

1 **Characteristics of men willing to act as sperm donors in the context of identity-release**
2 **legislation**

3

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5

6

Abstract

7

8 **BACKGROUND:**

9 Although ongoing legislative changes are important to protect the rights of all involved in
10 assisted reproductive technologies, it cannot be guaranteed that legislation will ensure the
11 successful operation of reproductive health clinics, as is indicated by ongoing reports of a dearth
12 of donor sperm in clinics in some countries.

13 **METHODS:**

14 Data were 1428 profiles taken from a website that aims to facilitate relationships between those
15 seeking donor sperm and men willing to donate their sperm. Data were coded as three
16 independent variables: age, relationship status and country, and four dependent variables:
17 motivation to donate, willingness to be identified, willingness to be involved with children
18 conceived of donations and beliefs about who should determine the level of involvement.

19 **RESULTS:**

20 Non-parametric testing indicated that men aged under 26 or over 46, and who were either single
21 or in a same-sex relationship, were most likely to be willing to be identified to children ($P <$
22 0.05), and to desire involvement with children ($P < 0.01$). A significant proportion of men aged
23 between 26 and 46 years of age ($P < 0.001$) were motivated by a desire to procreate and were
24 unwilling to be identified, as were a significant number of men in opposite-sex relationships ($P <$
25 0.001).

26 **CONCLUSIONS:**

27 Although limited by its reliance upon a sample constituted by men living in western countries
28 who completed a self-report profile and who had not received counselling about their potential
29 role as donors, this study draws attention to the potential impact of age and sexual orientation
30 upon intentions to donate.

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35

36 **Introduction**

37 For more than forty years, advances in assisted reproductive technologies have driven legislative
38 change, offering as they do radically new ways of conceptualising kinship, reproduction, and
39 rights (Thomson, 2005). It can not be assumed, however, that legislative change in all instances
40 will automatically promote the operations of reproductive health services. A good example of
41 this appears in the use of donor sperm. Whilst legislation has been introduced in many countries
42 to mandate for the release of identifying information about donors to children once they come of
43 age, and whilst this is a positive step for donor-conceived children, in many instances this has
44 resulted in an initial drop in the number of men willing to donate to clinics. Importantly, however
45 research indicates that the numbers of men willing to act as donors in the context of identity-
46 release legislation does gradually recover, albeit with a somewhat different demographic of men
47 (Blyth and Frith, 2008). The primary difference is that prior to the introduction of identity-
48 release legislation, a significant majority of donors have historically been younger men without
49 families of their own, whilst post the introduction of legislation to mandate identity-release this
50 has shifted to a larger proportion of donors being older married men with children of their own
51 (Daniels and Lalos, 1995). Whilst this shift accompanying legislative change is welcomed by
52 some on the basis that the latter group of men might be considered more ‘responsible’ donors
53 (Yee, 2009), it brings with it concerns over the potentially deleterious effects associated with
54 declining sperm quality in older men (Ng *et al.*, 1994).

55

56 Changes in the availability of donor sperm (and the particular groups of men now donating
57 sperm in the context of identity-release legislation) are compounded by other legislation
58 introduced to support the rights of a wider range of people to access donor sperm in many

59 countries (such as lesbian couples and single women). In other words, by allowing more people
60 eligibility to access donor sperm, there is now a much greater demand upon the already limited
61 resources available. As a whole, then, the issues identified here would suggest that whilst
62 changes to legislation across many countries have primarily aimed to better regulate the use of
63 assisted reproductive technologies involving donor sperm, they have also introduced new
64 constraints or issues for reproductive health clinics.

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67 In response to these problems arising from legislative change, other forms of legislation have
68 been introduced or are being considered in some countries (such as allowing for donors to be
69 reimbursed for their time when previously this was not the case. See Yee, 2009, for a discussion
70 of this in the case of Canada). Yet these responses are not only contested (e.g., see Daniels and
71 Lewis, 1996, in regards to payments to donors), but legislative change is often slow, and as the
72 discussion above would suggest, cannot solely be relied upon to effect the short-term change
73 required to meet the demand for donor sperm. As a result, the reality of the current shortage of
74 donor sperm in many western nations is one that must be acted upon in ways other than
75 legislative change. One readily available response to this shortage is to focus upon the
76 demographic characteristics that research indicates are associated with a willingness to donate
77 sperm in the context of identity-release legislation, and to target these groups of men.

78

79 Unfortunately, previous research on willingness to donate in the context of identity-release
80 legislation has produced mixed findings. Some of the research, for example, indicates that older,
81 married, heterosexual men with children of their own are more likely to be motivated to donate

82 for altruistic reasons (Daniels, Curson and Lewis, 1996), and that this group of men are more
83 likely to be willing to be identified to donor-conceived children in comparison to younger,
84 single, heterosexual men (Janssens *et al.*, 2006; Lui *et al.*, 1995; Thorn *et al.*, 2008). Contrarily,
85 other research has suggested that single heterosexual men are more likely than married men to be
86 willing to meet children conceived of their donations (Frith *et al.*, 2007). What appears to
87 mediate these two findings is the degree of contact considered reasonable by these differing
88 groups: married heterosexual men with children of their own report being willing to engage in a
89 one off meeting with children conceived of their donations, whilst single heterosexual men report
90 a greater willingness to have an ongoing relationship with such children (Godman *et al.*, 2006).
91 A further characteristic that has been investigated more recently are differences between
92 heterosexual and gay men in regards to their willingness to be identified and their motivations.
93 Research suggests that gay men, in general, are more willing to be identified, and that whilst
94 donating for altruistic reasons, may also donate as a way of staking an identity claim to paternity
95 if it is perceived that there are no other options available in this regard (Riggs, 2008; Ripper,
96 2008).

97

98 As the above summary would suggest, then, there are some discrepancies over what constitutes
99 an ‘ideal’ donor in the context of ongoing legislative change (particularly in regard to the
100 removal of anonymity for donors). The present research was developed in response to this, and
101 reports on findings drawn from a large sample of quantified data collected from 1428 profiles on
102 a world-wide sperm donor website that provides for the facilitation of relationships between
103 those seeking donor sperm and men willing to donate their sperm. The data are analysed utilising
104 non-parametric significance testing in order to explore what motivates these men to donate

105 sperm; whether this sample of donors want their identity to be disclosed to children conceived of
106 their donations; if they seek involvement with children following birth (and who they believe
107 should determine this involvement), and to examine the degree to which these variables are
108 associated with the potential donors' country of residence, age group, and relationship status.

109

110 **Method**

111

112 *Participants*

113

114 Participants were individuals whose profile appeared on the website sperm-donors-worldwide.com
115 during the months of March and April, 2009. Of the full number of profiles (N=2112), 1428
116 were included in the sample. Inclusion was determined by two factors: the completeness of their
117 profile (individuals were excluded if three or more responses of interest for the current study
118 were left blank), and their country of residence (only countries with 100 or more profiles were
119 included in order to ensure adequate numbers for statistical analysis). The countries represented
120 on the basis of these exclusion criteria were Australia, Canada, the United Kingdom, and the
121 United States.

122

123 Information pertaining to age was restricted to the categories available on the website, with
124 18.4% of the sample being in the age range of 18-25 years, 33.8% aged 26-35 years, 34.1% aged
125 36-45 years, 11.2% aged 46-55 years, and 2.6% aged 55+ years.

126

127 The majority of donors resided in either the UK 39.5% (564) or the US 39.4% (562), with 13.9%
128 (199) of the participants residing in Australia and 7.2% (103) residing in Canada.

129

130 Participants' relationship status was also recorded, with most participants reporting being single
131 (63.7%) with the remainder falling in the website category of 'in a relationship' (36.3%). This
132 latter category included two two sub-categories: 'in a same-sex relationship' (16% of those in a
133 relationship) or 'heterosexually married' (84% of those in a relationship).

134

135 No other information was available in the profiles that would provide further information about
136 the experiences or histories of the men listed on the website. Specifically, no information was
137 recorded in the profiles about whether men had donated previously (either in a private
138 arrangement or to a clinic), and no information was recorded about whether the men had
139 accessed counselling or other forms of support prior to expressing willingness to act as a sperm
140 donor (and the website itself does not offer this service).

141

142 *Materials*

143

144 Materials consisted of 1428 donor profiles, accessed in full upon purchasing one month's
145 membership to the website sperm-donors-worldwide.com. Due to the nature of the data, where
146 participants publish their profiles in the public domain, and where the data utilised were non-
147 identifiable, it was deemed that ethics approval was not required. Instead, permission to use the
148 site's profiles for the purpose of this study was gained via email from the site's creator (Emma
149 Hartnell-Baker of Queensland, Australia). Neither of the authors of the present paper had

150 previously (or since) made use of the website with the purpose of accessing donor sperm, nor did
151 the authors make contact with any potential recipients or donors listed on the website.

152

153 Sperm Donors Worldwide, also known as FSDW/DIY baby (Free Sperm Donors Worldwide/Do
154 It Yourself Baby), is a website designed to “help single women, lesbian and infertile couples
155 become pregnant using artificial insemination”. Men register as donors by placing their profile
156 on the site, which can be accessed by prospective recipient members of the site from across the
157 globe. Membership to the site requires a monthly fee, however the website is very clear in stating
158 that whilst it is nominally a commercial business (i.e., people looking for donor sperm pay to
159 access the profiles), the commercial aspects are limited to paying for the upkeep of the website
160 and the expenses of administering it. In other words, the owner of the website makes no money
161 *per se* from individual ‘matches’ between donors and recipients, and the website also clearly
162 states that its purpose is not to facilitate payment for sperm donation (which in some of the
163 countries listed on the site is currently illegal). Further, the site does not provide an insemination
164 service, but does offer information about self-insemination and links to self-insemination kits
165 which can be purchased online through third parties.

166

167 *Procedure*

168

169 Two of the independent variables chosen for analysis within this study – *age group* and
170 relationship status – were selected due to their significant predictive ability indicated by previous
171 research (Daniels, Curson and Lewis, 1996; Janssens *et al.*, 2006; Lui *et al.*, 1995; Thorn *et al.*,
172 2008). Whilst indicated as a potential predictor variable in previous research (i.e., Riggs, 2008),

173 sexuality was not included as the category was not included in profiles (though as will be
174 reported in the findings, coding for same or opposite-sex relationships could be validly coded,
175 and thus was used as a subset of the relationship status measure). Country of residence was also
176 included on the assumption that there may be differences between countries on the basis of
177 legislative differences.

178

179 The dependent variables of *Motivation*, *Identity-Release Status*, *Involvement with Offspring*, and
180 *Who Determines Involvement* were also chosen on the basis of previous research findings
181 (Daniels, Curson and Lewis, 1996; Janssens *et al.*, 2006; Lui *et al.*, 1995; Riggs, 2008; Thorn *et*
182 *al.*, 2008). Assessment of these variables was made through one of two ways: either specific
183 responses within profiles to questions that called for forced choice answers (this was the case for
184 *Identity-Release Status* and *Involvement with Offspring*), or the codification of open ended
185 responses provided in profiles (this was the case for *Motivation* and *Who Determines*
186 *Involvement*).

187

188 In regard to the forced choice response relating to identity-release status, potential donors had the
189 option of selecting one of three categories: *Known* (child can request information at age 18),
190 *Anonymous*, and *Undecided*. No further specific information was provided within the profiles as
191 to why men selected one of these categories (though it could be argued that at least in part their
192 motivations may explain this, however it was felt that making an extrapolation on this basis
193 would be rather tenuous, and hence no direct relationship was explored in subsequent analyses).
194 Donor desire for involvement or contact with offspring was also coded by the three forced
195 response categories on the website consisting of: *Desired*, *Limited Involvement*, and *None*.

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In developing the coding system for the variables of *Motivation* and *Who Determines Involvement*, 50 randomly selected profiles from the sample were initially analysed to determine preliminary categories based on common themes within these two variables. Specifically, common and similar profile responses were grouped under distinct and meaningful categories, comprising of similar terms, ideas and themes. This process was continued until saturation of responses was achieved within the 50 profiles selected. The categories generated for each of these two dependent variables were then compared against each of the remaining profiles to determine which best represented the open ended responses in each profile.

Categories generated for the variable of donor motivations consisted of: *Helping Others*, *Empathy*, *Valuable Genetics*, and *to Procreate*. *Helping Others* consisted of terms such as: ‘assist’, ‘facilitate’, ‘aid’, ‘give’, and ‘accommodate’, where donors primarily reported their motivation as seeking to help others. *Empathy* included terms or ideas such as: ‘empathy’, ‘understanding’, ‘experience’, ‘compassion’, and ‘awareness’, whereby donors typically reported being motivated by an understanding of the effects of fertility problems upon friends, colleagues, family members or partners. *Valuable Genetics* included terms such as: ‘good stock’, ‘precious’, ‘beneficial’, ‘quality’, and ‘valuable’, whereby donors reported being motivated by the belief that they had much to offer potential recipients and offspring as a result of their genes. *To Procreate* involved terms such as ‘reproduce’, ‘have babies’, ‘father a child’, ‘multiply’, and ‘show fertility’, and was described as a motive for donors who sought a chance to procreate, whether or not they sought to play a role in the child’s future.

219 Donor understandings of who should determine level of contact with any child conceived of their
220 donations was determined by their response to an open ended question presented after the
221 *Involvement* forced response question. The category of *Negotiable* included terms such as: ‘open
222 to discussion’, ‘agreement’, ‘mutual’, ‘needs talking about’, wherein donors were willing to
223 discuss their level of involvement with the recipient(s) of their donation and agree on a
224 comfortable arrangement. The category of *Parent’s Decision* consisted of terms such as:
225 ‘mother’/ ‘parent’s’ ‘choice’/ ‘wants’/ ‘desires’/ ‘request’, and indicated that donors were happy
226 to comply with the wishes of the recipient(s). The third category, *Child’s Decision*, was
227 comprised of comments such as: ‘child’s choice upon maturity’, and ‘child’s wishes’, whereby
228 donors were happy to be contacted if the child wished to meet them.

229

230 *Analytic Approach*

231

232 Analysis of the coded data was undertaken using the Statistical Package for the Social Sciences
233 (SPSS version 17.0), with multinomial logistic regression analyses employed to determine any
234 associations between the independent demographic variables (*country of residence, age-group,*
235 *and relationship status*) and the four dependent variables and their categories: *motivation,*
236 *identity-release status, involvement with offspring, and who determines involvement.*

237 Multinomial logistic regression analysis was employed due to its suitability to larger datasets as
238 well as its ability to process dependent variables with more than two categories (Pampel, 2000).

239 Multinomial regression analysis is further suited to categorical data as it examines specific
240 contrasts between the categories of each dependent variable as well as their relationship with the
241 independent variables. This, in turn, reduces the redundancy of repeated tests, and thus increases

242 the probability that associations between dependent and independent variables within the data
243 occur due to significant differences within the actual data set as compared to a hypothetical
244 population generated on the basis of a null hypothesis (Riggs, 2008)

245

246 Individual chi-square tests were also undertaken to explore more specifically the significance of
247 the association between the four dependent variables and independent demographic variables.

248 The assumption of chi-square, which states that no more than 20% of cells can have a cell
249 frequency count of less than 5, and that no cells may have a cell frequency count of zero, was
250 met for all chi-square analyses.

251

252 **Results**

253

254 *Motivation Variable*

255

256 When all of the variables were initially entered into a regression, the output indicated that donor
257 motivation was only predicted by age-group of the donor, and to a lesser degree, their country of
258 residence. The final regression model for motivation revealed that the association between the
259 combined independent variables included in the model (i.e., the two that were significantly
260 related to it – the remaining variable was excluded from the model) and the dependent variable
261 was a product of the dataset: $X^2(21, N=1355) = 60.29, p < 0.001$, where the combined effect of
262 the two variables accounted for just over half the variance amongst donors, Pseudo $R^2 = 0.55$.
263 Table I depicts the distribution of independent demographic variables: age group and country of
264 residence in relation to donor motivation.

265

266 INSERT TABLE I ABOUT HERE

267 In relation to country of residence, a significant association between country and motivation was
268 found, $X^2(9, N=1358) = 19.62, p < 0.05$, whereby men residing in all four countries were more
269 likely to donate in order to help others compared to other motivations. Secondly, men of all
270 countries were more likely to be motivated by a desire to procreate than due to empathy or a
271 perception of having valuable genetics, with the motivation of procreation most strongly
272 pronounced (after helping others) amongst men in the UK and US.

273

274 This pattern in motivations extended to age-group, whereby men of all age-groups were
275 significantly more likely to donate to help others, and to lesser degree to procreate, than to be
276 motivated by empathy or a perception of valuable genetics, $X^2(12, N=1355) = 44.79, p < 0.001$.
277 In regards to procreation as a motivation, this was most significantly associated with men aged
278 between 26 and 45 years of age.

279

280 *Identity-Release Status Variable*

281

282 When all of the variables were entered into the regression, the output indicated that donor
283 preference for identity-release status was only predicted by age-group and relationship status.

284 The other independent variable (country) did not contribute significantly to the variance
285 explained and therefore was excluded from the final model. The final regression model for
286 identity-release status revealed that the association between the combined independent variables
287 included in the model (i.e., those that were significantly related to it) and the dependent variable

288 was a product of the dataset: $X^2(10, N=1361) = 29.93, p < 0.05$, where the combined effect of
289 the variables accounted for almost half of the variance between donors, Pseudo $R^2 = 0.45$. Table
290 II depicts the distribution of relationship status and age-group in relation to identity-release
291 status.

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293 INSERT TABLE II ABOUT HERE

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295 Chi-square tests conducted on both of the independent variables in the final model demonstrated
296 the significance of the apparent differences in Table II, whereby men overall regardless of age
297 were willing for their identity to be known to children conceived of their donations, $X^2(8,$
298 $N=1415) = 15.63, p < 0.05$. For those who nominated to be anonymous, this was most
299 significantly associated with men aged between 26 and 46 years of age, with fewer men outside
300 of this age range seeking to be anonymous. This same pattern was repeated amongst men who
301 were undecided, who constituted overall the second largest group of respondents across all ages.

302

303 The overall effect observed in Table II also extended to relationship status, wherein all men,
304 regardless of relationship status, were significantly more likely to be open to identity-release
305 status compared to being anonymous or undecided, $X^2(2, N=1364) = 12.307, p < 0.01$. The
306 results also showed that single men were significantly more likely to display a preference for
307 identity-release or to be undecided, while those in a relationship were significantly more likely to
308 state a preference to be anonymous donors than would be expected in an even distribution.

309 Composition of relationship was further explored, with Table III depicting the distribution of
310 relationship composition (i.e. same sex or opposite-sex) in regards to identity-release

311 preferences. Chi-square analysis suggested that those in same-sex relationships were
312 significantly more likely to prefer to be known donors as opposed to anonymous or undecided,
313 while those in opposite-sex relationships were significantly more likely to prefer to be
314 anonymous or undecided rather than being known donors, $X^2(2, 368) = 23.91, p < 0.001$.

315

316 INSERT TABLE III ABOUT HERE

317

318 *Involvement with Offspring Variable*

319

320 When all of the variables were entered into the regression, the output indicated that donor
321 preferences for involvement with offspring were only predicted by donors' relationship status
322 and country of residence; Age-group did not contribute significantly to the variance explained
323 and thus was excluded from the final model. The final regression model for involvement
324 revealed that the association between the combined independent variables remaining in the
325 model and the dependent variable was a product of the dataset: $X^2(8, N = 768) = 32.740, p <$
326 0.01 , where the combined effect of the variables accounted for just over half of the variance
327 between donors, Pseudo $R^2 = 0.54$. Table IV depicts the distribution of these independent
328 demographic variables in relation to desired involvement.

329

330 INSERT TABLE IV ABOUT HERE

331

332 Chi-square tests conducted on both of the independent variables included in the final model
333 demonstrated the significance of the apparent differences in Table IV, whereby men overall

334 regardless of relationship status desired no involvement, $X^2 (2, N=768) = 8.35, p < 0.05$. The
335 overall effect observed in Table IV also extended to country of residence, wherein all men,
336 regardless of where they lived, were significantly more likely to seek no involvement with
337 children conceived of their donations compared to active or limited involvement, $X^2 (6, N=797)$
338 $= 12.43, p < 0.05$. For those who sought limited contact or actually desired contact, this was
339 most significantly associated with being single. In regard to relationship composition (i.e., same-
340 sex or opposite-sex), Table V depicts the distribution of composition of relationships in relation
341 to desired involvement. A Chi-square test revealed that men in same-sex relationships were
342 significantly more likely to desire active involvement with children conceived of their donations
343 compared to other involvement options, while men in opposite-sex relationships were
344 significantly more likely to desire no involvement compared to other involvement options than
345 would be expected in an even distribution, $X^2 (2, 217) = 87.42, p < 0.001$.

346

347 INSERT TABLE V ABOUT HERE

348

349 *Who Determines Involvement Variable*

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351 A multinomial logistic regression analysis revealed that who determines involvement was not
352 significantly associated with any of the independent variables. The data showed that the majority
353 of donors believed involvement should be determined by recipient parents (45.2%) and via
354 negotiation (49%), with only 5.8% feeling the decision should be left to the child, yet this finding
355 was not significant, $X^2 (16, N=563) = 22.46, p > 0.05$.

356 **Discussion**

357

358 The results from the present study confirm previous findings to some degree, whilst also offering
359 clarification about particular aspects of the association between demographic characteristics and
360 motivations, desire for involvement and willingness for identifying information to be released
361 amongst sperm donors.

362

363 In regards to motivations, the findings indicate that an altruistic motivation was the primary
364 motivation associated with men across all four countries and all age groups. This confirms the
365 emphasis upon altruism amongst donors as noted by Yee (2009), though the findings of the
366 present study suggest that a significant proportion of men aged between 26 and 45 were also
367 motivated by a desire to procreate.

368

369 In regards to openness to the release of identifying information to donor-conceived children, a
370 willingness to be known was associated with men across all ages and amongst both single men
371 and those in a relationship, thus confirming Blyth and Frith's (2008) suggestion that legislating
372 for identity release will not necessarily impact upon numbers of men willing to donate sperm *per*
373 *se*. Interestingly, however, and in regards to the findings of previous research that identity-
374 release legislation may impact upon the demographic of men willing to donate (i.e., a shift from
375 younger single men to older married men, see Daniels and Lalos, 1995), it is important to note
376 that the present research found that a higher proportion of men in relationships and men aged

377 between 26 and 45 preferred to be unknown compared to single men or men outside these age
378 ranges (the majority of whom were aged under 26). The findings did however confirm those of
379 Riggs (2008), in that men in same-sex relationships were more likely to consent to identity-
380 release than were men in heterosexual relationships.

381

382 Finally, and in regard to level of involvement with donor-conceived children, overall more men
383 were likely to nominate no involvement than any other level of involvement, thus supporting the
384 findings of Lui et al (1995) who found that the donors in their sample typically desired little
385 active or ongoing involvement with children conceived of their donations. It must be noted,
386 however, that the men who listed a profile on the website examined in this study were not
387 provided with any counselling or education about the possible need for contact on the part of
388 children conceived of their donations, which may well have influenced this finding. For those in
389 the present sample who did nominate involvement, single men and men in same-sex
390 relationships were most likely to desire involvement, with the latter finding confirming those of
391 Riggs (2008), who found that gay men were more likely than heterosexual men to desire
392 involvement with children conceived of their donations.

393

394 The findings presented here thus shed considerable light on some of the characteristics that
395 would indicate the most likely candidates for recruitment for donation in the context of identity-
396 release legislation (i.e., single men and men in same-sex relationships aged under 26 or over 45).
397 It must be noted, however, that in some countries clinics preclude potential donors who identify
398 as homosexual (Riggs, 2008; Kirkman, 2004). This would suggest the need for ongoing revisions

399 to legislation or clinical practice so as to ensure that such donors are made eligible. However, it
400 must also be noted that as men in same-sex relationships (and to a much lesser degree, single
401 men) are increasingly able to start their own families through surrogacy, foster care, adoption, or
402 shared parenting arrangements, these groups cannot necessarily be relied upon as a primary
403 source of recruitment for donor sperm. Nonetheless, legislative change to ensure equitable access
404 for all is both desirable and necessary.

405
406 Given that it cannot be relied upon that the groups identified above will continue to display the
407 same willingness to act as donors, it is important that clinics also consider ways of addressing the
408 barriers for other groups of men to be recruited as donors. In this regard, Frith et al. (2007, see
409 also Lui *et al.*, 1995; Riggs, 2009) suggest the need for better information about the emotional,
410 personal and social implications of sperm donation for potential donors, and that accessible
411 counselling and support services should be provided to men (both those who have donated and
412 those who are considering donating). This may be particularly so for those men in the 26 to 45
413 years age bracket, whose indecision about identity disclosure may at least in part be due to the
414 fact that this group of men may be exploring possibilities for starting their own families. Of
415 course such services should also be offered to men outside this age bracket, and particularly
416 younger men who may not have yet considered having children, but who may do so at a later
417 date and who may be negatively affected by previous choices about sperm donation.

418
419 Despite the utility of the findings presented here and the recommendations from them for
420 increasing the numbers of men willing to donate in the context of identity-release legislation,

421 several limitations must be noted. First, the profiles examined in this research were of men listed
422 on a website designed to facilitate free donation of sperm in private arrangements, but which
423 provides no information *per se* about the possible needs of children conceived from donor sperm.
424 As such, it is difficult to determine the extent to which the same patterns would apply to the
425 highly regulated ART clinic sector (which employs rigorous donor screening methods and
426 includes education and counselling requirements so that potential donors are fully aware of the
427 experiences of donor conceived children and their likely desire for contact when they come of
428 age). Moreover, it must be noted that information provided by the donors was self-reported and
429 thus must be interpreted with caution, as self-report may be likely to accentuate the level of
430 exaggeration and self-marketing undertaken by donors as they strive to attract potential
431 recipients and fulfil their potential individual motivations (Almeling, 2007). Second, since
432 exclusion criteria required that countries were represented by 100 donors or more, only four
433 countries - Australia, Canada, the UK and the US - were analysed. Due to these all being
434 westernised cultures, generalisability of the findings to other cultures must be undertaken with
435 caution, particularly since country of residence was found to play a role in predicting donor
436 motivations and desired levels of involvement.

437

438 Nonetheless, and in conclusion, whilst some of the trends identified in this paper may be
439 relatively time-limited and context-specific (i.e., they may be limited to westernised countries
440 and may change as more diverse groups of men are involved in having children than has been the
441 case in the past), clinics, policy makers, and researchers would do well to take note of the trends
442 identified, and to treat them seriously in the development of future donor sperm recruitment
443 agendas and for informing the support services provided to sperm donors themselves.

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445

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448

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492

493 Table I

494 *Frequencies for Motivation Variable*

	<i>Motivation</i>				
	Help Others	Empathy	Valuable Genetics	Procreate	Total
<i>Age-Group</i>					
18-25	211 (87%)	12 (5%)	2 (1%)	16 (7%)	241
26-35	335 (74%)	28 (6%)	18 (4%)	74 (16%)	450
36-45	330 (73%)	22 (4%)	18 (3%)	98 (20%)	468
46-55	98 (64%)	12 (8%)	4 (2%)	40 (26%)	154
55+	20 (54%)	3 (8%)	5 (14%)	9 (24%)	37
<i>Country</i>					
Australia	146 (78%)	12 (6%)	12 (6%)	21 (10%)	191
UK	390 (72%)	39 (7%)	17 (3%)	95 (18%)	541
US	418 (78%)	19 (4%)	14 (2%)	83 (16%)	534
Canada	63 (68%)	7 (8%)	4 (4%)	18 (20%)	92

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496

497 Table II *Frequencies for Identity-Release Status variable*

	<i>Identity-Release Status</i>			
	Known	Anonymous	Undecided	Total
<i>Relationship Status</i>				
Single	517 (59%)	100 (11%)	253 (30%)	870
In a Relationship	262 (53%)	130 (26%)	102 (21%)	494
<i>Age Group</i>				
18-25	174 (67%)	29 (11%)	58 (22%)	261
26-35	250 (53%)	91 (19%)	135 (28%)	476
36-45	257 (53%)	84 (17%)	141 (30%)	482
46-55	107 (67%)	20 (13%)	32 (20%)	159
55+	24 (65%)	3 (8%)	10 (27%)	37

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500 Table III

501 *Frequencies of Relationship Composition for Identity-Release Status variable*

	<i>Identity-Release Status</i>			
	Known	Anonymous	Undecided	Total
<i>Relationship Composition</i>				
Same-Sex	50 (83%)	1 (2%)	9 (15%)	60
Opposite-Sex	40 (14%)	177 (60%)	76 (26%)	293

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506 Table IV

507 *Frequencies for Involvement variable*

	<i>Involvement</i>			Total
	Desired	Limited	None	
<i>Relationship Status</i>				
Single	97 (14%)	153 (21%)	474 (65%)	724
In a Relationship	37 (10%)	97 (33%)	160 (57%)	294
<i>Country</i>				
Australia	14 (14%)	38 (36%)	52 (50%)	104
UK	60 (18%)	112 (35%)	152 (47%)	324
US	59 (16%)	100 (34%)	156 (50%)	315
Canada	4 (7%)	12 (22%)	38 (71%)	54

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510 Table V

511 *Frequencies of Relationship Composition for Involvement variable*

	<i>Involvement</i>			Total
	Desired	Limited	None	
<i>Relationship Composition</i>				
Same-Sex	36 (60%)	22 (37%)	2 (3%)	60
Opposite-Sex	67 (22%)	101 (35%)	125 (43%)	293

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