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Relationships and boundaries between provider and recipient families following embryo adoption

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This article reports on a study of individuals and couples who provided or received embryos under the Snowflakes® embryo adoption programme in the US and had established contact with each other. This mixed-methods study comprised two phases: an online survey, followed by email interviews. It explores participants' initial experiences of establishing contact after embryo adoption and the birth of a child; how they developed and negotiated boundaries in their relationships with their respective provider or recipient families; and the fluid meaning and role of genetics in forming the basis for relationships. To our knowledge, this is the first study to explore how relationships are negotiated in these emerging family forms. This article extends knowledge and understanding of embryo adoption and contributes to the growing body of sociological research on information exchange and contact between parents who have children who share the same embryo or gamete donor.

key words embryo adoption • embryo donation • Snowflakes® • embryo providers • embryo recipients • family-building • relationships • genetics • reproductive technologies

Background: embryo donation and adoption

Embryo donation for family building was first reported in Australia in 1983 (Trounson et al, 1983). In most jurisdictions embryo donation operates under provisions that discourage or prevent donor-conceived individuals from learning about their donor or any other people to whom they may be genetically related as a result of donation. There are, however, some jurisdictions where anonymous donation is illegal and information sharing mandated and encouraged (Hammarberg et al, 2011; Blyth and Frith, 2015; IFFS, 2016).

There has been some research on the perceptions and experiences of embryo donors, recipients and resultant families (Söderström-Anttila et al, 2001; MacCallum and Golombok, 2007; MacCallum and Keeley, 2008, 2012; MacCallum, 2009; Paul et al, 2010; Collard and Kashmeri, 2011; Frith et al, 2011). Embryo donation is often a relatively unpopular choice among both fertility patients with unused embryos following completion of their treatment (Lanzendorf et al, 2010; Nachtigall et al, 2010; Hill and Freeman, 2011; Provoost et al, 2012) and those pursuing family building by means of assisted reproductive technology (ART) (de Lacey, 2005, 2007; MacCallum and Golombok, 2007; Blyth et al, 2011; Ethics Committee on Assisted Reproductive Technologies, 2012). However, a recent study reported that:

... [embryo] donors' and would-be donors' ultimate decision in favour of donation was not difficult in the way the literature had previously suggested and did not reflect decision-

making based on “least worst” scenarios compared to other dispositions. Indeed, donation to others was positively desired; for a number of respondents it was actively pursued. (Millbank et al, 2017: 137)

Most relevant to our current study is Goedeke and Payne (2009) and Goedeke et al’s (2015) work on the views and experiences of donor and recipient families involved in New Zealand’s ‘open’ embryo donation programme, overseen by the government-appointed Ethics Committee on Assisted Reproductive Technology, which vets each donation request on a case-by-case basis (Advisory Committee on Assisted Reproductive Technology, 2008). Donated embryos must be created using the donor couple’s own gametes, who must no longer require them for family building themselves. Donated embryos may be used to create full genetic siblings in a maximum of two families. A check of police records is required prior to recipients’ acceptance for embryo donation and, before proceeding, prospective donors and recipients are required to participate in joint counselling sessions regarding their views and expectations concerning disclosure, information exchange and possible contact. In New Zealand donor anonymity is not permitted, and disclosure to the child is encouraged. Goedeke and colleagues have highlighted the significance of relationships and genetic connections for both donors and recipients, although they did not investigate the nature or experience of any contact between donor and recipient families.

Sharing many of the characteristics of the New Zealand programme, ‘embryo adoption’ was pioneered by Nightlight Christian Adoptions, an American infant adoption agency offering an alternative to fertility clinic-based donation programmes (which in the US tend to be anonymous). Similar to practices developed by its infant adoption programme, Nightlight’s Snowflakes® embryo adoption programme includes social work assessment and a home study, background checks, preparation for parenthood classes for prospective recipients and facilitates the exchange of information and development of contact between donor and recipient families (Nightlight, nd).

Three empirical studies have investigated the experiences of participants in an embryo adoption programme in each case involving the Snowflakes® embryo adoption programme. Collard and Kashmeri (2011) explored provider (donor) and recipient couples’ conceptualisation of siblingship, in which the key relationship between provider and recipient families was perceived as akin to genetic siblings in the different families. Participants reported two distinct models of inter-familial contact: first, early contact initiated by the respective parents; and second, delayed contact, to be initiated by the child if and when (s)he decides to do so. Paul et al (2010) and Frith et al (2011) reported on the decision-making processes of provider couples and their initial experiences of contact with recipients of their embryos, and their aspirations and plans for future contact. At the time no participants had developed longer-term contact with recipient families. In a further study, Frith et al (2017) reported on the experiences of both embryo providers and recipients who had established contact with each other following the birth of at least one child as a result of embryo adoption. This highlighted the nature and experience of contact arrangements established between provider and recipient families. The present article uses data from the same study and explores how these participants began to develop and negotiate boundaries in their relationship with their respective provider or recipient family – and other provider or recipient families in the case of multiple family connections – and the fluid meaning and role of genetics in forming the basis for relationships.

ART and changing conceptions of the family

The last decades of the 20th century witnessed major transformations in how 'the family' is experienced and conceptualised. ART has played a central role in this process, both being constrained by conventional assumptions about what family 'is' and 'ought to be' while – more recently – contributing to the diversity of routes to family life. In the early days of ART family-building procedures, especially those involving the use of donor sperm, were restricted to heterosexual couples who – more often than not – were also required to be legally married to each other. Since sperm donation enables the female recipient to experience pregnancy and childbirth, this conforms to conventional behaviours associated with 'being a mother'. In the absence of contrary knowledge, her male partner would similarly be assumed to be the father of the child. Preserving the myth of paternity and subscribing to the key assumptions of intergenerational biogenetic relationships or blood ties underlying the heteronormative family ideal, donor insemination (DI) practitioners promoted the notion that DI was best undertaken in secret. DI practice was further constrained by the anonymity of donor and recipient to each other, their respective identities known only to the DI practitioner (RCOG, 1987; Novaes, 1998).

The dominance of this model came to be challenged by virtue of a number of factors including: the emergence of donor conception families choosing to disclose to their children information about their conception (Donor Conception Support Group of Australia Inc, 1997); professional groups from outside the medical profession influenced by recent trends in 'open' adoption (Wincott and Crawshaw, 2006); and increasing utilisation of DI by single women and lesbians, often by means of selfinsemination, and who had neither the ability nor the desire to 'pass as normal' (Goffman, 1963). This led to legal moves in some jurisdictions to prohibit donor anonymity and encourage disclosure to donor-conceived offspring (Blyth and Frith, 2015). Increasing transparency about the role of ART in creating 'non-traditional' families thus signals ART's contribution to the transformation in the way families are built and to conceptualisations of 'family' itself. Technological developments in ART have deconstructed parenthood into its constituent parts: a child may have up to three different 'biological' parents. 'Biological' relationships are no longer self-evident since both a child's genetic and gestational mother may claim to have a 'biological' relationship to the child. In practice a child may have more than three 'parents' if a person with no biological connection to the child assumes a parental relationship. ART has facilitated the family-building aspirations of single people (Hertz, 2006), lesbian couples (Ehrensaft, 2008), gay couples (Bergman et al, 2010) and post-menopausal women (Cutas and Smajdor, 2015), utilising sperm, oocyte and embryo donation Eric Blyth et al 4 and surrogacy. Family building using ART, much like the breakdown in parental relationships resulting in reconstituted and stepfamilies, has emphasised that 'the family' is not simply a collection of individuals connected to each other by biology, but is socially contingent. Nevertheless, while it is evident that many families – at least in Western cultures – no longer adhere to the stereotypical idealised family form (Stacey, 1996; Fischer and Hout, 2008), family legitimacy is still largely dependent on the extent to which it conforms to stereotypical ideals. In this way, the conceptions of the family that arose out of the foundationalist accounts, such as that of Talcott Parsons', still serve as powerful rhetorical devices when it comes to discussing families and their composition.

Accompanying these transformations resulting from ART practices, recent developments in sociological understanding of and theorising about 'the family' have shifted from primary concerns about structural relationships, marriage and household composition, that is, what the family 'is', to emphasising processes through which relationships, rights, privileges and obligations are created,

developed and maintained (Carrington, 1999; Silva and Smart, 1999; Weeks et al, 1999; Sullivan, 2004), that is, what families 'do' (Morgan, 1996; Finch, 2007). By establishing, sustaining and giving meanings to relationship networks between specific individuals, 'doing family' also involves establishing and maintaining boundaries by excluding or limiting the participation of other individuals from these networks. Scholars have noted how, in 'doing family' non-traditional families, such as single mothers, have tended to reify 'traditional' family structure (Nelson, 2006), in much the same way that heterosexual DI families endorsed mainstream assumptions of family structure and roles. Families built using embryo donation or embryo adoption are among the least known about or understood ART families. The study on which this article is based set out to increase knowledge and understanding of a particular subset of embryo donation/embryo adoption families. Participants in this study actively acknowledge the 'difference' between their own family and the idealised two-parent heterosexual family. However, similar to parents of donor-conceived children who share the same donor (Scheib and Ruby, 2008; Freeman et al, 2009), they initiated behaviours based on their belief that children have a right to know the identity of their genetic parents, that demonstrate the pervasive impact of blood ties and genetic connections on the way in which individuals talk about and experience family relationships. In this article we explore how these families 'do family', who they choose to identify as key members of their children's family, how they have begun to establish relationships with those they identify as their children's kin and create boundaries, and how they make sense of and negotiate these extended family roles and relationships.

The study

Materials and methods

The study had two phases. In Phase I, undertaken between May and September 2013, an online survey was completed anonymously by providers or recipients of embryos using the Snowflakes[®] programme resulting in the birth of at least one child, and where the provider and recipient couple had established some form of contact with each other. Information sought in Phase I included basic demographics, family composition, the number of embryos that had either been provided or received, the amount and type of contact that had been established with their respective provider/recipient and their experience of such contact. Phase I responses were used to construct a semi-structured interview schedule administered via email used in Phase II of the study to elicit more in-depth information about contact arrangements and participants' experiences of these. Participants in Phase II included some Phase I respondents as well as newly recruited participants. Phase II interviews took place during 2014 and 2015. Seventeen providers (14 women and 3 men) and 28 recipients (27 women and 1 man) took part in Phase I. Eight providers (5 women and 3 men) and 12 recipients (10 women and 2 men) participated in Phase II.1 (Further details of the methodology, participant recruitment and demographics are reported in Frith et al, 2017.)

The study received ethical approval from the Universities of Liverpool and Huddersfield.

Data analysis

Qualitative data in this article are derived from participants'2 free text responses from the Phase I and the interviews in Phase II. We developed codes following thematic analysis of responses to identify concepts and employing the constant comparative method to explore the relationship between concepts (Braun and Clarke, 2006). Individual participants are labelled using the following formula: PH1 = Phase I; PH2 = Phase II; P = provider; R = recipient; F = female; M = male, and their

unique number, for example, PH1-PF1; couples have the same number, that is, PH2-PF1 and PM1. Original quotations are reproduced verbatim, except for the correction of spelling errors.

Results

Applying family constructs to conceptualise embryo adoption

Despite the variety of family forms currently evident in contemporary societies, family building using donated embryos remains an exceptionally unusual approach – especially when accompanied by an explicit plan to establish and maintain contact between provider and recipient families:

It is an odd thing – allowing a person that “gave” you their child (albeit an embryo) to see that child and know how you’re parenting. We have had no issues to this point, and don’t expect any, but it’s still an odd situation to be in. (PH2-RF5)

A male provider likened it to:

... an arranged marriage – where you are meeting someone who you will be connected with for the rest of your life. (PH2-PM3)

Most participants employed the language of an extended family to make sense of the network of relationships created by embryo adoption. A female recipient said: “The genetic mother has described feeling like she is a ‘far away auntie’” (PH2-RF10). Hence, this recipient saw it as the creation of a new extended family:

[N]ot only did God give us our daughter ... but a whole family too, two families actually, or one big family!.... (PH2-RF3)

The relationship between the providers’ children and the children born following embryo adoption was often described as a sibling relationship. A male provider referred to “our own children” and to their “distant siblings” in the recipient family (PH2-PM3):

[Recipient mother] has told [son] who I am, and that my boys are his brothers. We are not sure how much of it he really understands at this point. The twins were told the boys are their brothers but they were only three when we were there two years ago. (PH2-PF4)

An added significance of this for participants is that families built using gametes or embryos provided by a third party tend to be small, with single-child and two-children families being common (Blyth, 2012). Therefore, making contact with full genetic siblings in provider/recipient families enables these children to experience a wider family network, PH2-PM3 referred to wishing “our own children to know of their distant siblings.” And,

T is our only child and I’d like him to know his biological siblings. Hopefully he will have a relationship with them someday. (PH2-RF6)

Not all participants, however, subscribed to the idea that embryo adoption conferred a sibling relationship between all of the providers’ genetic children:

Our son has known that we gave a family 'seedlings' that became babies but we don't refer to them as his brothers. (PH2-PF5)

We don't refer to them as her siblings. We refer to them as the placing family's children.... When a placing family places their embryos for adoption, they are relinquishing them. So ... they are relinquishing the relationships too. Mother, Father, sister, brother, aunt, uncle, grandma/grandpa etc. They are not brother and sister ... they relinquished the child(ren) and those familial ties/roles. (PH2-RF1)

The role of 'genetics'

Genetic relationships assume ambiguous and contested characteristics in third-party assisted donation, being rendered both significant and insignificant (Konrad, 2005; Kramer, 2011). All participants in this study acknowledged that, regardless of genetic connections, the recipient parents were 'the' parents of the child born following embryo adoption:

The adopting family are the parents for the child(ren). (PH2-PM3)

The children from the frozen embryos are not mine, never were, and I feel no hold over them or sadness that they are not mine. (PH1-PF1)

Participants emphasised the importance they attached to genetic relationships by the very act of facilitating access for children born as a result of embryo adoption, both to information about and contact with their genetic relatives. However, this study found that genetic relations play different roles depending on the context. For example, where recipients did not use all the embryos they have received, some thought the unused embryos should revert back to the 'genetic parents'. This is highlighted by a female recipient who recounted how the fate of the embryos they were not going to use should be decided:

... since they [providers] are the 'parents' of the embryos they should select the next family to adopt the embryos. [Husband] and I both feel that since genetic parents are the parents that that decision should be theirs. (PH2-RF8)

A different approach was taken by PH2-RF8 who had not used all the embryos received from her providers. As agreed in the original contract between the provider and recipient couple, custody and ownership of any unused embryos would be returned to the providers. Subsequently, both couples had agreed to make the embryos available to another recipient family and that they would jointly engage in the selection and matching process of a new recipient family. At the completion of this study, PH2-RF8 reported that a second recipient couple had been selected and that all three couples had met and established regular contact via email and Facebook.

In this study, several families reported the use of embryos that had been created using donated gametes. In all instances the gamete donor had been anonymous, so this had not resulted in any further extension of the family network. The fluidity of the significance of genetic connections was apparent in these instances in which the embryo had been created with donated gametes and subsequently 'donated on' to a recipient family. The recipient mother of a five-year-old daughter

who was born from an embryo created using an anonymously donated oocyte reflected on the limitations of language adequately to describe an inherently complex set of relationships:

[Daughter] has triplet brothers in her genetic family as well as two older half-siblings [brother and sister] that are both grown now. She has met her triplet brothers as well as genetic mom [that is, the wife of the genetic father] and dad.... We refer to the embryo donor parents [legal owners technically of the embryos] as [daughter's] genetic parents and the original egg donor as the biological mother. We don't really have a better term for the parents or specifically the mother who donated the embryos. She is not genetically or biologically related to [daughter], but she's still a significant 'family member'. This is why we call her the genetic mom, but [daughter] does know that there is another mom also (biological mom/egg donor), but it's very abstract to her at this time since we cannot actually ever meet her or communicate with her. (PH2-RF9)

In this case, even though the wife in the provider couple was not genetically related to the child, she was still given an important place in the kinship relationships and called the 'genetic' mother.

A female provider, whose embryos were created using both donor eggs and sperm, said she "wonder[ed] sometimes, if contact would be hard if either or both (sperm or eggs) would have been genetically mine" (PH1-PF1). Several recipients reported advantages in using embryos that had been created with donated gametes, even though this restricted the information that their children might have about their genetic heritage or precluded them from making connections with anonymous gamete donors and other genetic relatives:

[W]e ... have no uncomfortable feelings in dealing with the other families which we feel is related to the fact that the original family used donors for both the egg and sperm. (PH2-RM3)

For this recipient it 'levelled the playing field' as neither the providers nor recipients were genetically related to the child. Thus, genetic relationships were not straightforwardly important to our participants – ownership and creation of the embryo were often as important as a basis for forming kinship relationships as genetic ties.

Multiple family creation

Some families had created extended networks, where additional families were involved, that is, where providers had given embryos to more than one recipient family or recipients had received embryos from more than one family. This was often seen as a positive situation by participants reporting this phenomenon. A female recipient who was in contact with both her provider family (with one daughter) and a second recipient family (with two daughters) to whom the providers had also donated embryos, reported that her own daughter had three genetically related sisters:

They even mail us their daughters' hand-me-down clothes and my daughter gets to wear her sisters' clothes! ... and there are aunts and grandmas and cousins of the other three girls that also love us very much and send gifts for our daughter on the holidays, it is really quite awesome to get an Easter book from the other two girls' Grandma and she signs it 'love Nana' for our daughter! (PH2-RF3)

However, multiple families could also create problems for some participants who were in contact with more than one family. A female recipient recounted that, in relation to her first embryo providers:

We rarely get a letter back from them that is in-depth anymore. I don't know why that is. It may be because each family has moved forward in their own way. It may be because it is too difficult emotionally. Or it may be simply a time issue. For me personally, it is frustrating because I am trying to keep a relationship going with people that have really hurt me in the past because I didn't meet their expectations. (PH2-RF7)

These difficulties had been exacerbated following the birth of a second child from an embryo provided by a second couple, but with whom much a more positive relationship had developed. The recipients felt unable to establish closer links with their second provider because they knew that this was not possible with their first provider and they were concerned about the possible negative impact on their children of any inequitable contact arrangements. A somewhat analogous difficulty was raised by a female recipient, who had both a child born from embryo adoption and an older adopted son:

... adopted from an orphanage and we have no information about his genetic family, so we are trying to navigate the differences in our siblings' relationships and their genetic histories. (PH1-RF2)

A male recipient whose children had been born from embryos from two different providers reported similar problems:

It is clear to us that our provider family 1 was not well prepared for embryo adoption.... When we were trying our best to develop ... communication, it felt as if it wasn't good enough for them and in their frustration they lashed out in anger. We attempted some type of reconciliation and that was not well received.... [W]e constantly feel that we will never measure up to their expectations and that they are disappointed in the process. This has been a very difficult and hurtful area for us through the adoption process.... Our experience with provider family 2 was completely different and a shock to us. We realised what most families experience in the process and what we missed in our first experience. (PH1-RM1)

A male recipient who was in contact with both the embryo providers and a second recipient family relayed the problems that an imbalance in contact created when the other recipients and the providers lived close to each other in a distant state:

I know the distance thing will really make that tough.... I can see that the other two families are able to be both physically close and therefore more emotionally close and [daughter] is missing out on this closeness. (PH2- RM3)

Boundaries

Several participants recognised that the relationships created by contact (whether indirect or face-to-face) required careful negotiation of boundaries:

It was very important for me to have contact, although I did know that the amount of contact had to be mutual. Both sides have to be comfortable with the amount of contact and neither should try to push for more if that is not what the other is comfortable with. I think the only thing I would add is that both families have to be aware that this is a very unique situation and they have to be careful not to over-step the boundaries. (PH2-PF4)

It's challenging to know where the boundaries are for keeping involved. Our open conversation with the [recipient family] has been extremely helpful. (PH2-PM3)

We feel that there should be firm boundaries between us, the genetic parents, and them, the birth and adopting parents. We do not want confusion in a young child about who their parents are, but we also want to be open to future contact as the children want/need it. We want to minimise any psychological negativity, and allow for the positive in this situation. Working with a third party is very helpful to keep contact going over a long period of time, and to maintain boundaries as desired by either donor or recipient families. (PH1-PF5)

A male recipient, who was in contact with both the providers and a second recipient family, expressed his and his wife's initial fears of having to agree more contact than they felt comfortable with, but that these had ameliorated primarily in recognition of what he and his wife perceived to be their daughter's best interests:

[O]ur initial concerns of them somehow wanting the baby back or wanting to help parent was pretty prevalent. But [now].... I actually wish we were much closer so that [daughter] could be as close with her sisters as they are because of their proximity to each other. I also think that [my wife] would also benefit from the other mothers being close as they seem to be like sisters themselves with just phone and email connections. (PH2-RM3)

There was recognition from both providers and recipients that the needs of the child, as determined by the recipients, should drive the pace of any contact between the families:

[W]e are not asking to be in the front row of seats for this child but at least want to be in the bleachers.³ Ultimately, we believe that the needs of the recipient parents and their child are greater than ours. If they need to progress in this relationship very slowly and cautiously, then we will roll with it. (PH1-PF3)

We have a great relationship with the provider family, and the amount of contact is just right for us. We aren't looking to involve our daughter in the contact because we don't want to confuse her regarding who her parents should be or where she belongs. We want her to develop emotionally and mature as a person a bit before offering the opportunity to meet the provider family in person and developing her own relationship with them. Until then, the contact we have is laying a great foundation for any face-to-face meetings or further involvement down the road. (PH1-RF3)

For the most part, each pair of provider/recipient families had established mutually satisfactory boundaries to their relationship:

We feel emotionally close to the genetic family, but not in such a way that is stifling or uncomfortable in any way. We respect each other, our time, our similarities and differences, and we couldn't be more grateful for this genetic family in our lives. (PH2-RF10)

Discussion

The study reported here is the first in-depth investigation of the views and experiences of participants in an embryo adoption programme where at least one child had been born and who had established contact with their respective provider or recipient (see also Frith et al, 2017). Discussion of the study's findings are framed within the context of two specific areas of social science research interest: first, the relatively unexplored topic of embryo donation/adoption; and second, arrangements for information exchange and contact between parents who have children who share the same embryo or gamete donor. Of the previous social science research on embryo donation/adoption, only that conducted in New Zealand (Goedeke and Payne, 2009; Goedeke et al, 2015) and a previous Snowflakes® study (Collard and Kashmeri, 2011) have explored issues of information exchange or inter-familial contact. Generally, the findings of this study support those of these earlier studies. Compared to Collard and Kashmeri's (2011) study, our participants predominantly reflected families that had initiated early contact rather than leaving this to the child's discretion when older. Recipients in our study reported fewer difficulties than those in Goedeke et al's study in deciding on this route to family building in the first place, and had fewer fears about the implications of acknowledging providers as their children's genetic parents. Generally, in our study no participants reported either any actual undermining of their position as parent or over-involvement in the other family as a consequence of contact. Differences with the New Zealand sample might reflect the fact that recipients in the New Zealand programme have no choice but to follow this route if they wish to build their family using embryo donation, whereas participation in the Snowflakes® programme is entirely voluntary.

Research focusing on arrangements for information exchange and contact between parents who have children sharing the same donor is relatively recent and has been reported in only a couple of studies, primarily focusing on the outcomes of sperm donation (Scheib and Ruby, 2008; Freeman et al, 2009). Participants in our study differed significantly from those in these studies, notably as regards family structure, the stage in the family life cycle at which contact is made and the extensiveness of contact with donors and fellow recipients of donated material. All participants in our study were in a heterosexual couple relationship, whereas most participants in Scheib and Ruby and Freeman et al's studies were either solo mothers or lesbian couples. Second, although our participants established contact with their respective provider or recipient early in the family life cycle (often before the birth of the child), parents of donor-gamete children tend to discover the identity of, and establish contact with, donors and/or other recipient families at a much later stage of family development. Third, while our participants had established contact with the children's genetic parents (donors) and virtually all other families that included genetically related siblings, this was patently not the case in either Scheib and Ruby or Freeman et al's studies. In these studies, relatively few recipients had identified or made contact with donors. Freeman et al's study highlighted the potentially large numbers of donor-conceived offspring sharing the same donor living in different families (up to 554) potentially having a negative impact on parental attempts to discover their children's genetic relatives since identification of and contact with all genetically related siblings could not be assured.

Despite these differences, there was a broad measure of agreement between participants in previous embryo/gamete donation and embryo adoption studies and those in our study, that contact with donors, siblings and other recipient families was largely a positive experience (see also Frith et al, 2017). Much as Nordqvist and Smart (2014) found among families built using gamete donation, participants in our study tried to balance acknowledging their differences with, and endeavouring to appear like, a conventional family. Participants in our study utilised extended family concepts, incorporating genetic, gestational and social relationships in order to acknowledge their difference while defining themselves as a legitimate family. Lovelock (2010), building on Charis Thompson (2001), characterises this as a kind of ‘naturalising strategy’: ‘When making sense of technologically assisted conception, the biological connection or the social connection is foregrounded and re-crafted as new social relations require alignment and/or the choice of technology and treatment invites some degree of normalisation’ (2010: 129).

Even more so than families built using gamete donation, those engaged in embryo adoption realise that there are few precedents for their route to family building. From the beginning of this journey they are enmeshed in unfamiliar, complex and ambiguous relationships that they need to negotiate and define in ways that make sense to them and with which they can live. Successful accomplishment of this parenting project requires acknowledging and holding together the disparate elements of genetic, gestational and social parenting, and effective management of the dialectic tension of being both ‘similar’ and ‘different’ in comparison with other families (Wyverkens et al, 2015). Our study sheds light on how these unfamiliar relationships are negotiated, and how boundaries are drawn between close and extended family, and who becomes kin.

Genetic relationships held different meanings in different contexts. While participants felt it was important for children to know their provider ‘parents’, the status of anonymous gamete donors used to create the embryos was less clear-cut, and even though there was no genetic connection between some of the providers and ‘their’ embryo, they were still seen as part of the kinship network. In the future, it is probable that the identity of gamete donors will be more readily available to both recipients and offspring (Allan, 2017). In the event that embryo adoption utilises gametes donated by a known donor, this will create scope for further extension and complexity of networks between different families that share genetic connections.

In our study, the entitlement of the child born following embryo adoption to biogenetic information was very important for participants. Both embryo providers and recipients prioritised this entitlement as essential for the child’s welfare and as an important aspect of responsible parenthood. However, the practice of embryo adoption involves more than simply establishing a mechanism for this information to be accessed. Rather, embryo adoption is perceived and experienced as a web of wider kinship networks defined by the relationship of various participants in this family-building enterprise to the child and to each other. Distinctions between ‘different’ families become blurred, although these relationships need to be negotiated and managed. Thus, even when they stressed recipients’ parental status, providers maintained feelings of parental responsibility towards the child. Notwithstanding the focus on the child born as a result of embryo donation, these considerations also extended to providers’ children who were perceived as being entitled to information about and contact with their genetic siblings. The interests of providers’ children (and the children of gamete donors more generally) remains an under-researched area and could provide a fruitful area of future research.

At the time of the study, the relationships between provider and recipient families were at an early stage. While children had been included in contact and communication arrangements, most in both provider and recipient families were of a young age, and it is arguable that most would have, at best, only a rudimentary understanding of either being born as a result of embryo adoption and/or having full genetic siblings being raised in another family (Gregg et al, 1996; Williams and Smith, 2010), and indeed, parents acknowledged their children's age-related lack of understanding.

Similar to Collard and Kashmeri's study participants, most of our participants regarded the relationship between children in the two families as that of siblings, although not all shared this view. Furthermore, this study provides no insight into how children themselves perceive these relationships. It was envisaged by participants that their relationships with their respective providers and recipients would be long term, possibly throughout the whole of the life course. Consequently, future research will be necessary to find out both how these inter-familial relationships develop over time, and how children come to understand their place vis-à-vis both provider and recipient families. Participants were clear that disclosure, information exchange and contact should be based on children's needs and proceed at their pace. However, with parents having committed to disclosure at the outset, children in these families will grow up as 'always knowing' about the nature of their conception, and would never have the option, if they so desired, of 'not knowing'. The implications for donorconceived individuals of 'always knowing' have yet to be explored. Strathern, for example, argues that the knowledge that one is donor-conceived has the potential to reconfigure kinship relations, and this knowledge cannot be ignored or rejected; it becomes knowledge about relations with others, 'there is no choice about it; such effects are built-in' (Strathern, 1999: 75).

Study limitations

Our study participants were a distinct group of individuals – those who had participated in an embryo adoption programme and who had chosen to establish contact with their respective provider or recipient families. Therefore, we have made no attempt to generalise this study's findings beyond these particular participants. Furthermore, the cross-sectional nature of the study mean that, it is not possible to track changes in views and experiences over time. In addition, children's perceptions and experiences were mediated by their parents' (typically their mothers') reports rather than being elicited directly, largely a result of the relatively young age of children in participant families. Nevertheless, it provides a glimpse into the lives of families that have chosen this particular model of family building.

Conclusion

To our knowledge, this is the first study to examine the information exchange and contact arrangements between providers and recipients of embryos for family building. Participants in this study showed how embryo providers and recipients can acknowledge each other's role in the lives of their own family and establish meaningful relationships. While developing successful relationships within the context of this novel family form was not necessarily problem-free, most participants reported mutually satisfactory arrangements, even when family networks became particularly intricate when full genetic siblings were being raised in more than two different families. All participants expected that existing inter-family communication and contact arrangements would develop, with children taking a more participatory role and eventually taking responsibility for

determining their nature as they got older. The study also showed how participants determined and negotiated the relationships between providers and recipients and children in ways that acknowledged the mutability rather than inflexibility of these relationships. This study suggests that a family-building model such as offered by embryo adoption and 'open' embryo donation better addresses the needs of some potential embryo donors and recipients than anonymous embryo donation. How such a model of donation might be realised in other contexts is a further area for research.

Notes

1 The total of Phase I and Phase II participants does not represent separate 'cases' since some participants took part in both phases.

2 For ease of expression, we have used the term 'participants' to describe those who took part in both Phase 1 and Phase II, although the term 'respondent' more appropriately describes those who took part in Phase I.

3 North American term for cheap, uncovered spectator seats in a sports field.

4 Even higher numbers of offspring sharing the same donor are known to the Donor Sibling Registry (DSR). As at 8 November 2016, the largest sibling group who share the same donor known to DSR in the US was around 200 (W. Kramer, DSR, personal communication, 8 November 2016).

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