

Supplementary Information:

The differences between embryo and gamete donation

Embryo donation is markedly different from both sperm and oocyte donation in a number of key respects. From a donor's perspective, donation of sperm or oocytes is a pre-meditated choice. Donation of embryos for family building, however, typically arises when the donors have undergone fertility treatment themselves and have unused cryopreserved embryos at the completion of their own treatment. These embryos may be perceived as their own potential children and, where their treatment has been successful, as potential siblings of their own children (de Lacey, 2005, 2007b; Nachtigall et al., 2005; Provoost et al., 2009, 2011; Goedeke and Payne, 2009; Paul et al., 2010; Stiel et al., 2010; Blyth et al., 2011; Kato and Sleeboom-Faulkner, 2011; Goedeke et al., 2015). Consequently, fertility patients with unused embryos may be unwilling to contemplate donating their potential genetic children and their children's potential siblings to be raised in other people's families (de Lacey, 2005, 2007a, b; Nachtigall et al., 2005; Provoost et al., 2009, 2011; Goedeke and Payne, 2009; Paul et al., 2010; Stiel et al., 2010; Blyth et al., 2011; Kato and Sleeboom-Faulkner, 2011; Goedeke et al., 2015). However, for some, it is precisely the conceptualization of their unused frozen embryos as the potential siblings of their children that motivates them to donate their embryos to others so that they may be afforded the opportunity of life (Elford et al., 2004; Paul et al., 2010). Where donation for family building is contemplated or undertaken, donors may experience a continuing sense of duty towards the welfare of any resultant children (Frith et al., 2011; Goedeke et al., 2015). This is shown in some potential donors' support for selection criteria for recipients including age, criminal history, educational level, financial status, sexual orientation, alcohol, tobacco and drug usage (Wånggren et al., 2013). While embryo donation may be 'technically straight-forward' (Janssens, 2009), 'very successful' and 'cost effective' (Hill and Freeman, 2011), it may be less attractive than other family building options for prospective recipient couples because neither of them would have a genetic relationship with any resultant child(ren) and there may be concerns about the implications of the child/ren having genetic parents and siblings living in other families (Nordqvist and Smart, 2014; Goedeke et al., 2015).

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