

Contact among families who share the same sperm donor

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Objective: To examine the experience of contact among families who share the same sperm donor and the purpose served by contact.

Design: Study 1: retrospective survey; study 2: archival data analysis.

Setting: Donor insemination (DI) program.

Patient(s): Study 1: 14 parents from the first cohort of matched families; study 2: Archival data about 515 families from the DI program.

Intervention(s): Study 1: Interview of parents via anonymous mail-back survey; study 2: none.

Main Outcome Measure(s): Study 1: Survey questions focused on the family, contact experience, and relationship to the matched family. Study 2: Comparison of families in the matching service to DI program families on family structure, parity, and type of donor (anonymous or open-identity).

Result(s): Study 1: Single women and lesbian couples headed most families. Parents reported positive experiences with contact. Reasons for contact focused on creating family for the child and addressing questions about the donor. Study 2: Families with open-identity donors and those headed by single women were overrepresented in the matching service; heterosexual couple-headed families were underrepresented.

Conclusion(s): Findings indicate positive outcomes for contact among families who share the same donor. Contact appears to serve the purpose of creating extended family for the child and may also help answer questions about the donor. (*Fertil Steril*® 2008;90:33–43. ©2008 by American Society for Reproductive Medicine.)

Key Words: Open-identity sperm donor, donor insemination, gamete donation, alternative families, half-siblings, genetic sibling matching, donor-linked families, disclosure

When a family is created through donor insemination (DI), it is likely that other families exist who share the same sperm donor. Research and personal accounts have indicated that DI recipients, parents, and offspring want information about their donors (1–13), but few studies address how this interest extends to families who share the same donor. Based on findings from adoption, Blyth et al. (14) have suggested that we should expect this interest among people with donor origins (see also 15, 16). In one collection of interviews, both parents and offspring were curious about others who shared the same donor (1, 17). Engel, a social worker active in the area of DI and mother of a child conceived through DI, also reported receiving letters from adults “eager to trace their half-siblings, or their children’s” (18). In a separate study of adolescents conceived through donor insemination, 90% of the youths reported moderate interest in contacting others with the same

sperm donor (12). But perhaps the strongest evidence of interest comes from the grassroots level. Several networks have been set up by parents to enable donor-conceived families to contact each other. Some appear primarily motivated by youths and parents interested in meeting each other (e.g., the Donor Sibling Registry at <http://donorsiblingregistry.com>), and others by recipients and newer parents (e.g., Single Mothers by Choice Sibling Registry). This interest is strong. For example, the Donor Sibling Registry was established in 2000; by October 2006 it had nearly 7000 members, and matches among 2684 families with the same donors (19).

The growing interest in others who share the same donor likely reflects families being more open about using DI. In a change from earlier practices in the United States, mental health professionals and professional guidelines now advocate that parents tell their children about their donor origins (10; for international trends: 15, 20). Increasing numbers of lesbian couples and single women are also now using DI and almost surely will share with their children their donor-assisted conception (21). This means that more children now than ever know about their origins, leading to the possibility of interest in others who share the same donor. Added to this is growing recognition that one’s genetic history is

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important (22) and that curiosity about one's genetic origins is normal (9, 23, 24). Increasingly, DI recipients also are using open-identity donors (25), who are donors willing to be identified to adult offspring, either by choice as in the United States (26) or because their government mandates that gamete donation programs use open-identity donors only as in the United Kingdom, Sweden, and Norway (27). Using open-identity donors in itself does not guarantee that parents will share donor conception information with their children (28), but it facilitates the opportunity to tell, because parents no longer have to worry that their children will suffer from the futility of having no donor information (2, 25, 29). All combined, these trends toward openness and increased access to information, whether by choice or through governmental intervention, can only increase the likelihood that more and more DI families will express interest in and seek others who share the same donor.

Currently, limited means exist for contact among donor-linked families, that is, families who share the same donor. Occasionally, DI programs do facilitate contact among families. In 1997, The Sperm Bank of California (TSBC) set up a family-matching service in response to requests from parents in its program. This American DI program is unique in its origin from a nonprofit feminist women's health clinic, and in promoting the importance of openness in families and access to information and choices for both parents and offspring. It serves lesbian couples and single women primarily, who tend to tell their children at an early age about their donor origins. The first open-identity DI program in the world originated at this organization in 1983 in response to parental requests for donor information for their children, should the children want it when they reached adulthood. The matching service was the next logical step from having an open-identity program, again meeting the needs of the family for information. The service, as with the open-identity option, also acknowledged the role of a donor in forming the family, the importance of donor/genetic information, and possible links families might have with others through DI.

The family-matching service of TSBC registers families who request contact with other families with the same donor. When there is a match—two or more families with the same sperm donor make a request—TSBC notifies the respective parents and releases each family's contact information to the other(s). The parents themselves express interest in being able to contact other parents with children from the same sperm donor and in having that option for their children should they be interested. Engel (18) proposed similar reasons for families wanting contact, as well as suggesting that contact might help reduce the mystery and provide support around a person's unknown genetic history, provide extended family for children, and help deal with medical situations such as needing an organ donor.

Our study examined the experience of a sample of DI parents who participated in TSBC's family-matching service. The study's participants were among the first TSBC group

to make matches with other families who shared the same donor. The purpose of the study was to identify which DI parents wanted contact with other families, what the outcome of contact was, and how participants viewed the relationships among families. Using both reports from participants in the study and an additional review of archival data from the DI program, we examined hypotheses about the purpose served by contact among donor-linked families.

MATERIALS AND METHODS: STUDY 1

Retrospective Survey

In 2002 and 2003, TSBC conducted a quality control study to assess the family-matching service and ensure that it was working well. We subsequently used the data collected by this study to address questions about who wants contact with other families and why. For the study, recipient mothers from the first cohort of matched families ($n = 23$) were invited by letter to complete and mail-back an anonymous questionnaire about their experiences in the family-matching service. In this program, policy requires that all correspondence be with the recipient, so we needed to contact this parent specifically. It is worth considering, however, that families may be more likely to participate in surveys when the other parent is also invited. This is especially relevant in the context of DI, in which the father or social mother lacks a genetic tie with the child and may appreciate efforts to acknowledge them as parents too.

Survey questions were open-ended or required participants to answer using adjective endorsements or 5-point rating scales. Questions focused on [1] family structure and demographics (Table 1), [2] the contact experience, and [3] the view of parents and children toward their relationship with the other families (i.e., as acquaintances, friends, family, or other). Questions about the contact experience included reasons for making contact (open-ended), the method of initial contact (phone, mail, e-mail), the experience of the contact (rating scale of 1 to 5, from "very negative" to "very positive" and open-ended), the child's reaction to his/her first contact (open-ended), and whether contact was ongoing (yes, no, other). Participants were also invited to give advice to future parents using the service (for further information about this last question, contact the authors).

For each of the three open-ended questions, one of the authors (JES) designed a coding scheme, based on common themes in the participants' responses. Research assistants reviewed the responses and provided feedback about any ambiguities in the coding scheme. After the coding scheme was finalized, the research assistants coded each response for the presence or absence of the themes. Inter-rater agreement on coding ranged from 75% to 100%. When a disagreement arose on how to code a response, the author helped resolve it, but this was counted against perfect inter-rater agreement. To summarize responses, we used descriptive statistics, and likelihood ratios were used to analyze the data. Use of these data and study 2 (a review of archival data) received institutional review board review exemption.

TABLE 1**Survey characteristics of matched families (n = 14).**

Family structure (% (n))	
Single woman	50.0 (7)
Lesbian couple	42.9 (6)
Heterosexual couple	7.1 (1)
No. of children in the family at first contact	1 in all families
% girls (n)	57.1 (8)
Median age at first contact	4 years
Child (% (n))	
Knew about the match	42.9 (6)
Not told yet	21.4 (3)
Was too young	35.7 (5)
Target family was matched to (% (n))	
1 family	71.4 (10)
2 families	14.3 (2)
3 families	14.3 (2)
Time between first contact and survey (median; range)	1 year; 2 months to 2 years
Family's donor is identity-release (% (n))	100 (14)

Scheib. Contact among families who share a donor. Fertil Steril 2008.

RESULTS

Participants

Of the 23 questionnaires mailed out, five were returned with no forwarding address. Completed questionnaires were returned by 14 mothers (response rate: 77.8%). The majority of households were headed by single women (50%; seven out of eight families invited to participate) and lesbian couples (42.9%; six out of eight invited), with one headed by a heterosexual couple (7.1%; one out of two invited) (see Table 1). All families had one child (eight girls, six boys) when the parents first contacted a matched family. The median age of the child at first contact was 4 years (range: 6 months to 9 years). Just under half the children (six; 42.7%) knew about the match between their family and another. Five children were too young to know about the match (all under age 2 years). The remaining three children had not been told about the match. We did not ask why parents had or had not told their child, but of the three who had not told, one provided an explanation. She was waiting to tell her child until she felt more confident that the child could understand the difference between her own family and the matched family. Because the relationship to the matched family involved a genetic tie, there was an assumption that they would be identified as family; however, this parent was not ready to recognize the matched family as family and so felt it necessary to keep the match from her daughter to solidify her own family before extending it to others.

The number of families who were matched together depended on the number of families from a given donor who chose to participate in the service. If more than two families chose to participate, then a family would be matched to two or more other families. Most families (71.4%) matched to and contacted a single family, but two matched to and contacted two families, and two matched to and contacted three families. The data reported here pertain to experiences with the first family that participants contacted. The time period between participants first contacting a matched family and responding to the questionnaire was about 1 year. All the families had open-identity sperm donors.

Contact Experience

Most families (78.6%) initiated contact with their matched family by phone rather than by mail or e-mail (Table 2). Using a 5-point scale from very negative to very positive, participants rated their first contact between moderately and very positive (mean rating: 4.7 ± 0.5). All but two also described the experience in response to an open-ended question. In reviewing the descriptions, we identified six themes focusing on feelings about the experience and the actual content of the interaction; four focused on feelings, and two focused on the content. Research assistants then coded each question for the six themes. In terms of feelings, the most common theme was that the families “clicked”: they got along well and felt a connection to the matched family (reported by five of the 12 participants providing a response; see Table 2). In contrast, the second theme was that participants felt that they had not connected with the matched family because the families were at different points on issues like how open they were about the child's origins and how much contact they wanted from each other (reported by three participants). It is noteworthy that, among the four families who matched to two or more families, two of the four reported feeling that the contact experience was better with the family(ies) they matched to later. They attributed this to having more in common and having better matched expectations with those later-matched families.

Two additional themes emerged from how families felt about the contact experience. Four reported being excited about the contact, and two reported an initial discomfort such as nervousness that eventually resolved itself.

Two additional themes focused on the content of the interaction. Over half of the participants described comparing their children's features, some to the point of subsequently exchanging photos (see Table 2). Two-thirds of the families reported discussing issues related to disclosure, such as whether the child and others knew and how the disclosure had happened. Of these, two specifically mentioned that the family match had acted as a catalyst to tell the child about his or her donor origins.

Participants also described their child's reaction to the family match and contact. Of the six children who knew, one child made first contact over the phone and another by

TABLE 2**Survey contact experience.^a**

Method of initial contact (% (n))	
Phone	78.6 (11)
E-mail	14.3 (2)
Mail	7.1 (1)
First contact experience ^b (M ± SD)	4.7 ± 0.5
Description of first contact ^c (% (n); reported by 12/14 participants)	
<i>Feelings</i>	
Families “clicked”	41.7 (5)
Families did not “connect”	25.0 (3)
Excited	33.3 (4)
Initial discomfort	16.7 (2)
<i>Content</i>	
Compared children’s physical features and personality	58.3 (7)
Discussed donor disclosure issues	66.7 (8)
Child’s reaction to first contact ^c (% (n))	
Curious and positive about the other child	100 (6)
Excited	66.7 (4)
Subsequent in-person meeting with matched family	
Have met	14.3 (2)
Plan to meet	71.4 (10)
Are undecided about meeting	14.3 (2)
Current contact with matched family	
Ongoing	71.4 (10)
Occasional	21.4 (3)
None (but plans to contact again in the future)	7.1 (1)
Reported purpose of contact ^c (% (n))	
Creates family for the child—now or in the future	85.7 (12)
Addresses curiosity about donor, shared genetics, and/or genetic relations	42.9 (6)
Child knows someone in a similar situation	21.4 (3)
Parent knows someone in a similar situation	14.3 (2)

^a For families with more than one matched family, we report findings for the first family they contacted.

^b Rating scale of 1 to 5: “very negative” to “very positive”.

^c Open-ended question—participants could give more than one answer.

Scheib. Contact among families who share a donor. Fertil Steril 2008.

e-mail, whereas the other four were first shown pictures of the matched child and then went on to talk on the phone. We coded the six participants’ descriptions of their child’s reaction (see Table 2). All six reported their child as being positive and curious about the other child. Four also said that their child was very excited, for example, “ECSTATIC to learn that [the child] had a brother.” Another wrote that her child “was ecstatic to see pictures of [the child’s] ½ brother. [The child] wants to meet him NOW.”

Two families later met their matched family in person, which they described very positively (each met a different family). Each described the occasion as beginning with their children staring or eyeing each other for a while and then hitting it off and being inseparable for the time that followed. Almost all the other families (10 of 12) planned to meet at least one of their matched families when the children were

a little older and/or when they were closer geographically (several families lived on opposite coasts). The last two families were undecided and wanted to wait until their children were older. On average, a year later most families still had ongoing (10 families) or occasional (three families) contact. One family had had no contact after the first phone call but would initiate it again when the child was older.

Rationales for Contacting Other Families

In response to an open-ended question, participants gave one or more of four reasons for wanting contact (see Table 2). Overwhelmingly (85.7%), participants described contact as a way to create family—not for them, but for their children. One participant explained, “it’s not about me, really, it’s about our child.” Others said it was for “connection with

half sibs,” “to gain a sense of kinship,” and that it would “maybe develop [into] a cousin-like relationship” with hopes that the children “will become great friends.” It is noteworthy that some participants felt that it was an opportunity for their child in the future, not necessarily now (e.g., in cases where the child did not yet know about the family match).

The second most common explanation (given by 42.9%) was that contact served as a way to acquire further information about the donor and address curiosity about him and the children’s shared genetics/ancestry. Participants wrote, “The pictures ... gave us each a better idea of the physical characteristics they inherited from the donor,” and that contact provided “a source for addition[al] genetic info on my [child].” Parents described comparing children’s traits and/or medical information as well as discussing similarities of the children: “to see pictures ... and compare them to my child.” Contact also served to help address a child’s current or future curiosity, with one parent explaining that she wanted contact “in order to assuage my [child’s] curiosity (if it arises, as I expect it will) ...”.

Smaller numbers (21.4%) described wanting contact because they wanted their child to know others in a similar situation. These situations included having donor origins, an open-identity donor, and/or an alternative family. Interestingly, two participants also specifically mentioned that having the same open-identity donor would allow the children to go through donor-identity release together (it is not uncommon for children of a donor to be similar ages). Finally, the last explanation given for wanting to contact a matched family was that the parents would know someone in a similar situation (two participants).

Relationship to the Matched Family

Participants were asked to define their own relationship to the matched family and how they viewed their child’s relationship to this family. For families in which the child knew about the match, participants also reported the child’s perception of

his/her the relationship to the matched family. Participants chose from four options: acquaintances, friends, family, or other. If they selected “other,” there was space to explain what this meant.

Parents were divided on the issue (see Table 3): 42.9% described their relationship to the matched family as acquaintances, and the rest described it as friends (21.4%), family (28.6%), or “other” (one participant, who defined the case as friends/family).

Participants then described how they viewed their child’s relationship to the matched family. There was more uniformity in the answers: 64.3% felt that the matched family was family to their child, but two (14.3%) did not know, and three (21.4%) reported “other,” with one defining “other” as “biological/none at this time” (the other two did not provide explanations). When answers were collapsed into “family” and “other,” only about one-third of participants viewed their relationship to the matched family as family, but two-thirds viewed their child’s relationship as family. This is consistent with the idea of using contact to create family for the children, but the association was not statistically significant (likelihood ratio, $G^2 [1] = 2.32, P = .13$).

Among the six families in which the child knew about the match, four participants reported that their child viewed his/her relationship to the matched family as “family,” and two said their child did not know how to define the relationship.

MATERIALS AND METHODS: STUDY 2

Analysis of Archival Data

To further explore why families want to contact other families with the same donor, we reviewed archival data from the DI program and compared the characteristics of families who participated in the program’s family matching service to those who did not. This allowed hypothesis testing about the purpose served by contact by identifying unique features about the families in the matching service. In study 1,

TABLE 3

Survey view of relationship to the matched family.					
	Acquaintances	Friends	Family	Other	Does not know
Mother’s relationship to matched family (% (n))	42.9 (6)	21.4 (3)	28.6 (4)	7.1 (1) ^a	0
Mother’s view of child’s relationship to matched family (% (n))	0	0	64.3 (9)	21.4 (3) ^b	14.3 (2)
Child’s view of relationship to matched family ^c (% (n))	0	0	66.7 (4)	0	33.3 (2)

^a Other defined here as “friends/family.”

^b Other was defined for only one of the three cases and as “biological/[no relationship] at this time.”

^c As reported by the child’s mother. Only six children knew about the matched family.

Scheib. Contact among families who share a donor. Fertil Steril 2008.

participants most often described the reasons for contacting their matched family as a way to [1] create family for the child, and/or [2] acquire additional information about the donor and address curiosity about the children's shared ancestry. These two reasons provided testable hypotheses for the purpose of contact. We did not address participants' two other reasons for contact—to know other children/parents in a similar situation—because it was not unique to the context of sharing a donor. We do not deny that contact can help families connect with others in similar situations, but families often use easier and more guaranteed ways of meeting others to achieve this goal (i.e., family matches are not that common) such as participating in informational/support groups and social events hosted by the DI program or through associations of single mothers by choice or lesbian mothers.

Data were available from a pregnancy database about families created or enlarged through the DI program. We tested hypotheses by comparing a sample of families in the matching service (regardless of whether they had made a match) to all DI program families during a given time period. Because the majority of families in the matching service had had their first child after 1997 and we wanted to allow time for siblings to be born (at least 3 years after the first born), we selected the time period of first child born between 1998 and 2003 to compare family-matching service members ($n = 90$) to all TSBC families ($n = 515$). To test hypotheses, data were derived for each family, including family structure (lesbian couple-, heterosexual couple-, or single woman-headed families), and whether or not there was more than one child in the family, the family's donor was open-identity, and the family participated in the matching service.

Hypothesis 1: Contact as a Way to Create Family for the Child

To test the family-creation hypothesis, we predicted that smaller families would be more likely to participate in the matching service. Families could be smaller in two ways: [1] smaller because there was only one child in the family or [2] smaller because it was headed by a single woman and thus lacked the extended family of a partner. Contact might then serve to create family in two ways: [1] create immediate (as opposed to extended) family through providing half-siblings for the child, and/or [2] provide extended family for the child (e.g., cousin-like). To examine this, we used chi-square analyses to test [1] whether families with only one child were overrepresented in the matching service as compared with all program families, and [2] whether single women were overrepresented in the matching service as compared with all program families.

Hypothesis 2: Contact as a Way to Acquire Further Information about the Donor and the Children's Shared Ancestry

To test the information-acquisition hypothesis, we predicted that families with open-identity donors would be more likely

to participate in the matching service than families with anonymous donors. In this DI program, recipients can choose between open-identity and anonymous donors. In general, recipients who choose open-identity donors do so because they want as much information as possible about the donor, including eventually being able to identify and possibly meet him. This contrasts with recipients who choose anonymous donors, who may be less interested in the donor per se (e.g., their focus is simply on getting sperm samples when they are needed), who have less of a desire to focus on him (e.g., a desire to minimize his role; 2) and/or for whom other priorities were more important in selecting a donor (e.g., interested in the donor's characteristics but not invested in future information for their child). Thus, we expected that families with open-identity rather than anonymous donors would more be motivated to join the family-matching service if contact provided another way to learn more about the donor and the children's ancestry. We used a chi-square analysis to test this.

RESULTS

Hypothesis 1: Is Contact a Way to Create Family?

If contact is a way to create family for the child, then we expected that families with only one child and/or families headed by single-women to be overrepresented in the matching service.

More one-child families among matching-service families? In the 1998 to 2003 time period, 70% of families in the matching service had only one child. This percentage did not differ from that of all DI program families (69.7%). Thus, in this case, we found no support for the hypothesis that contact served as a way to create immediate family via half-siblings for the child.

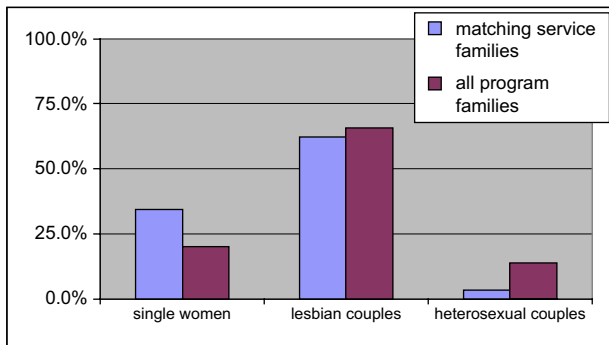
More families headed by single women among matching-service families? In the 1998 to 2003 time period, 34.4% of families in the matching service were headed by single women, 62.2% were headed by lesbian couples, and 3.3% were headed by heterosexual couples. In contrast, among all DI program families, single women headed 20.2%, lesbian couples headed 65.8%, and heterosexual couples headed 14% (Fig. 1). Chi-square analysis indicated that the distribution of family types in the matching service differed from that of all DI program families (chi-square [2] = 16.5, $P < .001$). Thus, once the distribution of family types in the DI program was accounted for, families headed by single women appeared to be the most likely to participate in the matching service and heterosexual couples the least likely. That single women were overrepresented in the matching service supports the hypothesis that contact is a way to create extended family for their children.

Hypothesis 2: Is Contact a Way to Learn More about the Donor and the Children's Shared Ancestry?

If contact is a way to help address questions and curiosity about the donor and the children's shared ancestry, then we would expect families with open-identity donors to be

FIGURE 1

Percentage of family types in the matching service as compared to the donor insemination program.



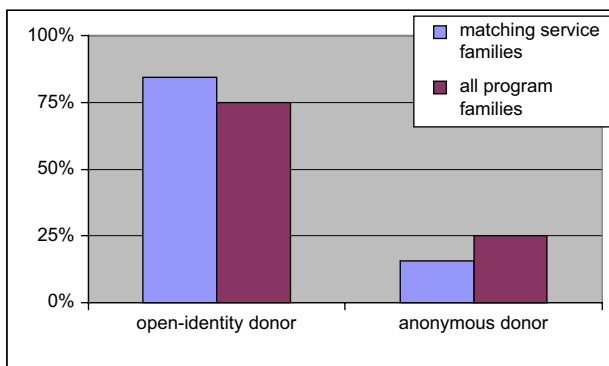
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overrepresented in the matching service. Indeed, in the 1998 to 2003 time period there were more (84.4%) families with open-identity donors in the matching service than expected (74.9% among all DI program families; chi-square [1] = 4.4, $P < .05$) (Fig. 2).

It was possible, however, that the overrepresentation of families with open-identity donors in the matching service was due to the disproportionate number of families headed by single women, who might be more likely to have chosen this type of donor. In the 1998 to 2003 time period among all DI program families, family type was indeed associated with type of donor used: families headed by single women and lesbian couples tended to have open-identity donors (chosen by 76% and 79.9% of families, respectively), whereas families headed by heterosexual couples were equally likely to use open-identity and anonymous donors

FIGURE 2

Percentage of families with an open-identity or anonymous donor in the matching service as compared to the donor insemination program.



Scheib. Contact among families who share a donor. *Fertil Steril* 2008.

(chi-square [2] = 28.3, $P < .001$). Thus, in the matching service, it was possible that more families than expected had open-identity donors simply because many of the families were headed by single women.

To test this, we grouped matching-service families according to family type and type of donor used. Over 90% (90.3%) of families headed by single women, 80.4% of families headed by lesbian couples, and all families headed by heterosexual couples had open-identity donors. In comparison, 76% of families headed by single women, 79.9% of families headed by lesbian couples, and 50% of families headed by heterosexual couples had open-identity donors among all DI program families. Small sample size (i.e., $n = 3$) precluded statistical analysis of the families headed by heterosexual couples, but otherwise the data suggest that there was a marginal effect of families with open-identity donors being overrepresented in the matching service, specifically among those headed by single women (chi-square [1] = 3.5, $P = .06$).

DISCUSSION

Our study examined the experience of families who participated in a DI program's family-matching service. Participants were among the first group to match and contact at least one other family who shared the same donor. Based on the parental reports, we then tested hypotheses about reasons for seeking contact by using archival data about families more generally from the DI program. The current findings add to recent reports on the phenomenon of contact among families who share the same donor (30–32). In addition, this study provides the first empirical examination of families' contact experiences and of the reasons for pursuing such contact.

Parental Reports

Single women and lesbian couples headed the majority of families in the first group of matched families at the DI program. All families who responded to the survey had an open-identity donor. At the time of contact, all study families had one child who was relatively young. Most families were matched to one other family, but just over a quarter were matched to two or three. Just under half the children knew about the family match. The remaining children were either too young to understand or the parents reported not telling yet because they felt their child would not understand the relationship to the matched family.

Findings from the parental reports suggest that contact among donor-linked families can be a very positive and exciting experience. Many parents reported "connecting" with their matched families, and children who knew about the family match were very curious and positive about the other child. Parents reported discussing DI-related disclosure issues with each other, and some reported that the family match had served as a catalyst to tell their child about his or her donor origins. Parents also reported comparing their children's

physical features and personality and exchanging photos. Contact resulted in in-person meeting for a few families, with many families planning to meet in the future. On average, a year later, most families remained in contact with their matched family. These reports are quite similar to those reported in personal stories elsewhere (30–32).

Reported parental reasons for contacting other families centered around creating extended family for the child. Parents reported hoping that their child would “gain a sense of kinship” through contact. This reason was consistent with many of the parents’ views of their child’s relationship to the matched family—that of family—as opposed to their own relationship, which was less uniformly described, ranging from acquaintances and friends to family. Additional motivation for contact focused on helping gain additional information about the donor and the children’s shared ancestry, which was reflected in the families sharing photos and information about their children.

Archival Analyses

Based on the parental reports, we tested two hypotheses about reasons for contacting other families with the same donor: as a way to create family and as a way to gain additional information and help address curiosity about the donor and the children’s ancestry. Archival analyses suggested that contact among families may help create extended family for the child. Once we accounted for the distribution of family types in the DI program, families headed by single women appeared most likely to participate in the matching service. This group’s overrepresentation in the service is consistent with the idea that the matched family may serve to provide extended family that single parents do not have through a partner. Although not tested here, this finding is consistent with the possibility that it may also be more difficult for two-parent families to join the service. Interest in a donor-linked family may be perceived in some families as hurtful to the parent without the genetic link, drawing attention away from him/her and redirecting it indirectly toward the donor. A similar sort of concern for the social parent has been expressed elsewhere by children when they are asked about their interest in the donor. Vanfraussen et al. (33) suggest that children who express little interest in their donor may be doing so out of concern for their social parent’s feelings.

We also expected that families with only one child would be overrepresented in the matching service if contact were way to create family, but they were not. Two factors may account for this. The first is that the chosen time period may not have allowed sufficient time for families to have second children, especially among those whose first child was born at the end of the time period. Analyses using longer time periods could test this. Second, membership in the matching service was motivated primarily by the parents, as the children were very young. Creating family through siblings rather than through extended family may not have factored prominently among parents who were just forming their own families. In

our experience, we have had quite a few parents in the matching service comment on their struggles with how to distinguish their own families from the matched family for their child while still wanting the contact (one parent specifically mentioned this in study 1). In contrast, among older children and adults with donor origins, a matching service may be particularly important as a way to create family among those who have desired but never had siblings. Thus, only children may be more likely to join such a service. This has yet to be tested.

Parents also described contact with their matched family as a way to gain further information about the donor and the children’s shared ancestry. We expected that families with open-identity rather than anonymous donors would be more likely to join the matching service because choice of open-identity donors tends to go along with a more general interest in the donor (2). Indeed, families with open-identity donors were overrepresented in the matching service. This effect was weak, however, due to our small and somewhat homogeneous sample: almost all the families were headed by lesbian couples and single women who tend to choose open-identity donors in this DI program. Although these results do not provide strong support for this motivation behind seeking contact, reports from the parents in study 1 and from elsewhere (32, 34) suggest that contact among families is likely motivated in part by the opportunity to get more information.

Implications for Other Family Matching Services

The link between having an open-identity donor and being more likely to join a family-matching service is likely limited to this DI program because recipients have a choice between open-identity and anonymous donors. For most families in the United States (and historically in DI internationally), donors are anonymous. Regardless of a recipient’s interest, information is limited with anonymous donors and can range from some nonidentifying information to nothing at all available. As such, many recipients who would have chosen open-identity donors, were the option available, could not do so, and now must find other ways to obtain information about their children’s donor and ancestry. Family-matching services in DI programs and registries offered by support organizations or governments (e.g., UK DonorLink at <http://ukdonorlink.org.uk>, Victoria Australia’s Donor Treatment Procedure Information Registers, or Western Australia’s Voluntary Register) (27) or by the families themselves (e.g., the Donor Sibling Registry, or BCDonorConception, <http://groups.yahoo.com/group/BCdonorconception>) provide critical tools in being able to get this information. We would expect then that in cases where both anonymous and open-identity donors were available, more of the families using these services/registries will have anonymous donors, but this has yet to be tested. We would also expect this bias among youth and adults with donor origins who are using a matching service; for these individuals, such a service sometimes can be the only way to get information about their donor and ancestry.

Clearly, multiple factors influence who joins a family-matching service and why. Another factor is parental openness and acceptance about having a donor. Parents who are uncomfortable about using DI and/or want to minimize the role of the donor in the child's life are less likely to participate in a matching service, in which the role of the donor is prominent. This applies to all parents, regardless of their sexual orientation or relationships status. In addition, parents who do not tell their child or others about using DI are unlikely to participate in the service. Although parents in our program tend to be more open about using DI, including the heterosexual couples (8), families who use anonymous over open-identity donors are the least likely to disclose in this sample. Even if parents are curious about the donor, the fact that their child does not know about his or her origins will limit the likelihood that they join the matching service. These factors likely account for why there were so few families headed by heterosexual couples and/or with anonymous donors in the current sample. Thus, a family's openness about having a donor and their interest in him are important considerations in understanding who joins a family-matching service and why.

Kinship in Donor Insemination

Interest in donor-linked families inevitably raises issues about kinship and terminology. Some parents struggle with how to describe a matched family to their children. Part of the issue is that they may not be ready or willing to ever acknowledge the family as kin or, alternatively, see the matched family as kin only to their children but not to themselves. Another is that we have no terminology to describe the relationship among these families, in which "the boundaries between the biological and social basis of kinship have become blurred" by DI (35, p. 194). Indeed, this struggle is not unique to donor-linked families. Sometimes DI families use awkward terms to describe the donor, who, to them, is more than a donor but less than a father (8, 12). He is not just "the donor" but is instead the "donor-dad" or "donor/biological father." Historically, the practice of DI with an anonymous donor has fractured the familial-by-shared-genes link between the donor and recipient family, providing no information about the donor and no way to contact him. A strong emphasis on the importance of socialization—who raises, loves, and lives with the child—over genetic ties, partly accounts for this. However, because secrecy has so long been a part of DI, along with persistent talk about which parent a child resembles (15, 36, 37), it is clear that genetic ties cannot be completely discounted (33, 35). Further, some DI offspring get a conflicted message that genetic ties are valued on their mother's side (or else why did their parent(s) not opt for adoption?) yet the value the child might place on the donor is downplayed or dismissed.

This does not necessarily mean that a donor should assume a parental role. His situation is not identical to genetically related parents raising a child, nor is it the same as a birth parent in adoption or an unnamed parent from an extramarital affair. It is like no other we have experienced in history. DI includes

conscious decisions by all participants, prior to conception, that the child will have a social parent to whom he/she is not genetically related, or will have only one parent intentionally, and that the male genetic progenitor will not have a social or legal parental role. Because of the significance held by genetic ties, however, it does mean that the donor may play a greater role for the offspring and/or the family than simply one who donates biological material (8, 12, 15, 33).

The role of the donor may be more important to the child than the parent(s) wishes to acknowledge out of a parental desire to protect the family unit. Interview findings and reports suggest that DI offspring can and do value their social parents and at the same time see a different role for the donor (9, 11, 12, 33, 38). Stevens summarizes this clearly: "My *real* father is the man who raised me. That's *real* to me ... There's a sperm donor and a parenting father and these roles both exist" (in 4, p. 13). With increased openness by families about using DI, we are only now grappling with how to describe the role the donor holds in a family and with what terms to describe him. These struggles extend to families who share a donor and acknowledge a genetic connection; they are not entirely clear on how to describe the relationship without the usual social components of family through marriages, shared experiences, and history. No doubt new terminology will evolve out of necessity to acknowledge these new types of donor-linked relationships.

Implications for Policy and Practice

With increased openness about donor conception comes the potential that individuals will want to know about and contact others who share the same donor. In this study, interest derived primarily from the desire to create extended family for the child and/or for information about the donor and the child's ancestry. As such, both anonymous and open-identity programs should expect that some families and offspring will request contact with donor-linked families, although the reasons for wanting contact may vary by program type. For example, open-identity programs might expect more families motivated by the desire to create extended family, whereas anonymous programs might expect more similar numbers of families with this motivation and those motivated by the need for additional donor information.

Programs that are receptive to contact requests should consider why families seek contact and prepare them for a range of possible experiences. Experiences likely will be very positive, but it is also possible that donor-linked families will have mismatched hopes for and expectations about contact. Other families will not want contact at all, and they should not be included in family matches. Alternatively, when programs are unwilling to help with contact, they should expect that families will turn to grassroots initiatives, governmental registries, or other means to find families with the same donor.

Current findings also hold implications for setting limits on the number of individuals or families that any one donor can

help create. Currently, American Society for Reproductive Medicine (ASRM) guidelines recommend that a donor be limited to no more than 25 births in a population of 800,000 (39), but in actuality limits vary substantially across programs. Internationally, limits vary as well (e.g., one birth per donor in Taiwan, 10 in the United Kingdom, 25 in the Netherlands; 40–42). For those who seek contact with donor-linked families, having the possibility of meeting several families may be very appealing. This number becomes daunting, however, when the number of individuals to whom one is related climbs from 5 to 30 or more. It is unclear how such high numbers will impact families. It is certainly something that will need to be addressed not only for the children's well-being but also for the effect on open-identity donors and their families (42, 43).

Study Limitations

When considering the current study findings, several limitations need to be kept in mind. One concerns the sample size of the families who responded to the survey in study 1. This sample was necessarily limited due to the criteria of including only families who had been matched to another family. In addition, the reports were not necessarily independent of each other because some of the families were matched to each other and thus would be reporting on a shared experience. We also know little about the families who chose not to participate in the study, and it is possible that their experiences were different and/or less positive than those who did participate. Thus, caution must be taken against generalizing the positive experiences reported here to all families who have contacted or in the future will contact each other. Clearly, more research is needed.

Our conclusions are also limited to families with young children, whose reasons for wanting contact are specific to the parents. Findings from a study of a matching service with adolescent or adult members with donor origins no doubt will provide additional insight into why people are interested in contacting others with the same donor.

CONCLUSIONS

Contact among families who share a donor will become more common as an increasing number of parents tell their children about their donor origins. This study provides the first empirical examination of contact experience among families and tests hypotheses about the reasons for wanting this contact. In this study, parents described wanting to create extended family for their children, either now or in the future, through contact with matched families, and being able to obtain new information about the donor and the children's shared ancestry, a finding consistent with recent personal reports. Comparisons of a larger sample of matching-service families to all families from the DI program provided support for the idea that contact serves to create extended family for the children and, to some extent, provides more information about the donor and children's ancestry. Questions remain, but the current

findings provide insight into the experience of contact among families with the same donor and indicate that it can result in positive experiences, with most families maintaining ongoing relationships.

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REFERENCES

1. Cordray B. A survey of people conceived through donor insemination. *DI Network News* 1999/2000;14:4–5.
2. Scheib JE, Riordan M, Shaver PR. Choosing between anonymous and identity-release sperm donors: Recipient and donor characteristics. *Reprod Technol* 2000;10:50–8.
3. Turner AJ, Coyle A. What does it mean to be a donor offspring? The identity experiences of adults conceived by donor insemination and the implication for counselling and therapy. *Hum Reprod* 2000;15:2041–51.
4. Franz S, Allen D, eds. Report to Health Canada: the offspring speak—an international conference of donor offspring. Toronto, Canada: Infertility Network, 2001.
5. Stevens B. Offspring. Toronto, Canada: Barna-Alper Productions, 2001.
6. Anonymous. How it feels to be a child of donor insemination. *BMJ* 2002;324:797–8.
7. Hewitt G. Missing links: identity issues of donor-conceived people. *J Fertil Couns* 2002;9:14–20.
8. Scheib JE, Riordan M, Rubin S. Choosing identity-release sperm donors: the parents' perspective 13–18 years later. *Hum Reprod* 2003;18:1115–27.
9. Vanfraussen K, Ponjaert-Kristoffersen I, Brewaeys A. Why do children want to know more about the donor? The experience of youngsters raised in lesbian families. *J Psychosom Obstet Gynaecol* 2003;24:31–8.
10. Ethics Committee of the American Society for Reproductive Medicine. Informing offspring of their conception by gamete donation. *Fertil Steril* 2004;81:527–31.
11. Allen D, ed. The future of donor conception: where do we go from here? Conference Proceedings. Toronto, Canada: Infertility Network, 2006.
12. Scheib JE, Riordan M, Rubin S. Adolescents with open-identity sperm donors: reports from 12–17 year olds. *Hum Reprod* 2005;20:239–52.
13. Daniels KR, Taylor K. Secrecy and openness in donor insemination. *Polit Life Sci* 1993;12:155–203.
14. Blyth E, Crawshaw M, Haase J, Speirs J. The implications of adoption for donor offspring following donor-assisted conception. *Child Fam Social Work* 2001;6:295–304.
15. Daniels K, Meadows L. Sharing information with adults conceived as a result of donor insemination. *Hum Fertil* 2006;9:93–9.
16. Kirkman M. Parents contributions to the narrative identity of offspring of donor-assisted conception. *Soc Sci Med* 2003;57:2229–42.
17. Lorbach C. Experiences of donor conception: parents, offspring and donors through the years. London, UK: Jessica Kingsley, 2003.
18. Engel E. Tracing half siblings from the same donor: the issues for counsellors. *J Fertil Couns* 2001;8:15–7.
19. Mar A. Who's their daddy? Sperm-donor kids find siblings via web site. *MTV News*, October 27, 2006.
20. Golombok S, Lycett E, MacCallum F, Jadva V, Murray C, Abdalla H, et al. Parenting infants conceived by gamete donation. *J Fam Psychol* 2004;18:443–52.
21. Greenfeld DA. Reproduction in same sex couples: quality of parenting and child development. *Curr Opin Obstet Gynecol* 2005;17:309–12.
22. United Nations. Convention on the Rights of the Child. Geneva: United Nations, 1989:Part 1, Article 8.
23. Feast J. Using and not losing the messages from the adoption experience for donor-assisted conception. *Hum Fertil* 2003;6:41–5.
24. Howe D, Feast J. Adoption, search and reunion: the long term experience of adopted adults. London: Children's Society, 2000.

25. Brewaeys A, de Bruyn JK, Louwe LA, Helmerhorst FM. Anonymous or identity registered sperm donors? A study of Dutch recipients' choices. *Hum Reprod* 2005;20:820–4.
26. Scheib JE, Cushing RA. Open-identity donor insemination in the USA: is it on the rise? *Fertil Steril*. Published online May 25, 2007.
27. Blyth E, Speirs J. Meeting the rights and needs of donor-conceived people: the contribution of a voluntary contact register. *Nordisk Sosialt Arbeid* 2004;24:318–30.
28. Gottlieb C, Lalos O, Lindblad F. Disclosure of donor insemination to the child: the impact of Swedish legislation on couples' attitudes. *Hum Reprod* 2000;15:2052–6.
29. Daniels KR, Lewis GM, Gillett W. Telling donor insemination offspring about their conception: the nature of couples' decision-making. *Soc Sci Med* 1995;40:1213–20.
30. Meeting the Half-Sibling. Donor Conception Network Web site. Available at <http://www.donor-conception-network.org/halfsib.htm>. Accessed June 2007.
31. Success Stories [forum]. The Donor Sibling Registry. Available at: <http://www.donorsiblingregistry.com/ListSuccess.php>. Accessed June 2007.
32. DiGirolamo L. Donor siblings. Our Family Coalition [newsletter], Summer 2006.
33. Vanfraussen K, Ponjaert-Kristoffersen I, Brewaeys A. An attempt to reconstruct children's donor concept: a comparison between children's and lesbian parents' attitudes toward donor anonymity. *Hum Reprod* 2001;16:2019–25.
34. Skelton C. Searching for their genes. *Vancouver Sun*, April 22, 2006.
35. Taylor B. Whose baby is it? The impact of reproductive technologies on kinship. *Hum Fertil* 2005;8:189–95.
36. Becker G, Butler A, Nachtigall RD. Resemblance talk: a challenge for parents whose children were conceived with donor gametes in the US. *Soc Sci Med* 2005;61:1300–9.
37. Daly M, Wilson MI. Whom are newborn babies said to resemble? *Ethol Sociobiol* 1982;3:69–78.
38. Scheib JE, Ruby A. Impact of sperm donor information on parents and children. *Sexual Reprod Menopause* 2006;4:17–9.
39. Practice Committee of the American Society for Reproductive Medicine, Practice Committee of the Society for Assisted Reproductive Technology. Guidelines for gamete and embryo donation. *Fertil Steril* 2006;86(Suppl):S38–50.
40. Wang C, Tsai M-Y, Lee M-H, Huang S-Y, Kao C-H, Ho H-N, Hsiao CK. Maximum number of live births per donor in artificial insemination. *Hum Reprod* 2007;22:1363–72.
41. Human Fertilisation and Embryology Authority (HFEA). Code of Practice. 6th ed. London, 2003. Available at http://www.hfea.gov.uk/docs/Code_of_Practice_Sixth_Edition_-_final.pdf. Accessed June 2007.
42. Janssens PMW, Simons AHM, van Kooij RJ, Blokzijl E, Dunselman GAJ. A new Dutch law regulating provision of identifying information of donors to offspring: background, content and impact. *Hum Reprod* 2006;21:852–6.
43. Crawshaw M. Lessons from a recent adoption study to identify some of the service needs of, and issues for, donor offspring wanting to know about their donors. *Hum Fertil* 2002;5:6–12.