was unbelievable how big my stomach looked I mean I literally looked pregnant

- Ann (36 years)

A further participant, Rae, was also diagnosed with 'kissing ovaries' half way through the stimulation process, and Ellen described a life-threatening experience caused by internal bleeding, which she felt was the result of a mistake during a routine ovarian cyst removal. They told me:

After the first retrieval I was ok probably for the first two days, I was fine then all of a sudden, I was like gaining all this weight like I gained 5lbs in a seven-day span and if I looked down I could visibly see that my left side was much more swollen than

⁴Kissing ovaries is the commonly used term to describe when a woman's ovaries are pulled and stuck together; this can be caused by ovarian hyper-stimulation syndrome as well as endometriosis.

my right side by a lot, like a noticeable bit, and it felt like some-body was squeezing my ovary or kicking me or something. I didn't know what was going on or why, I just knew there was a problem. So, I went back to the doctor, and even allowing them to do a vaginal ultrasound was excruciating as there was so much fluid, and that's when they told me that I have kissing ovaries; so fluid builds behind one causes it to smack into the other so that was what the pain was about.

- Rae (39 years)

My brother picked me up from the public clinic and we went home together on the tube and then I got inside the front door and I fainted in the hall way and my brother put me on my bed and I felt very cold and shaking all over [...] I was just feeling really cold as the night went on I had this excruciating pain down all one side and I couldn't move I literally could not move [...] I had suffered an injury and I was bleeding internally and the blood was flowing in to an area which was affecting my nervous system which is why I couldn't move so what actually happened was that I was bleeding internally and if I had not stopped naturally I would be dead, I am not exaggerating that is what happened.

- Ellen (45 years)

The experience of such significant side effects of the ovarian stimulation process was quite a shock for these women, many who had previously perceived the procedure to be low risk due to its widespread use. However, whilst these side effects were unpleasant, they were often perceived by the participants as a short-term sacrifice in the pursuit of a longer-term goal should the procedure provide them the opportunity to pursue motherhood in the future.

6.5.2. Emotional Effects

In addition to experiencing several uncomfortable, painful and sometimes serious side effects of the stimulation and retrieval, many of the participants also described several emotional 'side effects' of undergoing the procedure. Participants described feeling a heightened emotional state throughout the hormonal stimulation process which they reported left them more prone to crying and feelings of general anxiety. As Jen described:

You just feel kind of, you know, easily upset, easy to cry, just a short fuse, and just a little emotional.

- Jen (39 years)

In addition to feeling emotional because of the effect of the stimulation drugs on their body, nearly all the participants also reported finding the egg freezing process emotionally and psychologically challenging. This was often because, like many women in the research undertaken by De Groot et al. (2016), the participants in this research fundamentally didn't want to freeze their eggs but felt they were 'having' to make use of the technology due to their lack of a partner. As Ellen and Charlotte emotionally explained:

By the third round [of egg freezing] I had got resentful about it, I felt why can't life be simple? Why can I just meet somebody like everybody else? Why do I have to go through this process of injecting myself every day?

- Ellen (45 years)

Starting this process is extremely emotional and extremely scary and it is an overwhelming thing and you start thinking things like, how did I end up here? How did a woman like me end up in this position where I'm actually doing this you know? [...] I just broke down and I started crying and I said I just can't do this, you know I can't, I was like how, how am I going to do this I don't know and that was a really hard part of it you know for me.

- Charlotte (42 years)

The emotional challenge posed by egg freezing was therefore often much more demanding and difficult for the participants than the physical side effects of the stimulation procedure. This was because the emotions they experienced were not simply the result of the hormone drugs they were taking but were often linked to their single status and sometimes to the dissatisfaction they felt about the current direction of their lives. As Lacey and Jen explained:

I just felt really low, and really like it was, I just felt depressed basically. I just felt like what am I doing? It wasn't actually that I was questioning what I was doing, I just felt really miserable so and it's quite hard.

- Lacey (40 years)

I was feeling like so bummed that this is the point I'm at in my life, that I'm 37 and single and I really want to have kids and, you know, all my friends are on their second kids already and I don't even have a partner in sight and just a lot of sadness and a lot of self-judgement around that, like what happened to me and where did I go wrong?

- Jen (39 years)

As a result, it was common for the participants to be highly critical of themselves, their decisions and their current position in life when they were undergoing the process of egg freezing which, as Jen articulated, functioned sometimes as a reminder that they were not where they wanted to be in life.

I would just come home from every single one of those appointments and just sob. I'd just cry, just ball my eyes out because it was such a reminder of the fact that I'm not, you know, I wasn't where I wanted to be in my life. So, it was hard in that regard.

- Jen (39 years)

I can fall into patterns of thinking like why have you found yourself here? Did I do something wrong? Is there something wrong with me? Did I make bad decisions? Is this my fault? Like am I not going to get what I want now because I made decisions in the past I shouldn't have? Should I just have married that guy?

- Katie (38 years)

Thus, whilst egg freezing was a tool the participants drew upon to keep open imagined futures of marriage and motherhood, for many women the lack of an intimate partner in the present was a source of much distress and sadness. Their use of the technology was also bound up with feelings of guilt and shame for not yet achieving the life goals and expectations that they had held for themselves and which they perceived had come so easily to other people around them. As a result, the process of undergoing egg freezing was often very challenging and emotionally isolating for many of the participants. To manage these challenging emotions, periods of self-doubt and anxiety, some of the participants articulated how they became very goal oriented and determined to see the process of egg freezing through. Interestingly, Hayley shared how she dealt with the process by likening the egg freezing procedure to a form of treatment which would make her 'better' once it was completed.

I had to mentally tell myself that pretend that you have gone to the GP and the GP said right you need to do this to get better, you are going to have to take this medicine, and it's going to be horrible for a few weeks and then it will be over and then you will be fine. And I treated it like that as a way to mentally deal with the fact that I was going to have to do this horrible thing to myself.

- Hayley (38 years)

The process of egg freezing is very similar to IVF with regard to the ovarian stimulation and egg retrieval procedure; this similarity was observed by several of the participants, such as Aleen, who likened the process of egg freezing to undergoing IVF without a partner. This comparison was drawn by several of the women who stated that undergoing the procedure without the support of a partner was often the most challenging and upsetting part of the egg freezing process. This was because, whilst some women stated they had a strong network

of support, they were ultimately alone at home when they had to go through the daily process of injecting themselves with the stimulation drugs. As Anne and Jen described:

I was doing this on my own whereas couples do IVF, they have their husband with them, so just being on my own and doing the shots on my own [...] I always knew I had friends and my mum was there for me, but really at the end of the day it was just me by myself at home.

- Anne (36 years)

I lived alone at the time, so I was truly going to be doing it by myself in my house. And so, I just found that really upsetting.

- Jen (39 years)

In some ways the participants perceived women undergoing IVF to conceive to be in an enviable position; after all they had a partner committed to parenthood and were actively trying to have a child which was something many of the participants wished they could be doing. Due to their lack of such a partner, and the fact that it may be several years before they may be able to try and conceive, the participants also described a sense of loneliness when undergoing the procedure.

I can remember just being on this gurney thing waiting to go into the operation and having that cannula thing put in and just crying my eyes out just thinking, why am I here on my own, why do I have to go through this sort of thing on my own?!

- Claudia (41 years)

I was feeling like oh god, why am I here? Why am I at this point in my life? I'm so upset, I'm lonely, I'm doing this all by myself.

Jen (39 years)

Some women also reported a degree of stigma and embarrassment about making use of the technology and for 'still being single' at their stage in the lifecourse. As Preeti explained:

I think there is a stigma attached to it. Well why do you need to freeze your eggs, or why are you bothering, why don't you just get out there and find a man and get pregnant [...] some people said that.

- Preeti (37 years)

A significant amount of research has shown the immense emotional and psychological burden that medicalised fertility treatment has on those who make

use of assisted reproductive technologies (Bouwmans et al., 2008; Hammarberg, Astbury, & Baker, 2001; Hanna & Gough, 2017). This research equally found that the process of egg freezing could be intensely emotional and upsetting for the women who underwent the procedure who were often highly distressed about 'needing' to make use of the technology and often very disappointed about their lack of an intimate partner. Indeed, for many of these women the process of egg freezing was made more difficult due the fact that they were undergoing the process of medicalised fertility treatment alone.

6.5.3. 'Going It Alone' and Need for Further Support

Most of the participants had disclosed their decision to freeze their eggs to a small number of people, usually close friends and family to enable them to discuss the procedure and receive their support which was seen as valuable to the women throughout the process. As Lacey and Livvy described:

I was quite lucky as I had friends and family around and I was really open about it all, you know told everybody. Well I didn't tell everybody, I didn't tell my work actually, but I told most people, and everyone was really supportive.

- Lacey (40 years)

Well it's a very personal thing, it's not the type of thing I am going to advertise on Facebook, obviously I wanted to tell a few people to get their feedback, so I told people who I thought would be the most supportive and that was like half a dozen people and I didn't see why anybody else needed to know really.

- Livvy (37 years)

Most of the participants reported receiving support from their friends and family, particularly from their own mothers and friends who had experience of undergoing fertility treatment. This support was often emotional but also practical, such as offering to attend clinic appointments and being present when the participant was first getting used to injecting herself with the stimulation drugs.

I would say the injections were scary and intimidating. I'd never given myself a shot and yet the first, the very first day I did it my girlfriend Nicky came over to my house and she had frozen embryos, so she'd been through the process alone and she kind of coached me through the first night, which was so great.

Jen (39 years)

The first time I did it [the hormone injections] I was so scared that I made sure my mum was there with me because I was just freaking out. And in the end mum had to actually push it in because I just couldn't do it. I just sat there like oh I can't do it.

And once she pushed it in I realised that once you have pierced the skin, after that it isn't actually too awful.

- Hayley (38 years)

In addition to looking for and receiving support from family and friends, several of the women also reported having sought support and guidance from online fertility forums. It appeared that the support provided by women who had experience of, or who were currently undergoing, fertility treatment was particularly useful, especially for women such as Rachel who did not know anyone who had undergone IVF and thus had very limited knowledge of ARTs prior to engaging with egg freezing.

I spoke to people a lot on Fertility Friends, to be honest they are the best resource that I found.

- Rachel (34 years)

That fertility friends site massively helped and I just think god why didn't I just crack on with that earlier.

- Amber (39 years)

Previous research examining women and men's use of online fertility forums have reported how these sites enable users to provide mutual support and empathy to one another and allow users, often anonymously, to share their personal experiences of infertility and medicalised fertility treatment (Hanna & Gough, 2016; Malik & Coulson, 2008). These studies have also found how online support groups can help users make sense of their experience, have their thoughts and feelings validated by others and reduce the sense of isolation which can accompany fertility problems and treatment. Similarly, this research found that for some of the participants who drew on online networks for support, their use of the forums appeared to help reduce their fears and anxieties about the procedure. For others, having such support normalised the process and validated any concerns or feelings they had during the procedure.

It was so comforting that I had someone there who had been through it and who knew what she was doing and could just kind of talk me through it, just be moral support.

- Jen (39 years)

I'm very thankful that I had that one friend who had gone through it two years before because she was like my touch stone. I would just email her every day and be like ok, this is how I'm feeling now, I'm feeling really bloated today, and she would just kind of normalise and validate all that for me.

- Katie (38 years)

In addition to making use of online spaces to talk about the procedure, a smaller number of participants reported that they were able to make contact online, and then sometimes meet in person, with other women who had frozen their eggs. The support, understanding and guidance such women were able to provide was often seen as superior to the support able to be offered by women who had undergone IVF. This was because typical IVF users had more often pursued the technology with a partner and therefore the participants believed they experienced different challenges to those undergoing social egg freezing. The networks and relationships these online forums and face-to-face meetings provided enabled women to access and draw upon the tacit knowledge and experiences of other women who had undergone egg freezing and, through peerto-peer contact and support, created a 'community of practice' (Paechter, 2003). This community was of significant value to many women, as at the time these participants were undergoing social egg freezing, as well as at the time of writing, there were limited detailed resources available about the process and experience of egg freezing. As such, these online forums and personal relationships were a highly useful means by which women were able to access information and support which was not easily available elsewhere (Colineau & Paris, 2010).

Whilst most of the participants told their close family about their use of egg freezing and thus received support from them, a small number of women, including Preeti, Kanta and Effsie, reported receiving little support and encouragement from their families. Preeti and Kanta suggested that this lack of support was in part due to the specific ethnic and cultural backgrounds of their families (South Asian) which made it difficult to discuss issues such as using ARTs.

I didn't really know what to do and I didn't really have any support around me because whilst my parents are great they are not used to this sort of thing because I am from an Indian background and the traditional thing to do is to get married when you are younger but I never followed that route. So yeah, I was a bit paralysed about it.

- Kanta (41 years)

This led Preeti to comment that, whilst she would recommend egg freezing to most women, she believed it was important for them to have a strong support network in place as the lack of such a network for her was particularly challenging.

I just kind of think looking back on it, if someone came to me and asked me you know should they do it, I would say whole heartedly yes if you can afford to do it, and if you have got a support network. If you haven't got a support network then no because it's too hard, for me it seemed too hard without a support network.

- Preeti (37 years)

Whilst most of the participants reported friends and family to be supportive of their use of egg freezing, a small number stated that they had encountered people who were less understanding of their decision. These individuals, the participants described, often believed the women would be better off pursuing motherhood immediately or spending more time and effort searching for a potential partner. However, such comments were often easily dismissed by the participants.

I remember one of my married friends she said that she thought I would be better off investing the time and effort in dating but I kind of expected her to say something like that [...] I just think she thought I was going down the wrong avenue.

- Effsie (40 years)

My sister was like, 'What? Why are you doing that?' and I thought that was strange because I would expect her of all people to understand as she went through all these treatments so I am not sure if that is jealousy or she wishes she did it herself [...] but I wasn't expecting to get that so much of a not understanding reaction from her.

- Catrine (34 years)

Whilst the participants reported being generally happy with the treatment they received from the clinic, they believed that the clinics could better improve their handling of women undergoing egg freezing. More than one participant described having to repeatedly correct staff who assumed they were attending the clinic for IVF, not egg freezing. This was experienced as embarrassing for these women who as a result suggested that clinic staff needed to be more aware that women might be at the clinic to freeze eggs and not to attempt conception.

Everyone assumes you are going through IVF, like even the hospital staff who do your blood tests, the people who do your scans [...] people assume you are there to have children now and this woman started talking to me and I started telling her that I wasn't actually having a baby now or was trying to, I was freezing my eggs and she looked at me like I was completely off the planet you know it was really tough.

- Aleen (35 years)

Other participants noted how they felt visibly different to the patients at the clinics who were attending with partners and suggested that the clinics could offer single women classes on injecting the stimulation drugs or offer single women only clinic days or afternoons.

At first when I went in I felt so self-conscious of being by myself. There were other women that were by themselves in the waiting room, but they were wearing wedding rings and at first it just felt like oh my gosh it felt a little bit mortifying.

Melanie (36 years)

It was really depressing just going to the injection meeting. Everyone was a couple, it was just so upsetting to kind of be there with five couples and then there's me by myself. And everything that they're talking about, you know, here's how you do the injection and your partner can do this, and you sit while your partner does that, and I was like I don't have a partner, I'm going to be doing this alone [...] And I just got so frustrated because I felt like they ought to have a separate class for single women who are doing this.

- Jen (39 years)

Some of the participants did not respond well to stimulation, had cancelled cycles, yielded only a very small number of eggs or were diagnosed with premature ovarian failure. Several of these women reported feeling overwhelmed with the difficult information they were provided by clinic staff as they were attending the clinic alone and reported feeling 'panicked' by clinicians when informed of negative outcomes. As a result, the participants suggested that providers of egg freezing needed to be more sensitive when delivering bad news and should do so in an environment where women are able to calmly receive the information and have time to ask questions. As Kanta explained:

I had gone on my own, I didn't have anyone with me, and I just remember him talking about how I had so little time left and how time was running out and basically, I felt panicked by him. He started talking about donor eggs, and I had never even heard about donor eggs before and I didn't even know you could do that, it was pretty devastating the whole experience.

- Kanta (41 years)

Further practicalities and difficulties of undergoing egg freezing alone were also noted by others such as Aleen, who described how going through the process alone meant that she had to take sole responsibility to remember everything the clinicians told her and had to devise and ask relevant questions herself. Hayley made a similar observation which led her to suggest that the clinics should offer further support to single women when they were undergoing the procedure.

Most of the time people are at consultations with their partner so if they miss something then their partner might pick it up. I kind of felt a bit actually that they could have gone through it a bit more with me.

- Aleen (35 years)

I think they really need to be much more proactively supporting women doing it on their own, we have different feelings about it and we have a greater need for support.

- Hayley (38 years)

It appeared that the expectation of reproduction being a dyadic process left women without a partner marginalised by a setting which most often presumes coupledom and thus 'others' those whose experiences fall outside this norm. This led the participants to identify several ways in which they believe clinics could better support single women pursuing egg freezing. This included having specific clinic times for those undergoing egg freezing as opposed to IVF, providing more time in consultations for women attending appointments alone, and ensuring greater sensitivity from clinic staff regarding why women may seek to make use of egg freezing technology. Similar to the research by Read et al. (2014), who examined the psychosocial needs of couples undergoing infertility treatment, the participants suggested that it was, or would have been, beneficial for them to speak to women who had undergone, or were currently undergoing, the process of egg freezing and who could act as a 'buddy' or mentor throughout the process. These mentors could provide the women not only practical information and guidance but also peer support and understanding afforded by their experience of undergoing the procedure themselves.

6.6. Life after Egg Freezing

This chapter will now conclude by exploring how the participants reported feeling once they had completed the process of social egg freezing. It will examine whether the women described feeling more reassured or at ease about their reproductive futures as well as their attitudes and intentions towards their frozen reserve of eggs, including their disposal intentions should they not require them all in fertility treatment.

6.6.1. Emotions Following the Procedure

The most common and overriding emotion reported by the participants after completing the process of freezing their eggs was one of relief. The participants described relief that the procedure was completed, that it was successful, in so far as they were able to bank a number of mature eggs, and that it was 'out of the way' allowing them to 'get on' with the rest of their lives.

[I felt] relived I had got it out the way, relaxed it was nice to make the decision to do it and go through with it.

- Catrine (34 years)

I think there is a sense of relief that this is over, I feel like this is a book I want to close and put on the shelf for now.

- Charlotte (42 years)

Several participants also talked about how they felt empowered by the procedure and how by completing it they felt they had been able to take some control back over their hopes and desires for the future with regard to motherhood.

I just had this enormous sense of freedom and empowerment I was really kind of happy that I did it.

- Aleen (35 years)

I felt really empowered, I felt really proud of myself, I felt like this was something scary and I'm still moving forward and doing it, and I just felt very like in control and empowered and happy, honestly, and really proud.

- Katie (38 years)

For these participants the feeling of empowerment and control was linked to the hope and expectation that by having their eggs frozen they would be better able to, as Jen stated, 'enjoy the ride' and have more time to find the right partner and become ready for motherhood prior to trying to conceive.

It was an immediate overwhelming sense of relief; I mean it was just like wow, this is so great. I really do get to relax a little bit on this and just enjoy the ride. And it really affected me like that, and the six months that I had dating him, I had a tonne of fun. We were super compatible, we had a great time and I wasn't this super hard-core stress ball about oh my god, I need to have kids, I need to have kids!

- Jen (39 years)

This sense of empowerment and control also appeared to come from the participants' sense that they had been able to take back a degree of control over their reproductive trajectory. They believed that by undergoing egg freezing they had drawn on the best option available to them to try and secure the future they desired and had not had their goals of motherhood taken away by the actions of others or by the passage of time.

I feel it sounds like an advertisement for the treatment, but I feel frankly empowered about the whole situation I feel like I did something I was not just sitting back and letting fate get the better of me. I took an active decision and whether that will be successful I don't know

- Helena (37 years)

Before I think I probably felt just very disempowered or not empowered anyway [...] afterwards you feel empowered partly because you have given yourself statistically a better chance even

if it's not necessarily going to solve your problem you are empowered because of that and because you have done something about it, you haven't just sat there and thought oh I just have to let things happen to me.

- Olivia (37 years)

Similarly, some women described how freezing their eggs enabled them to feel slightly more relaxed and at ease about the possibility and process of finding a partner. It seemed that egg freezing had not only allowed them more time to potentially pursue motherhood but had also helped them in the pursuit of finding the right partner, a life goal which in itself was hugely valuable even if they did not go on to have a child. As Rae told me:

It takes a loaded gun off your temple to have a baby [...] Honestly, [without egg freezing] I think I would be one of those scary Manhattan women running around and looking under every rock for a man [...] If I had not done this I would be one of these women that was overly anxious about the person I was dating, whether or not that was the right person for me. This is different in the sense that there is a little bit of time a little bit of a window.

- Rae (39 years)

Whilst most of the participants felt that by freezing their eggs they were able to have more time to become ready for motherhood, several commented that they were still keen to not over-rely on their eggs to provide them a child in the future, particularly as they were unsure of the likelihood of their eggs resulting in a live birth.

I feel a sense of urgency; I just don't believe that having my eggs frozen is much of insurance. People who don't know about it think it might be insurance, but it's not a very good insurance if it is insurance at all.

- Preeti (37 years)

It did feel good, it was a sort of a sense of relief, but I don't know if I feel like that now. You think, or maybe I have realised, just because they are there it doesn't mean that they are going to get used.

- Claire (41 years)

This led several women to suggest that whilst they may have initially felt a sense of elation after completing the procedure they still felt a sense of urgency to find a partner and prepare for motherhood.

I feel rested with the eggs banked. And in some ways, I feel that that is an arrogant attitude to have. Like I feel I have the luxury of time, but I don't have five years to really think about having a baby. But do I have a year, or even two, which I can spend dating and getting to know someone because who knows what will happen with my eggs if that doesn't work out. It could not work out, so does it give me a little more time, sure. But it doesn't give me forever, but it gives me a little bit more than I had before.

- Rae (39 years)

6.6.2. Women's Attitudes and Perceptions of Their Frozen Eggs and Future Reproductive Intentions

The sense of urgency some of the participants still reported feeling about finding a partner was often because whilst they were pleased to have frozen their eggs, they were aware that their eggs may still not be successful in future fertility treatment. Indeed, many of the participants were aware of the attrition rate at each stage of the process of egg freezing and thawing, which meant they felt they could not rely on their eggs to guarantee them motherhood in the future.

I know that, out of those 13 eggs I will be lucky if maybe eight of them defrosted, six or seven fertilised and then you have got implantation.

- Preeti (37 years)

Let's assume I lose half in the freezing and that leaves me with 6, and let's say only a few will fertilise, so that could leave three embryos and only one of them could take and that's it!

- Aleen (35 years)

The participants held varying beliefs and hopes about how effective they thought their frozen reserve of eggs would be if they sought to use them in fertility treatment. A small number of the participants expressed a degree of confidence when thinking about the possibility of using their eggs in future fertility treatment. As Lindie and Katie told me:

I am optimistic about it [...] so yeah, I would say I am more on the hopeful side the optimistic side that things will work out.

- Lindie (34 years)

It's one of those things I try to caution myself. In one sense I feel like that's a lot, there's a lot of eggs [26], and they all looked good enough to freeze so they're all, at least I think, relatively stable and healthy. So, I think probably my chances of getting at least one baby are pretty good, but there are absolutely no

guarantees, who knows [...] I would say [I am] cautiously optimistic but I try not to let myself go to the place where I feel like it's something definitive because it's not.

- Katie (38 years)

It seemed that for participants such as Aleen, the confidence and hope she had in her eggs came from the fact that if she didn't invest a degree of trust in her frozen reserve, then she would feel panicked into trying to become a mother as soon as possible, which would defeat the point of her freezing her eggs in the first place. She explained:

He did point out that it is all very experimental, and you can't bank on it, it's not an insurance policy but I tend to ignore all that because I think it is. And I know I shouldn't think like that, I shouldn't, but I do think of it like that because if I didn't I would be like my friend and be trying to get knocked up tomorrow and I don't want to do that.

- Aleen (35 years)

However, many more women had much lower expectations when considering using their eggs in fertility treatment and were often pessimistic about the possibility of them resulting in the birth of a healthy child and thus still felt a sense of urgency with regard to finding a partner.

I think it's a really bad insurance policy, it's better than having not done it at all, but it doesn't take away the proactive nature of finding the father of my children, my future life partner. It doesn't take that away at all. I think maybe for some people if they've frozen a large number of eggs then they might feel a little bit more stable about it, I feel happy that I did some freezing to date, but I am also aware that it's not a good insurance policy.

- Rachel (34 years)

I definitely don't have confidence in them because of the success rate wasn't that good anyway: 20% per cycle. So, they estimated I might be able to do two cycles with them, so I was like ok I have got a 20% chance twice some point in the future, so definitely nothing to rely on but at least I have done something, and I thought maybe the technology will improve in the future.

- Claudia (41 years)

The extent to which the participants believed that their eggs may result in live birth in the future did not appear to be consistently shaped by the age of the woman at the time of undergoing the procedure or by the number of eggs banked for future use. However, the tentative way that many participants regarded their eggs and how unwilling many of them were to rely on them to produce a live birth in the future should perhaps begin to reassure critics who have raised concerns that users of this technology may be lulled into a false sense of security about the efficacy of their frozen reserve (Goold & Savulescu, 2009).

Indeed, for one participant, who was at risk of premature menopause and only retrieved four eggs for freezing, the possibility of conceiving using her frozen eggs appeared to her to be so remote that she decided to conceive immediately using donor sperm and later gave birth to a daughter. She told me:

My consultant was really stressing that the chances of them [the frozen eggs] working were so small that they were not something you should rely on or have to fall back on with any certainty at all. And I was just thinking oh my god, and that's why I was thinking I have got to do something else because if I go through the menopause and I meet the man of my dreams and then use these four eggs then that is it for me and that wasn't an option for me [...] so that's why I stopped the egg freezing side of things.

- Leona (39 years)

For many of the women in this research, several years had passed since freezing their eggs, 5 as a result, several of the women who were single at the time of freezing their eggs had since entered into new relationships and some had begun to pursue motherhood with these new partners. At the time of the interview taking place, the majority of the women (n=27) had not yet used their eggs in further fertility treatment, although four women had used them with varying results. One participant (Emily) had successfully conceived and given birth to a healthy girl and had frozen remaining embryos for use in the near future; a second participant (Mabel) was currently pregnant with twins conceived from two frozen eggs (this pregnancy resulted in two live births); the third participant had started the process of using her eggs with a partner only for them to all be destroyed accidentally during transit to another clinic (Jen). The final participant (Sofia) had used all her frozen eggs in treatment with her partner but had not been able to successfully conceive and was now considering using donor eggs.

At the time of the interview, two of the participants were pregnant after conceiving naturally with their current partner, a further two were currently trying to conceive with their partner and another two were intending on doing the same in the near future. Two women who were still single at the time of the interview were at the beginning of the process of trying to conceive through a fresh round of IVF using donor sperm, and one further woman had already had a child through donor sperm which she conceived via intrauterine insemination (IUI) shortly after freezing her eggs (Leona). One participant, Livvy, who was unable to freeze her eggs after responding poorly to the stimulation drugs, fell

⁵However, one participant took part in the research interview a few days prior to beginning stimulation and another had undergone the process to freeze her eggs seven years earlier.

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pregnant naturally shortly afterwards and gave birth to twins, and one participant was about to complete the process of freezing her eggs (Shu). Fourteen of the participants who were still single were still looking for a partner with whom they could have a child and a further two women were considering using donor sperm to conceive in the near future.

All the participants stated that when they were ready to try to conceive, if possible, they would first try to do so naturally, ideally with a partner. Should this not be possible many of the participants suggested they would next try a round of IVF or ICSI using their fresh eggs should they be suitable for use in fertility treatment. Should such an approach fail to provide them with a live birth, it was at this juncture that the majority of the participants said they would turn to their frozen eggs for use in treatment. The participants were thus often hopeful that they may be able to conceive without having to draw on their frozen reserve and only make use of their eggs when conceiving a second child or as a last resort should they be unable to conceive using 'fresh' eggs.

I think I would do it naturally first, I don't think there is any reason to not do it naturally first I wouldn't like to go straight to the frozen eggs they are fairly precious to be honest with you. The way I would like for it to work would be perhaps if I got pregnant naturally the first time then if I had another child, being that much older that's where the frozen eggs would come in useful.

- Holly (38 years)

Such an expectation on behalf of the participants demonstrates how for many of them it was not the fear of chromosomal abnormalities or concerns about the risks of pregnancies at an older age which led women to use egg freezing but the fear that they may experience involuntary childlessness. Many of the participants hoped that they would never have to use their frozen eggs to conceive and hoped they would conceive naturally or via fresh IVF. A small number of women suggested they would consider using donor eggs to conceive if their frozen reserve failed, and a smaller number suggested they would consider adoption.

As the practice of social egg freezing is still so new, little is known about what users of the technology intend to do with their eggs should they not require them all in fertility treatment. The overwhelming majority (87%) of women asked in this research stated that they would donate their unwanted eggs to research or to other women. Consistent with other studies (McMahon & Saunders, 2009; Paul, Berger, Blyth, & Frith, 2010) examining the disposal or donation of reproductive material, several women in this research indicated that they would find the process of relinquishing their eggs, and therefore possibly any further chances of having a child, quite difficult and wouldn't necessarily know when they would feel ready to do so. As Katie described:

It definitely would be a process to really think through and come to terms with, yes. I'm finally letting go of that last opportunity to reproduce something biological. I'm not saying I wouldn't do it, but it wouldn't just be something that I decided in a second, like oh yes, get rid of them. I think it's something I would probably have to work through and think about.

- Katie (38 years)

If I had two kids I would be like yeah, I don't need these eggs anymore. I think it would be hard to trash them or something but if I was donating them to research I would feel that that was like a useful place.

- Anne (36 years)

As the quote above from Anne indicates, the wish felt by the participants to donate their eggs was often linked to their desire to be helpful and see their eggs go to good use.

I can if I want, apparently, I think, bequeath my eggs to someone else and I like that idea. I like the idea that I might be able to do something positive with those eggs, whether it's for research or whether it's for someone who knows me. I like the idea of that, I don't know why but I do.

- Johanna (42 years)

I would like to use them to help women find out more about fertility I would give them to the clinic and say can you do something to help them find out more about their function.

- Mary (49 years)

Whilst most participants wished for their unwanted eggs to be used by others in research or treatment, a small number of women (n=3) stated that they would want their eggs disposed of should they never require them. This was because the idea of an unknown stranger raising what they felt would be their child was something they felt unable to consider.

Thought that someone 'half me' is being brought up by someone else and I wouldn't know anything about it oh, I would find that really tough!

- Livvy (37 years)

If I answer the question honestly [...] I don't think I could have a person running around that was part of me and feel ok with that.

- Rae (39 years)

The high proportion of participants in this research who wanted their eggs to be donated to assist in the treatment of others may be partially explained by the fact that almost half of the participants disclosed an awareness of friends and or family who had encountered difficulties conceiving. It may therefore be possible that this, coupled with their own experience of egg freezing, sensitised these women to the emotional pain and suffering of unwanted childlessness and thus made them more inclined to donate their eggs to research or in the treatment others. Whilst this finding is interesting, it is, of course, important to remember that these are only the current intentions of these women and not their actions which may ultimately differ. Furthermore, currently, UK guidelines suggest that eggs are only eligible for reproductive donation if they are retrieved from women aged 35 or under. As such, only eggs from four of the participants would be eligible for such donation. However, as greater numbers of women come forward for egg freezing, especially if clinics can encourage women to do so at an earlier age, then it is possible, as discussed in Chapter 2, that unwanted eggs from egg freezers could enter the donor egg pool for use in the treatment of other women.

This chapter has sought to provide a detailed and nuanced discussion of the experience of social egg freezing as described by the participants in this research. It has shown how this technology, and its use by women, is often characterised by much ambivalence and uncertainty with the women in this research reporting being reticent to engage with the procedure as well unsure about how likely the technology may be in providing them a live birth in the future. This chapter has explored key themes of risk, responsibility and reproductive control and has examined the embodied and affective experience of social egg freezing, noting how for many women the most challenging aspect of drawing on this technology was doing so alone and without the support of a partner. The next chapter of this book turns its focus to explore this key issue of intimate relationships and examines the processes of reproductive negotiation and bargaining that women sometimes enter into in the pursuit of parenthood.