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Applications to statutory donor registers in Victoria, Australia: information sought and expectations of contact

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Abstract Knowledge of genetic origins is widely believed to have consequences for health, family belonging and personal identity. Donor linking is the process by which donors, recipient parents (RP) and donor-conceived people (DCP) gain access to identifying information about each other. This paper reports on the information and contact sought by donor-linking applicants to the central and voluntary registers in the state of Victoria, Australia, which has one of the most comprehensive donor-linking legislative frameworks in the world.

Applicants to the Victorian registers complete a statement of reasons (SOR), a written document that is given to the subject of the application, outlining their reasons for applying and their short- and long-term goals. SOR written by applicants between 29 June 2015 and 28 February 2017 who had agreed to be recontacted for research were analysed. Forty-two of 93 eligible applicants took part (45%). All applications pertained to donor sperm.

RP were the largest applicant group ($n=19$) followed by DCP ($n=17$) and donors ($n=6$). All applicants wanted personal information and most expressed a desire for contact. Single mothers of young children used the registers more than any other parent group, indicating that family structure may influence application patterns. While it is apparent that all applicants are eager for information and some form of interpersonal contact, further research is needed on how the legal and policy landscape of different jurisdictions influences expectations, as well as what happens after parties are linked.

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KEYWORDS: assisted reproduction, donor conception, donor registers, third party assisted conception, information seeking, relatedness

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Introduction

Hundreds of thousands of people globally, including around 60,000 Australians (Parliament of Victoria, 2012), have been conceived with donated sperm, ova or embryos. Consistent with the view that donor-conceived people (DCP) benefit from having access to identifying information about their donors (Blyth et al., 2012; Freeman et al., 2009), a growing number of jurisdictions (including Australia, Sweden, Norway, Austria, Switzerland, the Netherlands and the UK) have introduced laws that mandate 'identity-release' donors and, in some cases, enable linking via government registers (Crawshaw et al., 2016). The state of Victoria, Australia has always been at the forefront of the legal regulation of assisted reproduction, and is unique in that its donor-linking laws have had retrospective application since 2015. They allow all DCP, donors, recipient parents (RP) (until their child turns 18 years of age) and descendants of DCP (but not descendants of donors) to apply for information about each other, independent of when conception took place, and donors who donated under a policy of anonymity are now identifiable. Linking under the Victorian framework is also supported by free counselling and other services provided by the government-funded Victorian Assisted Reproductive Treatment Authority (VARTA).

Legislation establishing a central donor register and a voluntary register came into force in 1988. The central register was designed to hold the names and dates of birth of DCP, their parents and donors where data are available. The information is provided by the fertility clinics where treatment occurred. Donors, DCP, RP (until their child turns 18 years of age) and descendants of DCP can apply to the central register for both identifying and non-identifying information. Applications by DCP can be made when the individual is 18 years old, or younger if the register counsellor considers they are sufficiently mature. In contrast, the voluntary register, which is available to those conceived before and after 1988, contains information supplied by DCP, donors, RP and descendants of DCP who want to make themselves available for information exchange or contact. In this way, matches can be facilitated between a more diverse range of people than is possible with the central register (e.g. donor siblings and parents who have used the same donor, as well as donors, RP and DCP). Under the 1988 legislation, DCP conceived after this date could apply to the central register to access their donor's identity at 18 years of age with consent. RP (until their child turns 18 years of age) and donors were also given the right to seek identifying information, provided the subject of their application consented to release. Applications by parents and donors could be made when the child was still a minor. For those conceived prior to 1988, the only way to access information about donor relatives was to apply to the voluntary register when they turned 18 years of age or to have a parent apply on their behalf when they were still a minor. If both parties had applied, a match would be made and information could be released upon mutual consent.

Subsequent changes to the legislation have extended entitlements to identifying information for those conceived before 1998 (the rights of those conceived after 1998 are not affected). In 1998, Victoria abolished donor anonymity altogether, giving DCP conceived after this date an

automatic right to access to their donor's identity when they turned 18 years of age. However, consent was still required for applications by RP and donors. In 2015, the Victorian legislation was further amended so that it had retrospective application. Under the new law, all DCP, no matter when they were conceived, were granted the right to access their anonymous donor's identity, provided the donor consented. Where information was found to exist, pre-1988 information about DCP, RP and donors was added to the central register. Previously anonymous donors were also given retrospective rights to information about their donor offspring. Further amendments were introduced in March 2017 that removed the requirement that the donor provide consent before information is released. It was replaced with a system of 'contact preferences', whereby donors can stipulate that they do not want contact, or that they are only comfortable with particular types of contact. Unlike many jurisdictions, a significant number of Victoria's historical donor records are still available, making retrospective linking possible (Kelly and Dempsey, 2018).

VARTA has responsibility for managing the central and voluntary registers, and the process through which applications are made. Since June 2015, applicants for donor linking through Victoria's registers have been required to complete a statement of reasons (SOR) in situations where consent is required for information exchange (a DCP applying for information post-March 2017 is no longer required to complete an SOR, although most continue to do so). The SOR contains three sections: (i) reasons for applying; (ii) short-term goal; and (iii) long-term goal. Applicants can write their SOR independently or with the assistance of a VARTA counsellor, and the information they provide is passed on to the party about whom they are enquiring. Free counselling for the applicant, as well as the subject of the application, is also provided prior to contact being made.

The current study used thematic analysis of 47 SOR to address the question: 'What are the information and contact expectations of donors, DCP and RP who apply to the central and voluntary donor registers in the state of Victoria, Australia?'

Kinship, relatedness and donor linking

Creating families through sperm donation raises complex kinship issues of relevance to the policy and practice of donor linking. Kinship refers here to a culturally influenced sense of relatedness or connectedness to significant others (Edwards, 2000).

In 'Euro-American' understandings of kinship, the facts about how a person came to be usually reside in an origins story that emphasizes biology. Through metaphors of blood or genes passed on from both parents, a cultural logic of inheritance is maintained, one feature of which is the transmission of identity through descent (Strathern, 1992). Knowledge of these facts is generally believed to be extremely relevant irrespective of the circumstances of a child's social parenthood. In families created through sperm donation, it is common for only one parent to be biologically related to the child, which complicates a bilateral understanding of descent and can be perceived as problematic for reasons associated with health, family unity and belonging. For this reason, until relatively recently, parents using donor

gametes to conceive were advised not to tell their children about the circumstances of their conception. More recently, fuelled strongly by the political activism of young donor-conceived adults, many have argued that children should be told from a very young age that they are donor conceived, and that keeping the secret of donor conception in families has detrimental effects for children's psychological well-being (Blyth et al., 2012; Freeman et al., 2009; McWhinnie, 2001; Parliament of Victoria, 2012). Many donor-conceived adults and young people indicate that they should have a right to knowledge about their genetic and biographical history (Rodino et al., 2011).

Arguably, since Mendelian understandings of genetic inheritance became dominant in the early 20th century, genes have replaced blood as the most influential Western idiom of inherited substance (Strathern, 1992). This has led to what some commentators have called the 'medicalization of kinship' (Finkler, 2000, 2001). As knowledge of the human genome progressed in the late 20th century, it became more difficult to ignore the proposition that genetic histories hold the key to one's future health (Finkler, 2001), although the significance of genetic knowledge may not be as medically important as is often presumed. The genetic basis for many cancers and other serious illnesses beyond known single gene disorders is rare and complex, and knowledge of family history cannot always assist. Many argue that mapping of the human genome has thus far failed to deliver on the promise that complex diseases and disabilities would be eradicated, and the field of epigenetics, exploring social influences on gene expression, has gained momentum (Carey, 2012). Yet this has done little to stem the pervasiveness of belief in the foundational influence of genes on health and well-being.

Nordqvist and Smart (2014), in their interviews with parents and grandparents of donor-conceived children in England, comment on the extent of 'genetic thinking' in contemporary everyday lives, irrespective of scientific evidence. They note that when people make comments about genes or what it means to be genetically related, their understandings are diverse and may or may not be scientifically accurate. Rather, evident are the strong emotional investments that people have in genetic ties and their symbolic and material importance. Genes evoke notions of affinity that may be expressed in seeking to understand the origins of family resemblances (Becker et al., 2005; Indekeu, 2015; Mason, 2008) or similarities in personalities and aptitudes.

Information seeking in third-party assisted conception

Internationally, most donor linking occurs via non-statutory online registers such as the Donor Sibling Register (DSR), registers operated by individual sperm banks, and direct-to-consumer DNA services.

Studies exploring the linking expectations of DCP and RP report that the most common type of information sought relates to the donor's characteristics such as appearance, likes, dislikes and aptitudes (Freeman et al., 2009; Frith et al., 2017; Hertz et al., 2013; Jadva et al., 2010; Scheib et al., 2017). A study of 256 DCP who applied to the Sperm Bank of California's open-identity program reported that almost

95% desired personal information about the donor (Scheib et al., 2017). Several studies have found that DCP believe this information is integral to their identity formation (Hertz et al., 2013; Jadva et al., 2010; Scheib et al., 2017). Parents who engage in information seeking on their child's behalf typically cite the importance of the child having a more secure sense of identity, medical reasons or a wish to thank the donor (Freeman et al., 2009).

Research addressing sperm donors' engagement in linking indicates less interest than DCP and RP in providing information (Daniels et al., 2012; Hertz et al., 2015; Rodino et al., 2011; Van den Broeck et al., 2013). However, sperm donors often indicate a willingness to share information if requested (Hammarberg et al., 2014; Kirkman et al., 2014). The main reasons given by donors for agreeing to supply information are concern for the well-being of the children and curiosity (Daniels et al., 2012; Hertz et al., 2015).

Attitudes towards contact

There is a small body of research addressing the attitudes of DCP towards contact with their donor (Freeman et al., 2009; Scheib et al., 2017). Scheib et al.'s research with 85 participants in the Sperm Bank of California's identity-release program found that of those who had requested their sperm donor's identity, approximately 75% expressed an interest in contacting him (Scheib et al., 2017). Only 7% wanted a relationship, while 20% explicitly stated that they were 'not looking for a relationship'.

Research exploring the experiences of RP who search for and contact their child's donor relatives is growing. Studies suggest that RP are more inclined to search for the child's donor siblings than their donor, and parents express some reticence about their child meeting and forming a relationship with the donor. For instance, Freeman et al. (2009), in their survey of 791 RP who had searched for their child's donor via the DSR, found that 37% wanted to meet the donor, but only 9% expressed the 'desire to form a relationship'. No parent ticked 'desire to form a relationship' when asked to identify their 'main' reason for searching for the donor.

The attitudes of RP towards contact with donors may be more positive in Australia, perhaps because donor anonymity has been abolished nationally for over a decade. In a qualitative study of 21 Australian RP, many had identified and had regular contact with their donor (Millbank, 2014). Contact occurred through both statutory registers and informal means. All of the children were <18 years of age. Similarly, a study of the donor-linking practices of Australian single mothers by choice found that over half of the 25 mothers had identified the donor before their child turned 5 years of age, and more than one-third had regular contact (Kelly and Dempsey, 2016a).

While research on donors' attitudes towards contact is limited, donors are known to be open to contact on request (Hammarberg et al., 2014; Kirkman et al., 2014). Daniels et al. (2012) found that only 22% of the 164 donors were actually in contact with offspring, and many reported challenges around adjustment to the new relationships within the donor's own family. One-third of the men in this study had partners who objected to contact. A study of 57 donors who had made contact with offspring (83% of whom

had been recruited via the DSR) found that approximately two-thirds had met in person at least once (Hertz et al., 2015). An Australian study with 42 egg and sperm donors who donated in the era of anonymity found that just under one-quarter had had contact with offspring (Kirkman et al., 2014). For some, contact was minimal while others had developed strong relationships.

Despite the growth in jurisdictions with donor-linking laws, most jurisdictions with legislation do not have children old enough to apply for information about their donor. Victoria's law has no such limitation, enabling exploration, for the first time, of the information and contact expectations of register applicants in a jurisdiction with legally sanctioned, professionally supported donor linking.

Materials and methods

Sampling and procedure

Ethical approval for the study was obtained from the Human Research Ethics Committees at La Trobe and Swinburne Universities, and the Victorian Department of Health and Human Services.

In the timeframe covered by this study (29 June 2015–28 February 2017), there were 284 applicants to the central and voluntary registers. This timeframe was chosen because 29 June 2015 was when the first reforms regarding retrospectivity came into effect, and 28 February 2017 was when further reform removed the requirement that the donors' consent was required before the release of identifying information. VARTA's intake form for register applicants asks about consent to be recontacted for the purpose of research. All 93 applicants who ticked 'yes' to recontact within this timeframe were eligible to participate (33% of 284). These applicants were e-mailed and asked if they agreed to the use of their SOR in the current study, resulting in a study sample of 42 (45% of 93). Five participants had completed two SOR because they were applying for information about more than one person (one donor, one DCP and three RP). Thus, while the sample consisted of 42 applicants, 47 SOR were analysed.

The SOR data were de-identified and analysed using frequency counts and qualitative thematic analysis, which emphasizes the meaning generated in the text. Themes were grouped and reduced in order to answer the research question. Following the method outlined in Waller et al. (2016), SOR were read and re-read several times by members of the research team to develop an initial coding scheme. The coding scheme was cross-checked for inter-rater reliability and refined to five themes that worked conceptually across the data set. Data were coded using NVivo software, which also enabled counting the number of SOR in which a specific theme appeared and the number of times that the theme occurred across all SOR.

The research sample included comparable proportions of donors, DCP and RP as were present in the overall VARTA applicant population (see Table 1). RP were the largest applicant group, closely followed by DCP then donors. All applications pertained to sperm donation. The absence of applications relating to donor egg or embryo donation is consistent with the fact that these applications comprise a very small number in the VARTA applicant population ($n=3$), and RP must usually recruit known egg donors in Victoria.

Sample demographics can be seen in Table 2. Most applicants were women ($n=32/42$). Most DCP were aged between 30 and 39 years ($n=12/17$), meaning that they were conceived prior to 1998, when donor anonymity was still permitted. Half of the donors were aged ≥ 60 years ($n=3/6$), suggesting that they donated under conditions of anonymity. Most RP were aged 40–49 years ($n=10/19$), while one-quarter were aged 30–39 years ($n=5/19$). RP most frequently reported that they were single ($n=14/19$) with children aged ≤ 6 years. Of the remaining five RP, one was in a lesbian relationship and four were in heterosexual relationships. Most donors were married/partnered ($n=4/6$), as were approximately one-third of DCP ($n=6/17$). Relationship status information was not available for most DCP because they did not mention this in their SOR.

Results

Information sought by applicants

The type of information sought was grouped into five themes: personal information; medical history; explicit requests for photographs; family characteristics; and physical characteristics or traits.

Although the proportion in each group of applicants was very similar when it came to requests for personal information, there were some differences between applicant type and information sought. DCP most frequently sought medical information ($n=16/18$), followed by personal information about the donor ($n=15/18$), then information about family characteristics ($n=13/18$). RP most frequently sought personal information ($n=18/22$), followed by photographs ($n=13/22$). In cases where donors made applications, they most frequently sought personal information ($n=4/5$).

Personal information

DCP expressed strong curiosity about the type of person the donor was:

I would love to know about your appearance, what field you work in, your education, what your heritage is, any personality traits and interests. Any information you think is important ... would be very valuable to me.

[(DCP 30–39 years)]

Donors and DCP shared information about their hobbies, likes and dislikes in the hope of receiving personal information in return:

I ... particularly wonder if you like to travel as I have travelled overseas extensively ... I enjoy playing tennis, cycling and skiing... I hope that by sharing a little bit about me, it will help you feel comfortable to share a little about yourself.

[(Donor ≥ 60 years)]

... I guess if there's any common personality similarities – I'm sociable, successful in my profession at a young age, independent, fit and a keen sports [person].

[(DCP 30–39 years)]

Table 1 Sample characteristics.

Applicant	Applicants to central or voluntary registers who consented to be recontacted for research purposes (n=93)		Research sample (n=42)	
	SOR completed and recontactable	% of VARTA applicant database (n=284)	Consented to participate	% of research sample
Donor	10	11%	6	14%
Donor-conceived adult	38	42%	17	40%
Recipient parent	43	47%	19	45%

SOR, statement of reasons; VARTA, Victorian Assisted Reproductive Treatment Authority.

RP sought information about donors for a range of reasons: to have information available to their child in the future; because the child had asked for information; and to explain observed aspects of their child's personality:

I have read the donor profile provided to me by the clinic; however [child] asks me questions that I cannot answer such as 'What is your name?' and 'Where do you live?'

[(RP 30–39 years)]

There are interests my child has that don't appear to come from myself or my side of the family and it leaves us wondering.

[(RP 40–49 years)]

My main reason for wanting to make contact with you is to find out information about your medical history. It's very important to me to be aware of any underlying conditions for my sake and my [children].

[(DCP 30–39 years)]

Some donors indicated a sense of responsibility to impart medical information, implicitly because there could be a genetic basis for the medical condition:

My other significant reason to find you was at the time of donation I had good health. Since then there are a number of matters affecting me health wise that you should be aware of.

[(Donor 50–59 years)]

Seeking medical history

Most DCP were seeking medical information, either due to having experienced illness, fears about developing genetically linked diseases, or the perceived importance of this knowledge for the DCP's own children:

I have struggled with a chronic illness that is likely to have come from my mother's side. Given this, I am keen for more medical information from your side so I can be further prepared.

[(DCP ≤29 years)]

Physical characteristics

DCP often sought information about the donor's physical appearance either due to curiosity or to explain physical attributes that were not apparent in their known family:

There have been times in my life where I've wondered why I look the way I do or possess particular traits. All my siblings have blonde hair, but I have brown hair.

[(DCP 30–39 years)]

Table 2 Demographic information.

Parameter	Donor (n=6)	DCP (n=17)	RP (n=19)	Total (n=42)
Age group (years)				
≤29	0	5	0	5
30–39	1	12	5	18
40–49	1	0	10	11
50–59	1	0	4	5
≥60	3	0	0	3
Sex				
Male	6	4	0	10
Female	0	13	19	32
Relationship status				
Single	0	1	14	15
Married/partnered	4	6	4	14
Divorced/separated	1	0	0	1
Not available/not applicable	1	10	1	12

DCP, donor-conceived people; RP, recipient parents.

RP also sought information about donors that could explain their children's physical traits, particularly if those traits differed from their own:

In time, [my child] will have questions about [their] donor that the profile will not provide answers to, like whether their height comes from my genetics or yours or both.

[(RP 30–39 years)]

Photographs

In keeping with an interest in the origins of family resemblances, requests for photographs were common among RP and DCP, whereas only one donor expressed a wish for a photograph.

Common reasons why RP wanted photographs were to provide their child with a visual record of the donor over time, to enable their child to see that the donor was a 'real person', and to find the source of their children's unexplained physical characteristics:

It would be great to share some photos. Perhaps a photo of you as a younger child, as a teenager, one of you in your 20s/30s and if you are comfortable, a more recent one of yourself. We are happy to share some photos of the [girls] too.

[(RP 50–59 years)]

So far it is just 'the man' and it would be great to tell them the name of the man and perhaps a photo to put in their baby books, in the space where it says donor.

[(RP 40–49 years)]

DCP who requested photographs tended to want visual evidence of how they resembled the donor:

Do you have hazel eyes that look brown sometimes? ... Do you have a dimple on your chin? If you are willing to share an old photo that would be amazing.

[(DCP 30–39 years)]

Family characteristics

Almost half of the applicants (20/47) requested information about family characteristics. Both RP and DCP were interested in the donor's marital status, family size, and whether or not he had other children:

We became very curious about our paternal ancestry ... Are you married or in a long-term relationship? Do you have children of your own? Did you grow up in a big family?

[(DCP ≤29 years)]

It was also common for DCP and RP to share information about family structure and relationship quality. The assumption appeared to be that this information would be of interest or reassurance to donors:

I have had a good life and am surrounded by fantastic family and friends. I was particularly blessed with wonderful parents.

[(DCP 30–39 years)]

We are a very happy family and my mum, dad and sister all live in the same street as us!

[(RP 40–49 years)]

Contact motivations and goals

All applicants expressed a desire for interpersonal contact, whether via e-mail, telephone or face to face. Most applicants expressed a short-term and a long-term contact goal, and some stated a desire for contact at an unspecified point in time. Donors were open to contact occurring, with a preference for written communication. They also emphasized that they would defer to the other party's wishes:

To make initial e-mail contact and exchange information about each other we should both feel comfortable. We may wish to make a non-identifying e-mail account to commence with.

[(Donor 50–59 years)]

Any contact or information exchange we might have will be under your control: information is power. I will respect your wishes and goals above all else.

[(Donor ≥60 years)]

DCP also emphasized written communication as a suitable first phase of contact, followed by an ongoing relationship if there was mutual interest:

I am happy to move forward slowly, perhaps with e-mail exchange initially, and develop a friendship from there, if that was something we were both comfortable with.

[(DCP 30–39 years)]

In all applicant groups, interest in face-to-face meetings as a long-term goal was high, particularly among DCP and RP. However, there was awareness that face-to-face contact must be mutually agreeable:

I hope that over time you may be interested in some form of communications. All going well perhaps there could be some e-mail exchanges, a Skype call, and maybe even have a coffee one day.

[(DCP 30–39 years)]

Single mother RP appeared to express the strongest desire for face-to-face contact. Sometimes this was because their children had expressed a wish to meet the donor, but also because of their belief that contact was in their children's, and possibly their own, best interests:

I believe it would be highly beneficial for my child to meet your family (and hopefully that would be reciprocally beneficial) at

some stage. The frequency would be guided by your wishes, my [child's] needs and, of course, time.

[(RP 40–49 years)]

I'd be interested in having ongoing, intermittent contact with [child]'s donor. I don't expect him to be a father figure but I would like my child to know him and understand his role in conception.

[(RP 40–49 years)]

Discussion

This paper reports on the thematic analysis of 47 SOR accompanying 42 applications to the donor registers in Victoria, Australia. Mirroring other social research in the field (Freeman et al., 2009; Jadhva et al., 2010; Scheib et al., 2017), RP, DCP and donors alike were curious about what the other party was like as a person. To these applicants, sperm donation is perceived as creating a link between donor and child that cannot be severed, but the emotional significance of this link is variable. The different ways in which donors, DCP and RP see the donor as co-present in the child speak to the creative, negotiated dimension of kinship (Mason, 2008; Nordqvist and Smart, 2014).

Most of the RP and DCP applicants in the study sample were women. This could be due to the fact that women are more emotionally engaged in donor linking. They tend to be custodians of family knowledge (Smart, 2007). Also, significant life events, such as having given birth to their first child, may lead women to delve deeper into the meaning of family, kinship and relatedness. This would be consistent with the ≥ 30 years age group of most DCP. That said, the SOR contain very little information about what triggered the request for information or contact, and this is certainly worth exploring in future research.

There was universal interest in some form of interpersonal contact among all applicant groups, and this distinguishes the findings of this study from others which have found that donor-linking participants often do not anticipate, or even desire, contact with the other party (Freeman et al., 2009; Scheib et al., 2017). Much of the previous research draws on survey data gathered from members of the online DSR who typically have no statutory means by which to access information about their donor relatives. It is therefore possible that they tread more carefully, or have lower expectations, than the participants in this study who pursue donor linking in a context where entitlement to information is a legal right and normalized by legislation.

However, what appears to be a strong interest in contact may be an artefact of the research process. Only one-third of applicants to the register agreed to be contacted for research purposes, and there is no way of knowing how the research sample differed from SOR not available for research. Also, writing a SOR is preceded by a mandatory information session with a VARTA counsellor and guided by a template which invites applicants to reflect on their short- and long-term goals. This embedding of a time dimension in the template could subtly imply an ongoing relationship with the other party. So, despite the fact that the SOR are

written by applicants in their own words and time, some may be influenced by the views about donor conception they assume are held by the counsellor, as well as the prevailing policy and law of the jurisdiction. More needs to be known about how jurisdiction influences applicants' expectations, and how applicants differ from non-applicants.

Interest in exchanging photographs to anticipate children's physical development over time was strong among DCP and RP. In keeping with the insight from kinship theory that biogenetic connections may evoke strong emotions (Nordqvist and Smart, 2014; Strathern, 1992), the desire to establish the origins of physical resemblances speaks to their perceived capacity to anchor a sense of belonging. This attention to explaining family resemblances precisely because they are considered so important to family belonging is echoed in other studies of how relatedness is understood and managed in third party assisted conception (Becker et al., 2005; Dempsey, 2013; Indekeu, 2015; Nordqvist and Smart, 2014). The comments of DCP and RP often revealed a popular, if inaccurate, understanding of genetic inheritance; that phenotypically, children constitute a perfect 50/50 blend of their biological parents. Or, that if a physical characteristic or personality trait could not be attributed to the known biological family, it must be present in the biological relatives 'on the other side'. Both DCP and RP wanted to trace the origins of particular traits, and appeared to believe that such transparency is made possible through donor linking. This may or may not be true, but the SOR reveal great investment in this possibility.

For DCP, medical knowledge was a higher priority than for other applicants. This could relate to the medicalized discourse of relatedness (Finkler, 2000, 2001) that is often emphasized in the doctor's surgery and the media. Although often overstated in public discourse, society's emphasis on the inheritability of disease may make DCP feel that not knowing their paternal health history makes them medically vulnerable. Indeed, some were making their applications in order to seek out more information about illnesses that had already occurred in their family. DCP's emphasis on requests for medical information could also be linked to their general tendency in the SOR to emphasize their sensitivity to the donor's personal circumstances. The fact that most DCP in the research sample were aged ≥ 30 years meant that they required the donor's consent for the release of identifying information. Requests for medical information are potentially perceived as reasonable and less personally intrusive to donors, who were highly likely to have been medical students at the time they donated and were told they would never be identified (Hammarberg et al., 2014; Kelly and Dempsey, 2018). Similarly, emphasizing the relative harmony and stability of one's existing family relationships, as many DCP did in their SOR, could also serve to reassure the donor that the applicant will not be too demanding once the identifying information is given. DCP expressed respect for the challenging circumstances in which these men may find themselves following the introduction of retrospective access to records. In turn, donors appeared to assume that it was not their place to set the terms for ongoing contact.

The largest group of applicants was RP, reflecting the perceived value to them of having information and forming relationships with donors for the benefit of their young donor-conceived children. Although RP were sometimes

motivated by explicit questions from their children, many assumed that their children would want to know their donor in the future. Most of the RP were single mothers making their application prior to their child's sixth birthday. In this regard, our research echoes other studies which have found that single mothers of young children are well represented in donor-linking communities (Goldberg and Scheib, 2015; Kelly and Dempsey, 2016a). Single mothers expressed a complex range of reasons for early contact, some of which may be predicated on family structure. The social pressure to 'find a father' could be fuelling single mothers' desire to contact their child's donor when the child is young. Single mothers may also be more likely to seek out the donor because his presence in the life of the child does not threaten the position of a genetically un-related parent as it might for lesbian or heterosexual couples (Freeman et al., 2016; Goldberg and Scheib, 2015; Hertz et al., 2013). Goldberg and Scheib (2015) similarly found that the single mothers applying to the Sperm Bank of California family matching program 'invested greater hope' in the matching process, with most hoping it would provide their child with a 'future support system' and an 'expanded family'. The complex motivations of unpartnered mothers seeking contact with the donor certainly warrant further study.

Limitations and implications

The study has some limitations. Firstly, views expressed in the analysed SOR may not reflect those of the total population of Victorian donor-linking applicants. Secondly, the study involved an analysis of documents which, in most cases, had been completed according to a template provided by VARTA and after an information session with a VARTA counsellor. It is possible that this influenced what applicants included in their SOR. For these reasons, a follow-up interview-based study of applicants' experiences after they have been linked through the registers would add to our understanding of how information seeking varies between applicant type, and if and how relationships between linked applicants unfold over time.

Nonetheless, these limitations do not detract from some important findings for jurisdictions considering the introduction of statutory linking or where DCP are not yet old enough to apply for information about their donor. Perhaps the most important implication is that where linking is normalized through law, expectations of contact may increase. Professionals working with applicants may therefore need to manage parties' expectations, in light of evidence that disappointments and challenging relationships can ensue (Daniels et al., 2012; Goldberg and Scheib, 2015; Hertz et al., 2015). The implications of these outcomes may be more significant if the child is young in that they potentially have implications for family law. In Australia, federal parentage laws do not address the legal status of a sperm donor where the recipient is unpartnered, even if conception is via a fertility clinic (Kelly and Dempsey, 2016b). In addition, 'any person concerned with the care, welfare and development of the child' can make an application for access. The failure of family law to keep up with donor-linking laws means that, in some circumstances, linking may be legally risky.

Conclusion

The state of Victoria, Australia is unique in that its donor-linking laws are retrospective and allow DCP, donors, RP and descendants of DCP to apply for information about related parties. Donor registers and linking processes are managed by a statutory authority which provides applicants with free information and support. This study makes an important contribution to knowledge about what applicants want to know about and their expectations of contact with a related party. DCP, RP and donors who apply to Victoria's registers are eager for information about their genetic relatives, validating the importance of government-funded donor registers and laws that give those affected by donor conception the right to information. Where donor linking is normalized by law, parties may have greater expectations of ongoing contact and relationship building. This may contribute to a new era of openness in the field of donor conception, although further qualitative research is needed with DCP, RP and donors to understand more about the lived experience of donor linking for each group, differences between applicants in different jurisdictions, and how applicants to registers differ from non-applicants.

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References

- Becker, G., Butler, A., Nactigall, R.D., 2005. Resemblance talk: a challenge for parents whose children were conceived with donor gametes in the US. *Soc. Sci. Med.* 61, 1300–1309.
- Blyth, E., Crawshaw, M., Frith, L., Jones, C., 2012. Donor-conceived people's views and experiences of their genetic origins: A critical analysis of the research evidence. *J. Law Med.* 19, 769–789.
- Carey, N., 2012. *The Epigenetics Revolution*. Faber and Faber, London.
- Crawshaw, M., Daniels, K., Adams, D., Bourne, K., van Hooff, J., Kramer, W., Pasch, L., Thorn, P., 2016. Emerging models for facilitating contact between people genetically related through donor conception: a preliminary analysis and discussion. *Reprod. Biomed. Soc. Online.* 1, 71–80.
- Daniels, K., Kramer, W., Perez-y-Perez, M., 2012. Semen donors who are open to contact with their offspring: issues and implications for them and their families. *Reprod. BioMed. Online* 25 (7), 670–677.
- Dempsey, D., 2013. Surrogacy, gay male couples and the significance of biogenetic paternity. *New Genet. Soc.* 32, 37–53.
- Edwards, J., 2000. *Born and Bred: Idioms of kinship and new reproductive technologies in England*. Oxford University Press, Oxford.
- Finkler, K., 2000. *Experiencing the new genetics: family and kinship on the medical frontier*. University of Pennsylvania Press, Philadelphia.
- Finkler, K., 2001. The Kin in the Gene: the medicalization of family and kinship in American society. *Curr. Anthropol.* 42, 235–263.

- Freeman, T., Jadva, V., Kramer, W., Golombok, S., 2009. Gamete donation: parents' experiences of searching for their child's donor siblings and donor. *Hum. Reprod.* 24, 505–516.
- Freeman, T., Zadeh, S., Smith, V., Golombok, S., 2017. Disclosure of sperm donation: a comparison between solo mother and two-parent families with identifiable donors. *Reprod. BioMed. Online* 33 (5), 592–600.
- Frith, L., Blyth, E., Crawshaw, M., Van den Akker, O., 2017. Searching for 'relations' using a DNA linking register by adults conceived following sperm donation. *Biosocieties*. 13, 170–189.
- Goldberg, A.E., Scheib, J.E., 2015. Female-partnered and single women's contact motivations and experiences with donor-linked families. *Hum. Reprod.* 30, 1375–1385.
- Hammarberg, K., Johnson, L., Bourne, K., Fisher, J., Kirkman, M., 2014. Proposed legislative change mandating retrospective release of identifying information consultation with donors and Government response. *Hum. Reprod.* 29, 286–292.
- Hertz, R., Nelson, M., Kramer, W., 2013. Donor conceive offspring conceive of the donor: The relevance of age, awareness, and family form. *Soc. Sci. Med.* 86, 52–65.
- Hertz, R., Nelson, M., Kramer, W., 2015. Sperm donors describe the experience of contact with their donor-conceived offspring. *Facts Views Vis. Obgyn.* 7 (2), 91–100.
- Indekeu, A., 2015. Parent's expectations and experiences of resemblance through donor conception. *New Genet. Soc.* 34 (4), 398–416.
- Jadva, V., Freeman, T., Kramer, W., Golombok, S., 2010. Experiences of offspring searching for and contacting their donor siblings and donor. *Reprod. BioMed. Online* 20, 523–532.
- Kelly, F., Dempsey, D., 2016a. Experiences and motives of Australian single mothers by choice who make early contact with their child's donor relatives. *Med. Law Rev.* 24, 571–590.
- Kelly, F., Dempsey, D., 2016b. The Family Law Implications of Early Contact between Sperm Donors and their Donor Offspring. *Fam. Matters* 98, 56–63.
- Kelly, F., Dempsey, D., 2018. The History of Donor Conception Records in Victoria. A report prepared for the Victorian Assisted Reproductive Treatment Authority. VARTA, Melbourne.
- Kirkman, M., Bourne, K., Fisher, J., Johnson, L., Hammarberg, K., 2014. Gamete donors' expectations and experiences of contact with their donor offspring. *Hum. Reprod.* 29, 731.
- Mason, J., 2008. Tangible affinities and the real life fascination with kinship. *Sociology*. 42 (1), 29–45.
- McWhinnie, A., 2001. Should offspring from donated gametes continue to be denied knowledge of their origins and antecedents? *Hum. Reprod.* 16, 807–817.
- Millbank, J., 2014. Identity Disclosure and Information Sharing in Donor Conception Regimes: The Unfulfilled Potential of Voluntary Registers. *Int. J. Law Policy Fam.* 28, 223.
- Nordqvist, P., Smart, C., 2014. *Relative Strangers: Family Life, Genes and Donor Conception*. Palgrave Macmillan, Houndmills.
- Parliament of Victoria, Law Reform Committee, 2012. *Inquiry into Access by Donor-Conceived People to Information about Donors*, Parliament of Victoria, Melbourne. <http://www.parliament.vic.gov.au/lawreform>.
- Rodino, I.P., Burton, J., Sanders, K., 2011. Donor Information Considered Important to Donors, Recipients and Offspring: An Australian Perspective. *Reprod. BioMed. Online* 22, 303–311.
- Scheib, J., Ruby, A., Benward, J., 2017. Who requests their sperm donor's identity? The first ten years of information releases to adults with open-identity donors. *Fertil. Steril.* 107, 483–493.
- Smart, C., 2007. *Personal Life*. Polity, London.
- Strathern, M., 1992. *Reproducing the Future*. Routledge, New York.
- Van den Broeck, U., Vandermeeren, M., Vanderschueren, D., Enzlin, P., Demyttenaere, K., D'Hooghe, T., 2013. A systematic review of sperm donors: demographic characteristics, attitudes, motives and experiences of the process of sperm donation. *Hum. Reprod. Update* 19 (1), 37–51.
- Waller, V., Farquharson, K., Dempsey, D., 2016. *Qualitative Social Research: Contemporary Methods for the Digital Age*. Sage, London.

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