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

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Abstract

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

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

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

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

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Introduction

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

Changes in the availability of donor sperm (and the particular groups of men now donating sperm in the context of identity-release legislation) are compounded by other legislation introduced to support the rights of a wider range of people to access donor sperm in many
countries (such as lesbian couples and single women). In other words, by allowing more people eligibility to access donor sperm, there is now a much greater demand upon the already limited resources available. As a whole, then, the issues identified here would suggest that whilst changes to legislation across many countries have primarily aimed to better regulate the use of assisted reproductive technologies involving donor sperm, they have also introduced new constraints or issues for reproductive health clinics.

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

Unfortunately, previous research on willingness to donate in the context of identity-release legislation has produced mixed findings. Some of the research, for example, indicates that older, married, heterosexual men with children of their own are more likely to be motivated to donate
for altruistic reasons (Daniels, Curson and Lewis, 1996), and that this group of men are more likely to be willing to be identified to donor-conceived children in comparison to younger, single, heterosexual men (Janssens et al., 2006; Lui et al., 1995; Thorn et al., 2008). Contrarily, other research has suggested that single heterosexual men are more likely than married men to be willing to meet children conceived of their donations (Frith et al., 2007). What appears to mediate these two findings is the degree of contact considered reasonable by these differing groups: married heterosexual men with children of their own report being willing to engage in a one off meeting with children conceived of their donations, whilst single heterosexual men report a greater willingness to have an ongoing relationship with such children (Godman et al., 2006).

A further characteristic that has been investigated more recently are differences between heterosexual and gay men in regards to their willingness to be identified and their motivations. Research suggests that gay men, in general, are more willing to be identified, and that whilst donating for altruistic reasons, may also donate as a way of staking an identity claim to paternity if it is perceived that there are no other options available in this regard (Riggs, 2008; Ripper, 2008).

As the above summary would suggest, then, there are some discrepancies over what constitutes an ‘ideal’ donor in the context of ongoing legislative change (particularly in regard to the removal of anonymity for donors). The present research was developed in response to this, and reports on findings drawn from a large sample of quantified data collected from 1428 profiles on a world-wide sperm donor website that provides for the facilitation of relationships between those seeking donor sperm and men willing to donate their sperm. The data are analysed utilising non-parametric significance testing in order to explore what motivates these men to donate
sperm; whether this sample of donors want their identity to be disclosed to children conceived of their donations; if they seek involvement with children following birth (and who they believe should determine this involvement), and to examine the degree to which these variables are associated with the potential donors’ country of residence, age group, and relationship status.

**Method**

**Participants**

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

Information pertaining to age was restricted to the categories available on the website, with 18.4% of the sample being in the age range of 18-25 years, 33.8% aged 26-35 years, 34.1% aged 36-45 years, 11.2% aged 46-55 years, and 2.6% aged 55+ years.
The majority of donors resided in either the UK 39.5% (564) or the US 39.4% (562), with 13.9% (199) of the participants residing in Australia and 7.2% (103) residing in Canada.

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

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

**Materials**

Materials consisted of 1428 donor profiles, accessed in full upon purchasing one month’s membership to the website sperm-donors-worldwide.com. Due to the nature of the data, where participants publish their profiles in the public domain, and where the data utilised were non-identifiable, it was deemed that ethics approval was not required. Instead, permission to use the site’s profiles for the purpose of this study was gained via email from the site’s creator (Emma Hartnell-Baker of Queensland, Australia). Neither of the authors of the present paper had...
previously (or since) made use of the website with the purpose of accessing donor sperm, nor did
the authors make contact with any potential recipients or donors listed on the website.

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

Procedure

Two of the independent variables chosen for analysis within this study – age group and
relationship status – were selected due to their significant predictive ability indicated by previous
research (Daniels, Curson and Lewis, 1996; Janssens et al., 2006; Lui et al., 1995; Thorn et al.,
2008). Whilst indicated as a potential predictor variable in previous research (i.e., Riggs, 2008),
sexuality was not included as the category was not included in profiles (though as will be reported in the findings, coding for same or opposite-sex relationships could be validly coded, and thus was used as a subset of the relationship status measure). Country of residence was also included on the assumption that there may be differences between countries on the basis of legislative differences.

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

In regard to the forced choice response relating to identity-release status, potential donors had the option of selecting one of three categories: Known (child can request information at age 18), Anonymous, and Undecided. No further specific information was provided within the profiles as to why men selected one of these categories (though it could be argued that at least in part their motivations may explain this, however it was felt that making an extrapolation on this basis would be rather tenuous, and hence no direct relationship was explored in subsequent analyses).

Donor desire for involvement or contact with offspring was also coded by the three forced response categories on the website consisting of: Desired, Limited Involvement, and None.
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.
Donor understandings of who should determine level of contact with any child conceived of their donations was determined by their response to an open ended question presented after the Involvement forced response question. The category of Negotiable included terms such as: ‘open to discussion’, ‘agreement’, ‘mutual’, ‘needs talking about’, wherein donors were willing to discuss their level of involvement with the recipient(s) of their donation and agree on a comfortable arrangement. The category of Parent’s Decision consisted of terms such as: ‘mother’/ ‘parent’s’ ‘choice’/ ‘wants’/ ‘desires’/ ‘request’, and indicated that donors were happy to comply with the wishes of the recipient(s). The third category, Child’s Decision, was comprised of comments such as: ‘child’s choice upon maturity’, and ‘child’s wishes’, whereby donors were happy to be contacted if the child wished to meet them.

Analytic Approach

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

Multinominal logistic regression analysis was employed due to its suitability to larger datasets as well as its ability to process dependent variables with more than two categories (Pampel, 2000). Multinominal regression analysis is further suited to categorical data as it examines specific contrasts between the categories of each dependent variable as well as their relationship with the independent variables. This, in turn, reduces the redundancy of repeated tests, and thus increases
the probability that associations between dependent and independent variables within the data occur due to significant differences within the actual data set as compared to a hypothetical population generated on the basis of a null hypothesis (Riggs, 2008)

Individual chi-square tests were also undertaken to explore more specifically the significance of the association between the four dependent variables and independent demographic variables. The assumption of chi-square, which states that no more than 20% of cells can have a cell frequency count of less than 5, and that no cells may have a cell frequency count of zero, was met for all chi-square analyses.

Results

Motivation Variable

When all of the variables were initially entered into a regression, the output indicated that donor motivation was only predicted by age-group of the donor, and to a lesser degree, their country of residence. The final regression model for motivation revealed that the association between the combined independent variables included in the model (i.e., the two that were significantly related to it – the remaining variable was excluded from the model) and the dependent variable was a product of the dataset: $X^2 (21, N=1355) = 60.29, p < 0.001$, where the combined effect of the two variables accounted for just over half the variance amongst donors, Pseudo $R^2 = 0.55$. Table I depicts the distribution of independent demographic variables: age group and country of residence in relation to donor motivation.
In relation to country of residence, a significant association between country and motivation was found, $X^2 (9, N=1358) = 19.62, p < 0.05$, whereby men residing in all four countries were more likely to donate in order to help others compared to other motivations. Secondly, men of all countries were more likely to be motivated by a desire to procreate than due to empathy or a perception of having valuable genetics, with the motivation of procreation most strongly pronounced (after helping others) amongst men in the UK and US.

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

Identity-Release Status Variable

When all of the variables were entered into the regression, the output indicated that donor preference for identity-release status was only predicted by age-group and relationship status. The other independent variable (country) did not contribute significantly to the variance explained and therefore was excluded from the final model. The final regression model for identity-release status revealed that the association between the combined independent variables included in the model (i.e., those that were significantly related to it) and the dependent variable
was a product of the dataset: \(X^2(10, N=1361) = 29.93, p < 0.05\), where the combined effect of the variables accounted for almost half of the variance between donors, \(\text{Pseudo } R^2 = 0.45\). Table II depicts the distribution of relationship status and age-group in relation to identity-release status.

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

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

Composition of relationship was further explored, with Table III depicting the distribution of relationship composition (i.e. same sex or opposite-sex) in regards to identity-release
preferences. Chi-square analysis suggested that those in same-sex relationships were significantly more likely to prefer to be known donors as opposed to anonymous or undecided, while those in opposite-sex relationships were significantly more likely to prefer to be anonymous or undecided rather than being known donors, $X^2 (2, 368) = 23.91, p < 0.001$.

INSERT TABLE III ABOUT HERE

Involvement with Offspring Variable

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

INSERT TABLE IV ABOUT HERE

Chi-square tests conducted on both of the independent variables included in the final model demonstrated the significance of the apparent differences in Table IV, whereby men overall
regardless of relationship status desired no involvement, $X^2 (2, N=768) = 8.35, p < 0.05$. The overall effect observed in Table IV also extended to country of residence, wherein all men, regardless of where they lived, were significantly more likely to seek no involvement with children conceived of their donations compared to active or limited involvement, $X^2 (6, N=797) = 12.43, p < 0.05$. For those who sought limited contact or actually desired contact, this was most significantly associated with being single. In regard to relationship composition (i.e., same-sex or opposite-sex), Table V depicts the distribution of composition of relationships in relation to desired involvement. A Chi-square test revealed that men in same-sex relationships were significantly more likely to desire active involvement with children conceived of their donations compared to other involvement options, while men in opposite-sex relationships were significantly more likely to desire no involvement compared to other involvement options than would be expected in an even distribution, $X^2 (2, 217) = 87.42, p < 0.001$.

INSERT TABLE V ABOUT HERE

Who Determines Involvement Variable

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

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

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

In regards to openness to the release of identifying information to donor-conceived children, a willingness to be known was associated with men across all ages and amongst both single men and those in a relationship, thus confirming Blyth and Frith’s (2008) suggestion that legislating for identity release will not necessarily impact upon numbers of men willing to donate sperm per se. Interestingly, however, and in regards to the findings of previous research that identity-release legislation may impact upon the demographic of men willing to donate (i.e., a shift from younger single men to older married men, see Daniels and Lalos, 1995), it is important to note that the present research found that a higher proportion of men in relationships and men aged
between 26 and 45 preferred to be unknown compared to single men or men outside these age
ranges (the majority of whom were aged under 26). The findings did however confirm those of
Riggs (2008), in that men in same-sex relationships were more likely to consent to identity-
release than were men in heterosexual relationships.

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

The findings presented here thus shed considerable light on some of the characteristics that
would indicate the most likely candidates for recruitment for donation in the context of identity-
release legislation (i.e., single men and men in same-sex relationships aged under 26 or over 45).
It must be noted, however, that in some countries clinics preclude potential donors who identify
as homosexual (Riggs, 2008; Kirkman, 2004). This would suggest the need for ongoing revisions
to legislation or clinical practice so as to ensure that such donors are made eligible. However, it must also be noted that as men in same-sex relationships (and to a much lesser degree, single men) are increasingly able to start their own families through surrogacy, foster care, adoption, or shared parenting arrangements, these groups cannot necessarily be relied upon as a primary source of recruitment for donor sperm. Nonetheless, legislative change to ensure equitable access for all is both desirable and necessary.

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

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

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

The authors wish to acknowledge the sovereignty of the Kaurna people, the First Nations people upon whose land they live in Adelaide, South Australia.

References


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Table I

*Frequencies for Motivation Variable*

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Help Others</th>
<th>Empathy</th>
<th>Valuable Genetics</th>
<th>Procreate</th>
<th>Total</th>
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<td><strong>Age-Group</strong></td>
<td></td>
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<tr>
<td>18-25</td>
<td>211 (87%)</td>
<td>12 (5%)</td>
<td>2 (1%)</td>
<td>16 (7%)</td>
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<tr>
<td>26-35</td>
<td>335 (74%)</td>
<td>28 (6%)</td>
<td>18 (4%)</td>
<td>74 (16%)</td>
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<tr>
<td>36-45</td>
<td>330 (73%)</td>
<td>22 (4%)</td>
<td>18 (3%)</td>
<td>98 (20%)</td>
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<td>46-55</td>
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<td>12 (8%)</td>
<td>4 (2%)</td>
<td>40 (26%)</td>
<td>154</td>
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<tr>
<td>55+</td>
<td>20 (54%)</td>
<td>3 (8%)</td>
<td>5 (14%)</td>
<td>9 (24%)</td>
<td>37</td>
</tr>
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<td><strong>Country</strong></td>
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<td></td>
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</tr>
<tr>
<td>Australia</td>
<td>146 (78%)</td>
<td>12 (6%)</td>
<td>12 (6%)</td>
<td>21 (10%)</td>
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</tr>
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<td>UK</td>
<td>390 (72%)</td>
<td>39 (7%)</td>
<td>17 (3%)</td>
<td>95 (18%)</td>
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<td>US</td>
<td>418 (78%)</td>
<td>19 (4%)</td>
<td>14 (2%)</td>
<td>83 (16%)</td>
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<tr>
<td>Canada</td>
<td>63 (68%)</td>
<td>7 (8%)</td>
<td>4 (4%)</td>
<td>18 (20%)</td>
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### Table II Frequencies for Identity-Release Status variable

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<thead>
<tr>
<th>Relationship Status</th>
<th>Known</th>
<th>Anonymous</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>517 (59%)</td>
<td>100 (11%)</td>
<td>253 (30%)</td>
<td>870</td>
</tr>
<tr>
<td>In a Relationship</td>
<td>262 (53%)</td>
<td>130 (26%)</td>
<td>102 (21%)</td>
<td>494</td>
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</table>

### Table III Frequencies of Relationship Composition for Identity-Release Status variable

<table>
<thead>
<tr>
<th>Relationship Composition</th>
<th>Known</th>
<th>Anonymous</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same-Sex</td>
<td>50 (83%)</td>
<td>1 (2%)</td>
<td>9 (15%)</td>
<td>60</td>
</tr>
<tr>
<td>Opposite-Sex</td>
<td>40 (14%)</td>
<td>177 (60%)</td>
<td>76 (26%)</td>
<td>293</td>
</tr>
</tbody>
</table>
Table IV  
*Frequencies for Involvement variable*

<table>
<thead>
<tr>
<th>Relationship Status</th>
<th>Desired</th>
<th>Limited</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>97 (14%)</td>
<td>153 (21%)</td>
<td>474 (65%)</td>
<td>724</td>
</tr>
<tr>
<td>In a Relationship</td>
<td>37 (10%)</td>
<td>97 (33%)</td>
<td>160 (57%)</td>
<td>294</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Desired</th>
<th>Limited</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>14 (14%)</td>
<td>38 (36%)</td>
<td>52 (50%)</td>
<td>104</td>
</tr>
<tr>
<td>UK</td>
<td>60 (18%)</td>
<td>112 (35%)</td>
<td>152 (47%)</td>
<td>324</td>
</tr>
<tr>
<td>US</td>
<td>59 (16%)</td>
<td>100 (34%)</td>
<td>156 (50%)</td>
<td>315</td>
</tr>
<tr>
<td>Canada</td>
<td>4 (7%)</td>
<td>12 (22%)</td>
<td>38 (71%)</td>
<td>54</td>
</tr>
</tbody>
</table>

Table V  
*Frequencies of Relationship Composition for Involvement variable*

<table>
<thead>
<tr>
<th>Relationship Composition</th>
<th>Desired</th>
<th>Limited</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same-Sex</td>
<td>36 (60%)</td>
<td>22 (37%)</td>
<td>2 (3%)</td>
<td>60</td>
</tr>
<tr>
<td>Opposite-Sex</td>
<td>67 (22%)</td>
<td>101 (35%)</td>
<td>125 (43%)</td>
<td>293</td>
</tr>
</tbody>
</table>