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## ORIGINAL ARTICLE


# The opposite of a step parent – The genetics without any of the emotion: ‘sperm donors’ reflections on identity-release donation and relatedness

Susanna Graham

*Centre for Family Research, University of Cambridge, Cambridge, UK*



**Susanna Graham** is a Research Associate at the Centre for Family Research, University of Cambridge, UK. She holds a Wellcome Trust Research Fellowship in Society and Ethics to explore the perceptions and experiences of men donating sperm through a connection website or a licensed clinic. Her research interests include assisted reproductive technologies, relatedness and kinship, gender, parenting and bioethics.

**Abstract** This paper draws upon data from an online survey with closed- and open-ended questions completed by 168 identity-release sperm donors who had all donated in the UK between 2010 and 2016. Paying particular attention to the qualitative data obtained from the donors’ responses to the open-ended questions, this paper explores the sperm donors’ thoughts and feelings about being an identity-release donor and about future information exchange and contact with offspring conceived with their gametes. It shows that the majority of donors regarded identity-release donation as their preferred method of donation, supported the removal of anonymity, did not have concerns about being an identity-release donor and indeed saw positives for both the donor-conceived offspring and themselves. However, it also highlights that the donors’ thoughts and feelings about being an identity-release sperm donor, how they saw themselves in relation to the individual conceived with their donation, and their preferences for information exchange and contact, varied greatly. The paper explores how identity-release donation is surrounded by many unknowns and consequentially sperm donors struggle to conceptualize what it means to be an identity-release sperm donor. As well as adding to the literature on donor conception, relatedness and kinship, by giving voice to sperm donors’ own views and experience of the identity-release regulatory context, and their thoughts and feelings about future information exchange, this paper will help policy makers and clinicians prepare for the imminent time when donor-conceived individuals in the UK can start requesting their donor’s identity. 

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**KEYWORDS:** Donor conception, Gamete donation, Identity release, Relatedness, Sperm donor

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*E-mail address:* [smg57@cam.ac.uk](mailto:smg57@cam.ac.uk)

<https://doi.org/10.1016/j.rbms.2021.06.003>

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## Introduction

In 2005 the UK removed donor anonymity, meaning that all sperm donors who donate through a registered clinic or sperm bank agree to their identifying information being released to individuals born from their donation after they reach 18 years of age ([Human Fertilisation and Embryology Authority \[HFEA\], 2004](#)). At the time the legislation came into force, there was concern about the possible effect this might have on donor numbers. Over half of the 43 UK sperm donors in Frith and colleagues' study ([Frith et al., 2007](#)) stated that they would not continue donating if anonymity were removed. In reality donor numbers increased rapidly after a short initial decline ([Day, 2007](#)), and clinics with active recruitment programmes have been successful in finding sufficient donors ([Blyth and Frith, 2008](#); [Ahuja, 2011](#)). According to the HFEA, newly registered sperm donors have continued to increase in the UK, with 642 newly registered donors in 2016 ([HFEA, 2019](#)).

The move to remove donor anonymity in the UK coincided with a more general societal shift towards openness and the 'geneticization of society' ([Nordqvist and Smart, 2014](#)). Over the years the emphasis had changed from protecting the recipient couple (historically assumed to be heterosexual) to a donor-conceived person's 'right' to knowledge of their genealogy ([Turkmendag, 2012](#)). Indeed, [Gilman and Nordqvist \(2018\)](#) argue that the UK's policy and decisions regarding openness in gamete donation have caused gamete donation to be seen purely in terms of its reproductive consequences and the emphasis placed on the interest that donor offspring may have in their origins. The framing of the removal of anonymity in terms of 'the rights of the child' has left the donors' own interest in, and desire for, information exchange ignored ([Raes et al., 2013](#); [Graham et al., 2016a](#)).

From 2024 onwards donor-conceived offspring in the UK who were conceived after the removal of anonymity in 2005 will begin to reach the age whereby they can request identifying information about their donor. With an increasing proportion of parents intending to tell their children about their donor conception ([Isaksson et al., 2012](#)), and evidence suggesting that some donor-conceived offspring are curious about and would like to make contact with their donor ([Scheib et al., 2005](#); [Jadva et al., 2010](#); [Scheib et al., 2017](#)), it is important to explore current UK sperm donors' thoughts and expectations regarding being an identity-release donor and about future information exchange and contact.

The term 'identity-release' donation is used throughout this paper to describe the situation whereby men donate spermatozoa with the knowledge that their identifying information will be released to any offspring conceived with their spermatozoa when the offspring reach the age of 18 years, should they request it. The term 'Identity-Release<sup>®</sup>' was coined by the Sperm Bank of California in 1983 when they developed the Identity-Release<sup>®</sup> Program to provide donor-conceived adults with access to information about their donors. Such donors are also referred to as open-identity donors, or open donors. The term 'identity-release' donation was used to ask donors in the current study about their experiences of donation as this was the

term used by the sperm bank staff when discussing the donors' obligations of information exchange. The term was also used in order to distinguish between other types of donation in which there are differing levels of being 'known' to the recipient and conceived child, for example when men donate spermatozoa through connection sites (see [Graham et al., 2019](#)).

Surprisingly little is known about UK sperm donors and their thoughts and feelings about the removal of anonymity and being an identity-release donor. Drawing on her qualitative research with egg and sperm donors in Scotland, [Gilman \(2019\)](#) showed how the identity-release gamete donors neither dismissed, nor straightforwardly activated, the relational significance of the 'biological substance' they donated. She showed how donors grappled with a lack of suitable vocabulary with which to describe their relationship to children conceived from their donation and struggled to articulate why this connection was significant, despite most stating that it was. Gilman detailed how the donors described the meaning of their connection with those conceived from their gametes in ways that did not map straightforwardly onto established kinship roles, using indirect non-parental connections, for example as the siblings of their own children. The gender of the gamete donor was important, however. Only 8 of the 24 gamete donors Gilman interviewed were sperm donors, and this narrative of indirect connectedness was much more prevalent in the narratives of egg donors than sperm donors.

The UK is only one small part of what [Kroløkke \(2020\)](#) calls the 'Big sperm' industry. The global market for spermatozoa has seen the USA and Denmark become world leaders in sperm banking, with hundreds of men listed as sperm donors on their websites and their sperm exported locally and internationally, resulting in a multi-million dollar industry (Mohr, 2019). Indeed, some recipients in the UK choose to import sperm from sperm banks in Denmark and the USA for use in their treatment ([Graham, 2018, 2014](#)), and by 2016, imported spermatozoa made up more than one-third of new sperm donor registrations in the UK ([HFEA, 2019](#)). As well as sperm banking turning men's reproductive fluid into commodities and transactional businesses, sociological and anthropological research has shown how sperm donation practices interact with localized understandings of gender, parenthood and relatedness ([Almeling, 2011](#); [Mohr, 2018](#); [Wahlberg, 2018](#)).

Questions regarding anonymity and information exchange therefore play in to local narratives of what it means to be a 'good donor' ([Graham et al., 2016a](#)). Legislation of donor conception varies around the world, with some countries, like the UK, mandating identity-release donation, others, such as Denmark and the USA, allowing the donor to decide between anonymous and non-anonymous donation, and still other jurisdictions mandating anonymity. [Wahlberg \(2018\)](#), in his ethnography of state-managed sperm banking in China, emphasized how anonymity and secrecy are considered essential by both recipient couples and donors. Due to the stigma attached to male infertility and a desire to continue the patrilineal family line, Wahlberg detailed how recipient couples keep their use of donor spermatozoa a secret from all but a small number of family members and friends and, likewise, donors empha-

size the necessity of confidentiality to avoid any 'trouble' in their future family life.

Outside the UK, research with identity-release sperm donors has taken place in jurisdictions where identity-release donation is not mandatory, but rather sperm donors can make a choice as to whether they wish to be anonymous or identity-release donors. Wheatley (2019) and Mohr (2015) both explored Danish men's experiences of being identity-release donors, and Almeling (2011, 2014) the experiences of sperm donors in the USA. Almeling and Wheatley found that sperm donors were clear to distinguish between 'biological' and 'social' parenthood, although many of the donors defined themselves as 'fathers' in some fashion. Mohr's (2015) ethnographic research with Danish sperm donors found that despite being encouraged by sperm bank staff to think of their donation in purely contractual terms, those who chose to be identity-release donors were clear that they had a role in relation to their donor-conceived offspring. Similarly to the gamete donors in Gilman's (2019) study, however, they found it difficult to articulate what this role might be, envisaging a socially meaningful, but non-parental, relationship with their donor offspring. Naming connections and determining obligations to individuals to whom one is genetically connected yet socially disconnected, Mohr argues, causes sperm donors to engage reflectively in an intricate play of connecting and disconnecting the social and the biological, and in doing so coming up with their own ways of acknowledging the social significance of the biogenetic connections established through donor conception.

Studies focusing on sperm donors' *actual* information exchange and contact with donor-conceived offspring have been conducted with sperm donors who had originally donated anonymously. Such studies have shown diverse attitudes to the exchange of information and curiosity about donor offspring. Research conducted through the US-based Donor Sibling Registry, an international online forum that facilitates contact between donor-conceived offspring and their donors, found, unsurprisingly, that almost all sperm donors were open to having contact with their donor offspring and that some desired identifying information about them (Jadva et al., 2011; Daniels et al., 2012). Despite donors being curious about their donor offspring, the majority commented that it was up to the child to initiate contact: the donors were not searching but making themselves available to be found (Jadva et al., 2011). Donors perceived their connection with their donor offspring along a range of options from 'No relationship' to 'Like my own child', with the most common response being 'A special relationship, like a good friend' (Jadva et al., 2011). Of those who had found and contacted their donor offspring through the registry, the majority reported it to be a 'very positive' experience. Although some anonymous donors who registered with the DNA-based voluntary information exchange and contact register, UK DonorLink, would welcome relationships with their offspring, others were apprehensive about contact (Crawshaw et al., 2013).

In June 2015, the state of Victoria, Australia, retrospectively removed donor anonymity and thereby gave donors and donor-conceived individuals who were conceived or donated under conditions of anonymity the right to apply to the state's Central Register for each other's identifying information (Kelly et al., 2019). Kirkman et al. (2014)

explored the expectations and experiences of anonymous donors who would be affected by this change in legislation and found the sperm donors' needs and desires to be non-homogenous. Most sperm donors did not characterize themselves as parents of their donor offspring but, in line with Jadva and co-workers' findings (Jadva et al., 2011), their expectations and experiences of contact ranged from none to a close personal relationship. The donors also understood their status in relation to people conceived from their gametes across a wide range of perceptions, with at one extreme some donors seeing the process as akin to donating blood while at the other end of the spectrum some donors understood themselves to be a parent to any person conceived from their donation.

Adding to this growing literature, the present study explores how UK identity-release sperm donors think and feel about donation and future information exchange and contact with offspring conceived through their gametes. In doing so it explores how these men conceptualize and describe the relationship between themselves and their donor offspring, as well as their thoughts and feelings about identity-release donation more generally. As well as adding to the literature of donor conception, relatedness and kinship, hearing sperm donors' own views and experience of the identity-release regulatory context, and their thoughts and feelings about future information exchange, will help policy makers and clinicians prepare for the fast-approaching time when donor-conceived individuals can start requesting their donor's identity.

## Materials and methods

This paper draws upon data from an online survey with closed- and open-ended questions, completed by UK identity-release sperm donors. Sperm donors were recruited to the study from the London Sperm Bank, the UK's leading provider of donor spermatozoa. An e-mail was sent to the 576 men who had become HFEA-registered sperm donors and commenced a donation programme at the London Sperm Bank between January 2010 and December 2016 and had consented to be contacted for research. The e-mail, sent by staff at the London Sperm Bank, contained a link to the survey as well as information about consent procedures. It was followed up where applicable by two reminder e-mails. All donors who completed the survey were eligible to claim a £15 Amazon voucher. The survey was live for 7 weeks between January and March 2017. In total, 168 donors completed the survey, giving a response rate of 29%.

Ethical approval for this study was obtained from the University of Cambridge Psychology Research Ethics Committee.

The survey contained both multiple choice and open-ended questions. Data were obtained on the donors' (i) sociodemographic characteristics, (ii) motivations for donating spermatozoa, (iii) experiences of donation, and (iv) expectations of sperm donation. Multiple choice questions enabled sperm donors to choose from a range of options, choosing the one that best fitted their situation, on, for example, if they desired contact with the child (yes, no, not sure), how they viewed their relationship with the child

(e.g. no relationship, a genetic relationship only, like any other child I know, etc.), and whether the child should be told about their donor conception (yes, no, not sure). Open-ended questions allowed the donors to expand upon their answers for multiple choice questions, for example 'Please describe any concerns you have about being an identity-release donor' and 'If you have any further comments about how you see the relationship between a donor and any children born from their donation, please write below.'

The questionnaire asked the donors about their whole experience of becoming and being a sperm donor. This paper reports on the donors' responses to questions specifically relating to identity-release donation, their thoughts about the donor-conceived child and their expectations of future information provision and contact, focusing predominantly on the qualitative data captured from the open-ended questions in the survey. Quantitative data were analysed using the software program SPSS, for the purpose of this paper providing simple frequencies. The responses for the open-ended questions were extracted from the dataset and inputted into the qualitative software program Atlas.ti. The data were coded using thematic analysis.

The sperm donors' demographic information is shown in Table 1. The sperm donors had a mean age of 32.9 years, with the majority of donors identifying as white (144, 85.7%) and heterosexual (116, 69%). Sixty-one donors (36.3%) were single, while seven (4.2%) were divorced and 99 donors (59%) were partnered (31 [18.5%] married, 42 [25%] cohabiting and 26 [15.5%] in a non-cohabiting relationship). The majority of donors (139, 83.7%) did not have their own children. The donors were highly educated, with the majority employed full time in a range of professions.

## Results

### Removal of anonymity – Best for the child

The donors were asked how they felt about the removal of donor anonymity in 2005. The majority of donors (106, 63%) thought it was a good thing (Table 2). Forty-seven donors (28%) were neutral about the change in the law and only 15 (9%) thought it was a bad thing.

A total of 119 donors explained their answer in the free-text box. Consideration for the donor-conceived child was the predominant theme of donors' reasons for supporting the removal of anonymity, with 60 sperm donors describing how it was important for donor-conceived children to be able to trace their genetic origins:

Any sperm donation program should have the child's welfare at the heart of its policies, and having the possibility of identifying their biological father could be really important for some of the kids.

Twenty-five of these sperm donors stated that it was the child's 'right' to access this information. However, for 13 donors, it was the fact that children were being given the 'choice' of whether to seek identifying information or not that was key to their support of the removal of anonymity.

Only a few donors elaborated on why they felt it was important to know this information. Three donors described its importance for health benefits and four claimed that this

information was needed for a donor-conceived person's sense of identity and belonging:

I feel that knowing one's own biological parentage is an important part of a person's identity, and you shouldn't create a life while deliberately keeping them in ignorance about that.

Some donors were clear to differentiate between a 'right' to identifying information about one's donor and a 'right' to contact that donor. Four donors stated that although they agreed with the removal of donor anonymity, they did not think that a donor-conceived person should expect contact:

I don't mind being identifiable, but contact would be a different matter – depending on the persons!

The differentiation between information provision and contact was also captured when the donors were asked whether they expected to have contact with offspring conceived with their spermatozoa when the latter reached 18 years of age. Sixty-one sperm donors (37%) answered yes, 41 (25%) answered no, and 64 (39%) were not sure.

The donors were also unsure what such contact would look like if it were to occur. However, in line with the theme that identity-release donation was predominantly there as an option for the child, the majority of the donors (107, 64%) expected their contact to take the form of 'whatever the child desires'.

The most commonly expressed negative viewpoint of the removal of anonymity was the belief that the change in the law would impact upon donor recruitment, with 14 sperm donors stating that donor numbers had decreased since the removal of anonymity. Seven sperm donors were concerned about the negative impact removal of anonymity could have on recipient parents:

I don't see any merit in it. You are not their 'father' as you have not raised or loved them. I feel that could complicate matters both for the man who may have raised the child as his own (and they're who really count), and the donor.

Five donors commented upon the policy's focus on the rights of children rather than donors. They believed that donors should be able to choose whether to be identifiable when the time came. In supporting this view, the donors drew on the time lapse between donating spermatozoa and being identifiable to any offspring who were conceived:

The law will probably change again before 18 years have elapsed, so it's hard to feel too strongly about it one way or another. Who knows what the law then will be, or what the world will look like. Maybe by then offspring will have the right to force donors to support them financially, who knows? It would seem to make more sense to ask the donor at the time the child is 18, not to make that decision 18 years in advance.

### Identity-release donation – Managed information exchange

The majority of the donors (100, 60%) stated identity-release donation to be their preferred method of donation.

Table 1 Demographic data.<sup>a</sup>

	<i>n</i>	%
Ethnicity		
White	144	85.7
Black	3	1.8
Asian	11	6.5
Mixed race	5	3.0
Other	5	3.0
Education		
Less than secondary school		0
Secondary school	4	2.4
College or trade qualification	25	14.9
University degree or higher	137	81.5
Not specified	2	1.2
Sexual orientation		
Heterosexual	116	69
Gay	38	22.6
Bisexual	9	5.4
Other	5	3.0
Relationship status		
Single		
Single	61	36.3
Divorced/separated	7	4.2
Widowed	0	0
Partnered		
Married/civil-partnership	31	18.5
Cohabiting	42	25
Non-cohabiting partner	26	15.5
Parental status		
Has children	29	17.3
No children	139	82.7
Employment status		
Employed full time	128	76.2
Employed part time	23	13.7
Not employed	17	10.1

<sup>a</sup>Mean age (SD) was 32.9 ( $\pm 6.8$ ) years.

wever, 25 of the sperm donors (15%) would prefer anonymous donation, 18 (11%) known donation and seven (4%) co-parenting, with 13 (8.%) stating they did not know and five donors (3%) preferring 'other' form of donation, for example, 'donor can choose whether to be identifiable when child turns eighteen', 'whatever the recipient family desires'.

Sixty-four of the 100 donors whose preference was identity-release donation expanded upon their reasoning. Eleven donors merely stated that this option 'felt right for them' without explaining why. Twenty-one donors again described how it was important for a donor-conceived child to know 'where they came from', and six of these donors described the importance of identity-release donation in fulfilling a child's 'right to know' about their genetic history.

However, 14 donors specifically mentioned the importance of donor-conceived offspring needing to be aged 18 to access information about their donor's identity as a rea-

son they preferred identity-release donation to other forms of donation, for example known from the outset:

At 18, an individual has the ability to make their own decisions. I feel if they were much younger, they wouldn't be able to necessarily handle the information in the correct manner.

I think a person should have had the chance to develop into a mature adult before the confusion of a potential extra parent figure is added into their life. Though I think it's good for the child to know about their conception, wherever possible the knowledge should come at a time when the child is emotionally equipped to deal with it. Ideally when they are an adult.

Eleven of the donors expanded upon the delayed release of a donor's identity as being beneficial for both donors and recipient parents: 'it gives both parties space without the complexities that donation may bring'. Five donors described how this 'space' ensured donors had no responsibilities to the donor-conceived child, whereas the other six donors thought it ensured that donors were not in any way involved in parenting while also enabling recipient parents full autonomy over their parenting without any outside interference:

As I think it guarantees the right for the child to look for his/her biological father, but still guarantees enough liberty for the donor to not being given a big responsibility. It is not my place to interfere in the parenting of the parents, if I knew about the child and where they were I would have an opinion on how they were being raised and want input.

For such reasons known donation was described as potentially too complicated by these donors:

I've considered co-parent and donating to a couple, but I don't think I would like any direct knowledge of any children produced by my sperm without having assuming some sort of parenting role. This process allows me to know that a child has been born, but beyond that, I know nothing and they know little about me. I remain a donor and am in no direct way a parental figure.

Identity-release donation was therefore seen by these donors as a happy medium between anonymous and known donation, giving all parties space and the recipients and their donor-conceived offspring the 'choice' of whether to find out more about the donor or not.

### Disclosure – A parent's decision

Although the donor-conceived child was at the heart of sperm donors' reasoning for supporting removal of anonymity and favouring identity-release donation, it was the recipient parents that were the donors' focus when thinking about disclosure. Half of the donors (83, 50%) thought that it should be up to the parents to decide whether children conceived using donated spermatozoa should be told how they were conceived. Only four donors (2%) reported that children should not be told how they were conceived, while 72 (43%) thought that children should be told. Nine donors (5%) were not sure.

**Table 2** Expectations and views of donation.

	<i>n</i>	%
Removal of anonymity		
It's a good thing	106	63.1
It's a bad thing	15	8.9
Neutral	47	28.0
Expects contact with child		
Yes	61	36.7
No	41	24.7
Not sure	64	38.6
Types of contact		
Mediated through a third party	34	20.2
Letter	33	19.6
E-mail	52	31
Telephone call	22	13.1
Face-to-face meeting	42	25
Whatever child desires	107	63.7
No contact	29	17.3
Other	7	4.2
Donation preference		
Anonymous	25	14.9
Identity-release	100	59.5
Known	18	10.7
Co-parent	7	4.2
Don't know	13	7.7
Other	5	3.0
Disclosure about conception		
Yes	71	42.5
No	4	2.4
Not sure	9	5.4
It's up to the parents	83	49.7
Concerns about identity-release		
Yes, major concerns	7	4.2
Yes, some concerns	13	7.7
Yes, minor concerns	39	23.3
No concerns	109	64.9
View of relationship with child		
No relationship	15	9.0
A 'genetic' relationship only	59	35.5
Like any other child I know	12	7.2
Like a friend's child	15	9.0
Like a niece or nephew	12	7.2
A special relationship	38	22.9
Like my own child	15	9.0

The free text option gave more insight into the donors' perspective on disclosure and identity-release donation more generally. It was clear how the concept of identity-release donation was ambiguous and fluid: the information exchange and contact enabled through identity-release donation did not hold the same importance to all donors. The donors were clear that different recipient families would have different thoughts and feelings about having used sperm donation to form their family and therefore some parents would want to disclose their use of a donor while others would not. Thirty donors elaborated on this theme, stating that every situation is different and therefore blanket rules should not apply but rather it should be up to the parents to decide what is best for their child,

and whether such information would be in their child's best interests:

It is up to the parents and if they feel that their child would be emotionally affected by knowing. If it has a detrimental affecting on relationships or individuals then maybe not.

It's completely up to them. They will know their child better than anyone.

Three donors, however, believed that it should be up to parents to decide *when* to tell children that they are donor conceived, but if they had not been told by the age of 18, then the donor-conceived individuals should be told regardless of their parents' wishes.

However, the importance placed on truth and honesty was central to 22 donors' perspective that children should be told how they were conceived, regardless of their parents' wishes. Others reiterated the belief that knowledge of one's genetic information was important ( $n = 13$ ) or that it was a child's 'right' to know this information ( $n = 8$ ). Five donors suggested that there would be a risk of finding out later in life so it would be better to know in advance, and another five donors felt that donor conception should not be an issue so why not tell?

I think the child should know their origins. If the parents raising them did decent job – there will be no issue for the child knowing he/she was conceived through donated sperm.

Reasons for believing it was best not to tell a donor-conceived child how they were conceived included donor conception not being important ( $n = 4$ ), the belief that the knowledge would cause problems for the child ( $n = 2$ ) and to protect the recipient family's integrity ( $n = 1$ ).

### The unknown regarding identity-release donation – Impact on the donor

The majority (109, 65%) of the sperm donors stated that they had no concerns about a child conceived with their spermatozoa being able to access their identity at age 18. Seven donors said they had major concerns (4%), 13 (8%) said they had some concerns and 29 (23%) stated that they had minor concerns.

Despite the recipient parents, and their thoughts about donor conception, looming large when asked about disclosure, only one donor mentioned the impact of information exchange on the recipient family as a concern about identity-release donation. However, 11 donors described being concerned about the impact of identity-release donation upon their *own* family:

Destroying a family I may create in the future.

The only concerns relate to the concerns of my partner and potential concerns of children.

Nine of the donors also expressed concerns about how identity-release donation would impact upon themselves, particularly the 'psychological or emotional' impact of meeting a young person conceived with their spermatozoa. The donors were also apprehensive about what the donor-conceived offspring would 'want' from them. Interestingly,

although five donors were worried that the donor-conceived offspring would make financial demands of them, it was the 'emotional needs' that offspring may expect their donor to fulfil that were a more commonly expressed concern. Eleven donors discussed this concern:

I worry about what relationship a child conceived with my sperm would expect, and whether they thought that knowing me in some way would solve problems in their own life. It's not a situation I have any experience of so there is some unease about what would happen.

Three donors were concerned that they would be sought out as a parental figure:

I don't feel as though I am a father to them, and I don't want them seeking me out thinking I am anything like that. I am a complete stranger.

Donors also expressed concerns that they would have feelings of responsibility or guilt towards the donor-conceived offspring, with some of the donors specifically mentioning concerns regarding the child's upbringing:

Worries about the child being raised in a manner I would disagree with: i.e. religious upbringing.

That the child could have had a bad childhood, for which I would in some ways feel responsible.

The unknown surrounding identity-release donation was described as a concern in and of itself. The donors did not know when, or indeed if, a child would ever seek their identity or contact them. If a donor-conceived young person did contact them, the donors could not really imagine what such contact would entail or how they or the young person would react to it. Without any prior experience of such a situation, the donors described the unknown and 'strangeness' of the situation:

It's hard to express these concerns concretely. It's an unknown quantity. The unknown can always be a bit scary. Mostly I'm intrigued and even a bit excited.

As can be seen in the above quote, the unknown surrounding identity-release donation provoked not only concerns about being an identity-release donor, but also positives. This particular donor was 'intrigued' and 'excited' about the prospect of meeting a person conceived with their donated spermatozoa.

As part of the survey donors were also asked whether they saw any positive aspects of identity-release donation. The majority (116, 70%) said yes, 37 (22%) were not sure and only 15 (9%) said they did not see any positive aspects. The open-text answers again gave further insight into the sperm donors' thoughts and feelings about identity-release donation more generally.

The positive aspects to identity-release donation described by the donors were split into two aspects: positives of identity-release donation for the child (described by 75 donors) and positives of identity-release donation for the donor (described by 45 donors). Positive aspects for the child elaborated upon themes introduced when they were asked about their thoughts about the removal of anonymity, namely 'the child being able to gain knowledge about genetic/biological lineage' and 'the child's ability for self-knowledge/better understanding of their identity'.

For the 45 donors who saw positive aspects of identity-release donation for themselves, this seemed to centre around the possibility of forming some sort of relationship with the donor-conceived child. Nineteen of the donors described how they would like to physically meet the donor-conceived child, 10 explained how they would like the opportunity to exchange information and get to know about the child, and eight donors specifically mentioned how it would be interesting seeing similarities and differences between themselves and the children conceived with their gametes:

And for me, to have the chance to get to meet people that I helped create. To see them and know them and find out how they are getting on, that's a huge positive!

Eight donors described how offspring getting in touch would provide them with a sense of accomplishment/achievement, and four wrote how being in contact with donor offspring would be an exciting life experience:

It will make me happy knowing that I gave someone the gift of life and it would be nice if they were appreciative. Assuming my samples get used some day, I can't wait to potentially have some young adults want to get in touch when I'm in my 50s.

Two donors even described how identity-release donation could facilitate donor offspring being a positive alternative to having their own children and one donor how these donor-conceived offspring could extend their own family:

If I might end up being single and with no children, I would like to consider the possibility that some of my sperm-sons could be willing to keep touch with me.

### The meaning of a sperm donor – The genetics without the emotion

In discussing identity-release donation, the sperm donors had all pointed to the unknown surrounding identity-release donation, how the significance it could have for recipients, the donor-conceived individuals and indeed the sperm donors themselves could vary hugely. When asked to specifically think about how they viewed their relationship with a donor-conceived child, the donors were once again mixed. The most common response was 'A "genetic" relationship only' (59, 36%), followed by 'A special relationship' (38, 23%). 'No relationship', 'Like a friend's child' and 'Like my own child' were each chosen by 15 sperm donors (9%) and 'Like any other child I know' and 'Like a niece or nephew' by 12 (7%). Fifty-nine participants added further comments on how they saw the relationship between themselves and any children who were born from their donation. The sperm donors showed varying levels of interest in their donor-conceived offspring and placed different levels of importance on the relationship with them.

Twenty of the sperm donors discussed the 'genetic' aspect of a relationship between themselves and a child born as a result of their donation. However, even when focusing on this aspect of a relationship, the meaning attached to this 'genetic relationship' varied, with donors describing its meaning along a continuum between no significance at all to 'like an own child'.

Five participants stressed the importance of the genetic relationship.

I think even when you try and detach from it you will still come back that you share DNA and they are still part of you.

Two of the sperm donors equated the importance of this genetic relationship to a type of parental relationship, with the donor-conceived child being like an 'own child'. However, four of the sperm donors downplayed the importance of the genetic relationship:

The child will have their own parents, the DNA aspect is only a tiny part of who your parents truly are. I have a wide extended family, we share genetic material yet we are not close. We are completely different people, with different personalities, interests, etc. Other than a genetic link, any children won't be influenced by me in any way, we may not have anything else in common.

Nine of the sperm donors discussed the 'uniqueness' of this genetic relationship – it was not necessarily something that was either important nor unimportant – it was a unique relationship that could have different meanings depending upon the context:

A unique connection, but not necessarily a strong connection. I would treat them as any other human, but I would understand if they saw me as something more, and try to be supportive of that if needed.

One of these sperm donors likened this unique relationship to being the opposite of a step-parent: there was a potential relationship based on this genetic connection but currently, without contact, there was no emotional connection attached to it:

It is clearly a special relationship, even if (or precisely because) it is genetic only. It is the opposite of a step-parent – the genetics but none of the emotion.

The recipient parents – those who would have an emotional connection with the child – loomed large in the donors' descriptions of their relationship with the donor-conceived child. Nine sperm donors were keen to specifically distance themselves from parenthood and expressed empathy for the recipients of their spermatozoa: they were keen not 'to replace in any way the parent or parents who had done the actual work of bringing them up!' Twelve donors stressed the importance of nurture over nature to downplay any relationship between themselves and a child conceived with their spermatozoa:

We will be connected on a deep and genetic level, yet at the same time they will not be 'mine' at all, as they will have been raised and loved by their families.

Expanding upon these themes, two of the sperm donors stressed that in being a sperm donor they would be giving *other* people the opportunity to become parents. By donating sperm they were giving the recipients the chance to become parents and form a relationship with the child, while severing any potential relationship on their part:

Parents raise children, I'm giving people the chance to become parents, that's all.

The concept of time impacted on the donors' thoughts and feelings about any connection with a child conceived with their donation. The sperm donors were thinking about a future, hypothetical relationship that *might* form *if* their donor offspring were to make contact when old enough to do so: there were currently a lot of unknowns surrounding even the *possibility* of any form of relationship:

I guess I will just have to wait and cross that bridge if it ever comes.

It's hard to describe a relationship that I have no experience of. I can just imagine how it's gonna feel.

Consequentially, 17 of the sperm donors deferred thoughts on the relationship between themselves and their donor-conceived offspring, instead discussing how it should be the child who dictates this relationship, not them:

I feel a lot would depend on what the child wanted. Perhaps the child would just want to meet the donor, and pretty much never see them again. Perhaps they'd want to form a closer bond and it'd be more like a kind of pseudo family member relationship. I just think there's a lot of possibilities.

The range of answers and emotions expressed by the sperm donors when thinking about how they might define a relationship between themselves and a person conceived with their spermatozoa points to the complexity and ambivalence surrounding this topic. The sperm donors found it difficult to define the relationship. Although they had been asked to choose the best fit from a range of options, this 'relationship', if they defined it as such, did not fit easily into existing categories:

A relationship between a donor and donor conceived child, I think it is slightly different from the other options above.

## Discussion

This study has shown that the majority of these UK sperm donors regarded identity-release donation as their preferred method of donation, supported the removal of anonymity, did not have concerns about being an identity-release donor and saw positives in this form of donation, both for the donor-conceived individual and themselves. However, it has also highlighted that the donors' thoughts and feelings about being an identity-release sperm donor, how they saw themselves in relation to the individual conceived with their donation, and their preferences for information exchange and contact, varied greatly. Some donors viewed themselves as having no relationship at all with a child conceived with their spermatozoa while others viewed the donor-conceived child as their 'own child'. Likewise, some donors were clear that information exchange and contact with donor-conceived individuals was not something they wanted to partake in, whereas others were actively looking forward to it and hoped for a meaningful, ongoing relationship.

Indeed, although the majority of the donors supported identity-release donation, what 'identity-release donation' actually meant to these sperm donors is not so clear. A lot of unknowns surround this form of donation: Will the child



be told about being donor conceived? Will they seek the donor's identity? Will they initiate contact? Will they want to meet the donor? While being an 'identity-release donor' who agrees for their identity to be released to an individual conceived with their gametes if they request it from the age of 18 appears fairly straightforward, it is in fact surrounded with much complexity and uncertainty. The donor's identity may be released to a donor-conceived individual but what happens from that point onwards? What sort of information exchange will ensue? What will the donor-conceived individual be expecting from the donor? How will they view the meaning of the relationship, if any, between themselves and their donor? How will the donor feel when faced with this individual who is their genetic child but of whom they have previously had no knowledge or contact? What will the donor's family context be at this point of information exchange? How will having contact with a donor-conceived individual impact upon the donors' other relationships with, for example, a partner and any children they may have?

With all these unknowns, it is therefore perhaps not surprising that 'being an identity-release donor' meant different things to different donors. The donors were all trying to make sense of their relationship with their donor-conceived offspring with very little idea of how they 'should' be viewing this relationship. Even when defining their relationship as a 'genetic relationship only', as the largest proportion of the sperm donors in this study did, it was clear that a 'genetic relationship' was not in itself self-explanatory. In some cases a 'genetic relationship' meant that the donors saw the donor-conceived child as 'part of [them]' and in other cases the 'genetic relationship' was seen to hold very little significance. Like the Danish sperm donors [Mohr \(2015\)](#) spoke with, the sperm donors in this study made sense of their connection to donor-conceived individuals as a particular kind of relatedness that could not be reduced to either contractual or kinship relations. Although the vast majority of the sperm donors in the current study did not see themselves as 'fathers' to those conceived with their spermatozoa, neither could they completely dismiss any relationship between themselves and the donor-conceived individual. Mohr argues that, in making sense of these connections, sperm donors negotiate their social significance and in doing so consider new kinds of sociality, making sense of their connections to donor-conceived individuals with reference to, but also beyond, kin relatedness (2015: 470).

[Klotz \(2016\)](#) calls these sorts of connections 'wayward relations': 'complementary relations' that exist alongside and together with existing family and kinship relations. 'Wayward relations' lack social scripts for how they should be made meaningful, and making them meaningful is therefore the task of those who are connected through them ([Klotz, 2016](#)). It is clear from the glimpses into the thoughts and feelings of the sperm donors in the current study that they were trying to work out their own script for the connections formed through their donation. In doing so they faced conflicting social narratives regarding the importance of genetic connections. The sperm donors had donated gametes in a society that privileges genetic connection and assigns social significance to it ([Nordqvist and Smart, 2014](#)). However, in the clinical context of gamete donation, the social significance of a sperm donor's genetic contribu-

tion is downplayed in preference to the social connection of the recipient parents ([Graham et al., 2016b](#)).

Identity-release donation opens up a new space for making sense of this genetic connection: identity-release donors are neither anonymous, forever unknown to the donor-conceived person, nor known from the outset, able to gradually form some kind of meaning for their relationship over time. Instead, identity-release donors are anonymous at the point of donation, unaware of who will use their gametes to conceive a child, yet 18 years later they are expected to share information with this donor-conceived person, if they request it, due to their 'right' to knowledge about their 'genetic origins'. At the time of the study the sperm donors were in a liminal space, a space where they were currently still anonymous and not in contact with their donor-conceived offspring, yet still somehow connected to them. The donors found it hard to navigate this space, grappling with what they would mean to a person conceived with their spermatozoa. They had no cultural script to adhere to and were treading a fine line between being important but not too important, aware that they could end up 'stepping on the toes' of the recipient or intruding too much on the parent-child relationship. With no stories about other UK sperm donors' experiences of information exchange and contact to draw upon, the sperm donors still did not know what being an 'identity-release donor' was really going to entail.

Identity-release donation therefore seemed to be conceptualized as a *possibility*. In and of itself, the 'relationship' between an identity-release sperm donor and a person conceived with their gametes meant very little but there was a *possibility* of something more. As one of the sperm donors described it, it is like 'the opposite of a step-parent – the genetics without any of the emotion'. Most of the sperm donors believed that there was a possibility for emotion to become part of the relationship. However, the extent to which it would do so depended upon many factors – the recipient parents, the donor-conceived individual and lastly the donor himself. All three of these parties have the power to facilitate or hinder the forming of feelings of relatedness. However, until the point at which a donor-conceived individual initiates contact, the unknowns surrounding identity-release donation are vast. It is therefore extremely difficult for donors to fully articulate what being an identity-release donor means to them at this stage.

On the whole the child seemed to be at the forefront of the sperm donors' thoughts about identity-release donation. When discussing the different aspects of donation, the donors predominantly focused on the child's rights for information about their 'genetic origins': it was perceived to be 'up to the child' to decide what sort of contact might occur and indeed to dictate the meaning of the relationship, if any, between the two of them. This focus on the child is in line with donation policy. As [Gilman and Nordqvist \(2018\)](#) argue, donation policy has been formed in a context where there is a legal presumption that it is best for a child to know the 'truth' about their genetic origins. They show that the particular form of openness embraced in UK policy prioritizes information sharing about donors with donor-conceived offspring, and frames gamete donation as significant only in terms of its reproductive potential and the

interest donor-conceived people may have in learning more about their origins. The results of this study suggest that the sperm donors have internalized this message, either through particular interactions at the sperm bank or through the cultural context more widely, and it frames how they view the connections formed through their donation. On the whole the sperm donors did not think about obligations of information exchange towards themselves. They saw their role as standing back, allowing the recipients full autonomy, but then fulfilling their responsibility to provide information, and be available to, people conceived with their gametes if they choose to initiate it.

However, it is clear from some of the sperm donors' responses that donors may have their own interest in information exchange, rather than viewing it purely for the benefit of the donor-conceived individual. Kelly and colleagues (Kelly et al., 2019), when exploring applications to the Central Register in Victoria, Australia, revealed an unanticipated desire on the part of previously anonymous donors for information about their offspring. Victoria is the only jurisdiction in the world where donors are given the legal right to apply for their offspring's identifying information. The Law Reform Committee in Victoria had not anticipated that donors would initiate applications, but in the first 12 months following the introduction of the legislation 10 donors made applications to the register and numbers have steadily increased in subsequent years (Kelly et al., 2019). Kelly and colleagues state that one of the reasons for donors initiating contact was that the donors themselves had emotional needs with regard to their donor offspring.

Although UK donors cannot request the identity of their offspring or initiate contact, it is still important to consider any needs and desires donors themselves may have about information exchange. As Gilman and Nordqvist (2018) argue, UK donation policy only considers disclosure of information about donor offspring to donors in terms of preparing the donor to share information with offspring and minimizing any disruption this might cause to donors' own families. This study has shown that some sperm donors might be interested in information exchange and contact for their own purposes, looking forward to, and in some cases expecting, a chance to get to know their donor offspring and form a relationship with them. Further research is needed to explore donors' own emotional needs regarding information exchange and contact, not just in terms of the negative impact of such information exchange, but also in terms of why donors might be seeking information exchange and contact for their own benefit.

It is important to note that although the majority of sperm donors were happy with identity-release donation, a sizeable minority were not. Twenty-five of the donors (15%) would prefer anonymous donation, 15 donors (9%) said that the removal of anonymity was a bad thing, and seven donors (4%) had major concerns about being an identity-release donor. These findings hold particular weight as the donors have all completed a donation programme where they have signed up as an identity-release donor. It seems unlikely that donors who do not see value in identity-release donation will keep their identifiable details up to date with the HFEA and be available to a donor-conceived person who seeks their identity. At the other end of the spectrum there was also a sizeable minority who were clearly

expecting and looking forward to meeting their donor-conceived offspring. Will these donors be disappointed if this contact never materializes? With such different views regarding identity-release donation perhaps it would be beneficial to offer varying levels of information exchange between recipients and donors in the regulated sector (Graham et al., 2019). In this way the different parties could match their expectations with regard to information exchange. Clearly at the point of donation the child's perspective could not be taken into account but at least the recipient parent's intentions regarding disclosure, etc. could be known. In this way some of the unknowns surrounding identity-release donation could be minimized for the donor.

Furthermore, the high proportion of donors supporting the removal of anonymity and favouring identity-release donation is an artefact of the study methodology – only men who had chosen to complete a donation programme since the removal of anonymity were asked their opinions about it. We do not know the thoughts and feelings of men who would consider donating their spermatozoa but only if they could do so anonymously. Indeed, Graham et al. (2019) found that there was a significant difference in the preferred type of donation between men donating sperm online or through a clinic sperm bank, with those donating online preferring anonymous or known donation and sperm bank donors preferring identity-release donation. Men are still donating their sperm anonymously, just not through the regulated sector. Further research is needed to explore these preferences for anonymous donation.

Despite the majority of donors supporting identity-release donation only just over a third of the donors stated that they expected contact with an individual conceived with their gametes. Indeed, when reflecting on identity-release donation, some sperm donors' were clear to distinguish between information exchange and contact. With the media portrayal of donor-conceived offspring portrayed through the image of 'a knock on the door' (Wheatley, 2019) many donor-conceived people will equate knowing their donor's identity with being able to meet him. It is important that both donors and donor-conceived people receive adequate advice and support before embarking upon information exchange, with both parties made aware that the other may have very different expectations of what such information exchange will lead to. Similarly, the language that some of the donors used in this survey indicated that they were struggling to find the terminology with which to understand the connections formed through their donation. While 'sperm-sons' may adequately describe the relationship a donor sees themselves having with the person conceived with their gametes, such terminology could be jarring for a donor-conceived person. All parties will need help and support in navigating these relationships. With only 52 (31%) of the sperm donors in this study stating that they had had an implications counselling session whilst going through the process of being a donor (Graham, forthcoming), novel ways of engaging with these donors may be needed.

Moreover, with the rise of direct-to-consumer genetic testing, and researchers arguing that anonymous donation is no longer a possibility (Harper et al., 2016), all donors need to be informed that their anonymity cannot be guaran-

teed as they may be traced if their DNA, or that of a relative, is added to a database. The donors in the current study were, on the whole, expecting a managed release of their identifying information to their donor-conceived offspring, after the age of 18. Of course, with direct-to-consumer genetic testing a donor-conceived child may find out the identity of their donor before that time. Moreover, any children that a donor might have would be able to find out their parent was a donor through the publicly available information on such sites. These issues need to be raised with donors.

This paper has provided some important insights for policy and practice as well as adding to the relatedness literature more generally. However, there are some important limitations to acknowledge. First, only one sperm bank was used for recruitment. Although the London Sperm Bank is the largest sperm bank in the UK, findings may not be representative of all UK identity-release donors. Moreover they may not be representative of identity-release donors in other jurisdictions where there are different regulations regarding donation. Furthermore, this survey asked donors prospective questions, asking them to explore an imagined relationship between themselves and their donor-conceived offspring. They had all donated spermatozoa but the offspring were not yet old enough to be able to initiate contact. Their accounts were therefore based on hopes and fears about how things *might* be. By the time their offspring are old enough to make contact, the donor will be much older and might have their own family who have their own views on donation. Even though the donors were fully aware and informed about the implications of identity-release donation at the time of their donation, we do not know whether their views will remain consistent over time, or indeed whether they would come to regret their decision to become an identity-release donor. Longitudinal research, following sperm donors over time, would be useful for tracking whether thoughts and expectations regarding donation and information exchange change over time.

Following the removal of anonymity 'the 'good' donor is perceived to be one who is willing to be identified and open to contact (Graham et al., 2016a, 2016b). With this rhetoric ingrained in policy and clinical practice and internalized by the sperm donors themselves, the narratives that have been captured in this study are perhaps the donors' portrayal of themselves as this ideal, 'good' donor. However, given this context, the finding that almost a quarter of the sperm donors taking part in this study did not expect contact with their donor-conceived offspring and almost 15% of them would prefer to be anonymous should, perhaps, be given even more weight. A benefit of this survey-based study is that it let the donors remain anonymous to the researcher and clinic staff. The sperm donors were able to speak freely about their thoughts and feelings without the fear of being judged or challenged about them, and therefore this study may have captured a more honest account about these men's perceptions of being a sperm donor.

Regardless of its limitations, this study has captured how UK sperm donors think and feel about identity-release donation and future information exchange and contact with offspring conceived through their gametes. In doing so it has explored how these men conceptualize and describe the relationship, if any, that they perceive between themselves

and a donor-conceived individual, as well as their thoughts and feelings about identity-release donation more generally. In highlighting the complexity and ambivalence surrounding identity-release donation and the connections it fosters, this study contributes to the literature on assisted reproductive technology, relatedness and kinship. Moreover, by giving a voice to sperm donors' own views and experience of the identity-release regulatory context, and their thoughts and feelings about future information exchange, this study will help policy makers and clinicians prepare for the fast-approaching time when donor-conceived individuals can start requesting their donor's identity.

## Acknowledgements

Thanks go to Dr Kamal Ahuja and all the staff at the London Sperm Bank who helped with recruitment for the study. I would also like to thank Professor Susan Golombok and Dr Vasanti Jadva for their advice and support in undertaking this project. Thanks also to all the men who took part in the study and took the extra time to provide thoughtful insights into their thoughts and feelings about being a sperm donor. This work was supported by the Wellcome Trust, Grant 104385/Z/14/Z.

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*Declaration: The author reports no financial or commercial conflicts of interest.*

Received 17 June 2020; refereed 4 May 2021; accepted 2 June 2021.