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The ART of performance: engaging young people with assisted reproductive technologies^{*}

Vasanti Jadva, Tatiana Vilsbol, Nadia Ayed, Susan Imrie, Catherine M. Jones, Nishtha Lamba, Anja McConnachie, Simone Vasques, Susan Golombok and Sophie Zadeh

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ABSTRACT

More children than ever before are conceived with the use of assisted reproductive technologies and many are raised in families that are structurally different from most. Research on the experiences of children growing up in diverse families has shown that children may face disapproval, a lack of understanding, and in some cases, bullying by those outside of their home environment, including from their peers at school This study evaluated the use of theatrical performance and postperformance discussions as a method of informing young people about different families. Findings indicated that performance was an effective and engaging learning tool, as it presented first-hand experiences of family diversity. Post-performance discussions were important in enabling young people to improve their understanding of different methods of Assisted Reproductive Technologies and diverse family forms. Young people were found to value engagement activities that are unbiased, interactive, and do not make them feel awkward or uncomfortable.

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Introduction

Infertility affects 1 in 7 heterosexual couples in the UK (National Health Service, 2017). Some of these couples may look to assisted reproductive technologies (ARTs) such as in vitro fertilisation (IVF), gamete donation or surrogacy to help them conceive a child. Medical advances in reproductive technologies have also enabled an increasing number of people who are not medically infertile, but who are either single or have a partner of the same sex, to have a genetically related child. For example, single women and lesbian couples can conceive a child using donor sperm, while single men and gay couples can achieve parenthood using either genetic surrogacy (where the surrogate's egg is used for the pregnancy) or gestational surrogacy with donor eggs. Furthermore, children may be raised in adoptive families headed by heterosexual couples, same-sex couples or a single parent. Indeed, in the United Kingdom, the number of families headed by single people, same-sex couples, and heterosexual couples who are choosing to cohabit rather than to marry have all increased over the last 20 years (Office for National Statistics, 2017). Thus, there are now a variety of ways in which families are created, and children are increasingly being raised in diverse family forms.

Just as different family forms are growing in number, definitions of what constitutes a family are also evolving (Correia & Broderick, 2009). Yet little research has focussed on what the public

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^{*}All authors are researchers from the Centre for Family Research, University of Cambridge, studying new family forms, predominantly families with children who have been conceived using assisted reproductive technologies. See www.cfr.cam.ac.uk

understand about family diversity in general, and their perceptions of families formed through the use of ARTs in particular (Hudson, Culley, Rapport, Johnson, & Bharadwaj, 2009). Much of the existing research has relied upon survey methods to establish what adults know and think about different types of technological assistance (for methodological exceptions, see Halman, Abbey & Andrews, 1992; Wagner et al., 2001). In the Bertarelli Foundation Scientific Board's (2000) research on public understandings of infertility and its treatment in six European countries, it was found that although the vast majority of participants in all countries were familiar with IVF, they were likely to significantly underestimate the number of couples for whom infertility is an issue. In terms of the perceived acceptability of fertility treatments, research based on a UK sample of 4012 adults (You-Gov, 2006) found mixed results with regard to support for IVF and other interventions, and significantly less support for the use of fertility treatment with donor sperm and/or eggs by same-sex couples and single women than for heterosexual couples.

The reasons for such differential support are not yet known. One possibility is that diversity in family life is perceived as potentially problematic for children's wellbeing. Indeed, Correia and Broderick's (2009) study, based on changes to the law in Victoria, Australia, enabling single women and lesbian female couples to access ARTs, found that such legislation was met with hostility from the public, whose opposition in part focussed upon the argument that children have a right to be raised by heterosexual, coupled parents to whom they are genetically related. Similar arguments about children's rights – and reduced welfare – were found in a UK study of national newspaper content published about single women using donor sperm between the years 1988–2012 (Zadeh & Foster, 2016). Yet studies of children growing up in families in which they lack a biological connection to one or both parents have generally found that the structure of the family and the method of children's conception is less important to children's psychological wellbeing than is the quality of parenting and the parent–child relationships that exist within these families (see Golombok, 2015, for a detailed review).

Given these findings, it seems possible that a lack of support for family diversity may be a consequence of a lack of information about the experiences of parents and children in different family types. However, attributing public attitudes to a lack of information runs the risk of assuming a 'deficit' in public knowledge about ARTs, without giving due attention to the significance that the public may attribute to specific sources of information about family diversity (Suldovsky, 2016). Relatedly, it has been suggested that levels of trust in different sources, such as the mass media, and trust in particular 'biotechnology actors', such as medical doctors, may be significant in determining levels of support for biotechnological innovation in general (Gaskell et al., 2001).

Along with the fact that few studies have examined what the public think and feel about family diversity, and the reasons behind their thoughts and feelings, little is known specifically about what young people understand about diversity in family life and ARTs. Research on the experiences of children growing up in diverse families has shown, however, that children may face disapproval, a lack of understanding, and in some cases, bullying by those outside of the home environment, specifically from their peers at school (Guasp, 2010; Leddy, Gartrell, & Bos, 2012; Raes et al., 2015; Van Parys et al., 2016; Vanfraussen, Ponjaert-Kristoffersen, & Brewaeys, 2002; Zadeh, Freeman, & Golombok, 2017). Accordingly, it has been suggested that greater understanding of family diversity by young people may alleviate some of the negative experiences that are faced by children being raised in families that differ from the traditional model (Zadeh et al., 2017).

In the field of health research, theatre has been shown to be an effective way of communicating scientific research findings to the public, as this method enables complex information to be disseminated and communicated in an engaging and entertaining way (Nisker, Martin, Bluhm & Daar, 2006; Gray & Sinding, 2002; Nisker, 2010; Rossiter et al., 2008). More specifically, theatre has previously been used to engage the general public with regard to reproductive technologies (Cox, Kazubowski-Houston, & Nisker, 2009; Nisker, 2010). A study by Cox et al. (2009) evaluated the effectiveness of theatre in informing and engaging members of the general public about Preimplantation Genetic Diagnosis (PGD), the genetic profiling of embryos prior to being implanted in the womb. The 130 👄 V. JADVA ET AL.

study found that in addition to providing information about PGD, the play and post-performance discussions also facilitated communication, which enabled participants to collectively question and construct knowledge of the topic that they did not previously have (Cox et al., 2009).

The present study had two aims: firstly, to evaluate the efficacy of using plays and post-performance discussions as a method of informing young people about different families, and secondly, to understand the qualities of an engagement activity that are seen by young people themselves to be important in their learning about different family forms.

Materials and methods

Participants

A school in the North of England, previously known to the authors, agreed to invite their students to take part. The participants were 23 young people aged 14–15 from one secondary school located in a large city in the North of England. Fifteen participants were female and 8 were male.

Procedure

The school was contacted to ask if they would be willing for their pupils to take part in a study day on the topic of family diversity. Twenty-three potential participants were selected by the school on the basis of their academic attainment and their parents were sent information about the event and asked for consent for their child to participate. All of the parents were happy for their children to take part.

The study day took place at the researchers' University. On the day of the event, young people were provided with an information sheet about the day, and asked for their written consent and verbal assent to participate in the study activities. Researchers were mindful to remind the group that they were under no obligation to take part, that alternative activities had also been arranged, and that, should they choose to participate, they could withdraw from the study at any time. All of the young people consented to take part.

Participants were asked to complete a short questionnaire asking whether they were familiar with a list of 6 terms (egg donation, sperm donation, embryo donation, donor conception, surrogacy and IVF), whether they thought being raised in a different family (headed by either a mum and a dad, two dads, two mums, a single mum, a single dad) would be as good as or not as good as other families they know, and whether they thought children raised in these different families would be the same or different from other children. Where relevant, participants were asked to explain their answers.

Participants were then shown two theatre pieces, each of five minutes in length, which were developed by young writers who had familiarised themselves with the research conducted by the researcher team. The first play, 'I'm an IVF Baby', by Grace Davis, was performed by 3 actors. The protagonist of the play is a young adult conceived using IVF who is currently making sense of her conception, while the other two characters offer opposing views about IVF, one describing IVF as a scientific breakthrough, and the other, describing it as unnatural. The second play, 'Free', by Michael O'Neill, tells the story of a young girl who finds a receipt detailing the amount of money her two gay fathers had paid for her birth using surrogacy. In this play, the protagonist's feelings are given prominence, with the plot focussing on her internal, conflicting thoughts, represented on stage by different actors.

After watching the plays, participants were divided into small groups of 4 or 5 for the purposes of post-performance discussions, which were designed in keeping with focus group methodology (Carey & Asbury, 2016). Each focus group was facilitated by two researchers, and based on a common topic guide (full topic guide available on request). One researcher led the discussion whilst the second took detailed notes and ensured that the guide was being followed. The questions covered two main areas. The first group of questions aimed to evaluate participants' thoughts about the plays, and included questions such as: What did you think of the play? What did you like about the play? What

didn't you like? How do you think the main character was feeling? The second group of questions probed for participants' views about effective ways of teaching young people about different family types, and included questions such as: From whom would you be most comfortable learning about different families? Do you think theatre is a good way of teaching people about different families? Which other methods would be good? For the latter two questions, prompt cards that detailed different methods of engagement (e.g. social media, lectures, newspapers) were used to facilitate discussion. Some cards were left blank and any new ideas that emerged from the discussion were written onto these. Each discussion lasted approximately one hour and provided participants with the opportunity to talk openly and in depth about their views on each play, and their ideas about how young people could be informed about different families.

At the end of the focus group, participants were asked to fill in the same questionnaire that they had completed at the beginning of the session.

Ethical approval was obtained from University of Cambridge Psychology Research Ethics Committee.

Data analysis

The focus group recordings were transcribed verbatim and anonymised. Thematic analysis (Braun & Clarke, 2006) of the transcripts was carried out by two researchers (TV and VJ) and was facilitated by the qualitative computer software package Atlas-Ti. Data from the questionnaires were analysed using paired samples t-tests to examine differences between the questionnaire responses before and after the activity.

Results

The results are presented in 3 sections. The first section describes findings relating to participants' views of the performances and the second section discusses participants' thoughts about the characteristics of an engagement activity that make it successful. These first two sections draw upon data obtained during the focus group discussions. The final section reports findings from the whole engagement activity (using data from the questionnaires and focus groups).

Characteristics that make theatre a good medium for learning about different family types

Two main themes emerged in relation to whether theatre was viewed as an effective method for learning about different families: (i) Providing a first-hand experience, and (ii) being an engaging format.

First-hand perspective

Across all focus groups, participants demonstrated a strong preference for first-hand perspectives for learning about different family types. Although the plays were based on fictional characters, several participants suggested that learning about ART families through someone's personal experience had had a great effect on their level of interest in, and retention of information about, the topic. It is possible that this medium also influenced their tendency to revoke negative stereotypes at the end of the project.

I like that it was kind of, showing what was going on in the person's head. So like, you got their perspective on what it was like first-hand.

Like, you see your [perspective] and you have your own judgment but you never actually think about what anybody else is thinking about it. Like, you actually saw what they think about. If that makes sense.

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Engaging format

Whatever the benefits were of presenting information from a first-hand perspective, participants reported that these were enhanced by the engaging, multimodal format of the plays. Some participants suggested that the visual presentation of information, particularly with an actor whom they perceived to be close to their age, made the emotional content easier to understand and relate to.

I feel like it was, maybe like, quite relatable because she was kind of like, our age. So it kind of made me feel about how maybe I would feel in that situation.

It shows emotions. Books and things, they don't show emotions. Plays, you can see how people feel. So you can see what they actually go through and what they think.

I think it makes you, like, it makes you feel more involved so you can have more of an opinion on it and feel more emotion about it.

One participant suggested that theatre may be more memorable than other sources of information because of its highly emotional, entertaining and visual nature.

Coz you can watch it and like, big dramatic movements and things that people say are more likely to stick in your mind than just statistics written on a piece of paper. So ... they sort of just stick in your mind ... to actually see that reaction on someone's face and how they talk and especially with like, the different views in her mind, walking around it, saying different things, it helps. It gets a lot of information in in quite a short time. So it's easier to remember and you can just think back on it.

This participant also suggested that theatre, as a non-academic means of engaging with the subject of families formed through ART, may be more amenable to discussion and sharing with peers:

It's like going to your friends and saying, 'I read a really good piece of paper yesterday', it's nothing ... they won't listen to you as much than if you say, 'oh, I watched a really interesting play about how someone found out about IVF; it was really, like, impactful and how she reacted made me feel really, strange.' There's more conversation there and you can get more people interested in the topic and they'll just want to learn about it. It's a fun way of learning.

Characteristics of engagement activities that could be successful for teaching young people about different family types

When probed about other methods through which they might enjoy learning about different family types, and the reasons for their choices, the young people in the study suggested three characteristics of effective information sources: (i) unbiased, (ii) interactive, and (iii) not awkward.

Unbiased

In general, participants raised several concerns about bias in the information they might receive about new family types. Although their suggested sources of trusted information varied widely (from teachers to celebrities to parents, with different opinions expressed about each source), participants were consistent in the markers used to identify what they called 'unbiased information'. They described such unbiased sources as typically factual, non-opinionated, and considering of different viewpoints. For example, one participant said:

I think it's easier for a teacher to understand and make sure you get the point across that everyone has a different opinion and that everything should be accepted. Whereas parents might be a bit more like, 'well, this is what I believe.' A bit more influential.

Another participant suggested:

I feel like your parents would be a lot more open-minded, so if they're talking about different family forms that, you know having in mind that you could be in a different type of family when you're older, I feel like they'd include a lot more aspects of it so that you could get a better understanding. And so it's not just closed off. You do understand everything a bit better.

Participants' concerns about bias mainly seemed to relate to the worry that they would not be able to make their opinion before having someone else's views imposed upon them:

Facilitator: What might be a bad thing about learning about different families from your sibling?

Participant: Because they're older ... they might give you a view before you can make your own.

Participants' emphasis on unbiased information, and the characteristics that they believed made information 'unbiased', may help to explain their strong preference for learning through first-hand experiences, and receiving information from members of new family types themselves, the latter of which was mentioned a total of 29 times across the 4 focus groups. Indeed, personal experience fulfils the above criteria in that it is factual (each story contains facts about that family's journey), non-opinionated (to the extent that it remains focused on the individual rather than general issues relating to ART), and presenting a diversity of viewpoints (owing to the uniqueness of every human story).

Interactive

Participants also expressed their preference for interactive formats that allowed them, or others, to ask questions that they perceived to be relevant to developing their understanding and satisfying or clarifying their individual curiosities and misconceptions about diverse family forms.

Maybe also meeting people from different families because then you can, like, ask them questions. Whereas with, like, social media and stuff you can't really ... they won't really always answer your questions but they will just kind of like tell you about it.

The same finding was highlighted in an interaction between three participants in one of the focus groups:

You can like, discuss your own opinions [with friends] so then other people learn about what your opinion is and they can ...

It doesn't need to be formal, it can just be like, in a normal conversation.

You're comfortable with them. Like, you feel like, especially with your close friends, you can bring up a lot of points and they'd respect them.

Furthermore, participants showed interest in interactive formats that they also deemed to be safe spaces in which they would have the opportunity to form their own opinions. Here, the same concern for forming unbiased views about these topics was expressed in their stated preference for contexts in which they could test their own ideas or opinions as a way of learning and grappling with new information, whilst being unconstrained by group pressures, including the need to conform to any particular view (whether expressed by parents, a teacher, or peer group members).

If you're like the only one out of the whole [friendship] group with a different opinion you might be pressured into having the same opinion as the others. In like, class discussions if you're in school, you like, learn other people's opinions and somebody else might have the same opinion as you so you feel like you're not the only one.

Not awkward

Finally, participants described the need to feel close enough to their source of information so as to not feel embarrassed or awkward about discussing specific issues or having their questions answered. Participants perceived awkwardness, a defining feature of relationships that were not especially close in nature, as a barrier to exploring and understanding new family types.

It's already comfortable. So like, you can kind of be yourself with your siblings so it wouldn't be an awkward situation and you could talk more in depth about it, rather than maybe with a parent, which can be maybe a bit awkward.

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Like, serious conversations with parents are awkward. It's like, you kinda want to go and so you might not really listen very well.

Because when you're with friends you feel more comfortable talking about ... coz you're meant to speak like that with your friends.

Much variation was found amongst participants with regard to which relationships were considered comfortable for the purposes of learning about different family types. For some, this was parents, but not siblings; for others, the reverse seemed to be the case. It was also evident that some relationships were considered close enough to be a safe space to discuss these themes, but were perceived to fall short on other important dimensions. For example, discussions with friends could be comfortable, but also a place where per pressure and bias could arise.

Given the importance attributed to unbiased information, some participants also described how going beyond comfortable ties to obtain information could sometimes be worthwhile:

Yeah. Coz if it's someone you're not tied as closely to, it's ... you might feel like you can talk to them about, kind of outside views that you wouldn't talk to your friends or parents about, and so, they'd hear you out about it rather than have to bring it up more formally to someone that you know.

Theatre and focus groups as a method of informing young people about the experiences of children raised in diverse family forms

Most (18, 78%) of the participants reported an increase in their awareness or understanding of different types of ART or family forms as a result of their participation in the project. There was a significant difference in the number of terms participants knew the meaning of before the event (mean = 3.3, SD = 1.22) and after the event (mean = 4.7, SD = 1.01); t (22) = -5.464, p < .001). There was a significant difference between the number of pupils who felt children in different families would be the same as others before the event (mean = 7.56, SD - 2.41) and after the event (mean = 9.43, SD = 1.20); t = 22 = 4.235, p < .001). Although the mean number of families viewed as being just as good as other families increased from before (mean = 3.52, SD = 1.6) to after (mean = 4.13, SD = 1.54), this difference was not found to be significant. Tables 1 and 2 show the frequency data for these latter two questions.

Thematic analyses of the open-ended responses to questions asked in the questionnaire and the evaluation form highlighted three themes relating to how the engagement activity had informed young people. These were (i) Increasing factual understanding of different methods of assisted reproduction and different family forms, (ii) Clarifying misconceptions and overturning stereotypes, and (iii) Creating understanding of first-hand experience.

Increasing factual understanding

Among those participants who felt that the event had enabled them to learn about terms and family types that they did not know about before, few mentioned the play as the source of their learning. A greater number of participants mentioned the day as a whole, or friends, as the source of their increased knowledge, suggesting that while the play may have introduced participants to new

Table 1. Responses to question 'In your opinion, what would it be like to be raised by the following, compared to other families you know?'.

	Mum and dad		Two dads		Two mums		Single mum		Single dad	
	Before	After	Before	After	Before	After	Before	After	Before	After
Just as good	23	22	14	19	14	18	15	18	15	18
Not as good	0	1	3	1	3	1	7	3	7	3
Not sure	0	0	6	2	6	4	1	2	1	2
Missing	0	0	0	1	0	0	0	0	0	0

	Same		Diffe	rent	Not sure	
	Before	After	Before	After	Before	After
Made through IVF	14	23	2	0	6	0
Made using a sperm donor	19	23	2	0	1	0
Made using an egg donor	20	23	2	0	1	0
Made using an embryo donor	14	21	1	0	8	2
Made using a surrogate	17	23	0	0	6	0
Raised by a mum and dad	22	22	0	1	0	0
Raised by two dads	14	21	5	1	4	1
Raised by two mums	14	21	5	1	4	1
Raised by one mum	20	20	3	1	0	2
Raised by one dad	20	20	3	1	0	2

Table 2. Responses to question 'What about the children? Do you think children will be the same or different from others if they are ... '.

terms, the clarifications that were most useful to them emerged during post-play discussions with peers and/or the researchers present.

Clarifying misconceptions, overturning stereotypes, reinforcing sense of shared experience

Many participants were sympathetic to different family types at the start of the project. Of the minority of participants (n = 7) who held negative stereotypes, and the smaller number who were unsure about their feelings about particular family configurations (n = 4), most revised their position after the play and the post-play discussion activity of the project. For example, one participant initially responded that child outcomes would be 'not as good' in families headed by two dads, two mums, a single mum, or a single dad:

If you are raised by two dads or two mums, it could make it different because there are two of the same genders influencing you to do things, which means there isn't a balanced education of two genders.

But later wrote:

As long as you have a happy childhood, I believe that it doesn't really matter ... I believe that children will be the same, because they are all humans.

Indeed, the questionnaire data collected at the end of the focus groups contained many references to shared humanity (n = 8), with several participants emphasising the 'sameness' of the experience of those born into different family types and those born into traditional family forms (n = 5), in contrast to responses provided before the plays and post-performance discussions. For example, participants wrote:

It's no different because you're still loved by them [parents] just as much as if you were a 'stereotypical family'.

I think all children will be the same with all of the options. I don't think it matters if you are made through IVF or whatever, as long as you have a family and they are there for you.

Creating understanding of first-hand experience or feelings

For many participants, this project was their first opportunity to explore new family types through the perspective of a young person conceived through ARTs. Many participants reported that they had gained some knowledge of the facts about ART through school and other channels, but few had explored what it might feel like to be a child conceived through IVF, or born through surrogacy.

When we're learning about it at school it's not really how the children feel and that's what, kind of, kind of surprised me about the plays because I didn't really think about how they would feel when they found out.

It made me think more about how when somebody is born in a different way to what's natural, if society's views are against that way it makes them feel not quite great and it confuses them because they obviously grew up like that and you can understand it ... It can make them question about themselves ...

Discussion

This study found that theatre may be perceived by young people as an effective and engaging means of learning about family diversity that also captures first-hand experiences. However, the post-performance focus group discussions were also important in enabling participants to improve their understanding of different methods of ART and family forms. Similar to the findings of Cox et al. (2009), results from the present study seem to suggest that the post-play discussion groups, where participants were able to further explore their ideas, ask questions, and listen to, as well as challenge others, provided the opportunity for collective improvement in understanding. Elsewhere (Day, 2002), it has been noted that theatre interventions are less successful when not accompanied by follow-up activities. Despite the limitation that the present study offers only an initial insight into the means through which a small sample of young people seemed to most effectively engage with the topic of family diversity through theatre, findings would appear to lend support to the inclusion of post-performance Q&A sessions, or other opportunities for discussion that aims to invite reflection, facilitate communication, and increase understanding, about this topic.

Given that theatre on its own may be less effective than when accompanied with post-performance opportunities that facilitate communication, it is noteworthy that other studies have established classroom teaching to be an effective method of facilitating young people's learning about different biotechnologies (Van Lieshout & Dawson, 2016). This raises the question of what purpose, if any, theatre serves in engagement. However, unlike teaching, which has been shown to improve understanding without necessarily affecting the levels of support for particular biotechnological applications, such as genetic testing (Van Lieshout & Dawson, 2016), theatre has been found to lead to a change in the attitudes of young people towards other biomedical issues, such as AIDS (McEwan, Bhopal, & Patton, 1991). Similarly, the findings of this study highlight that the combination of performance and post-performance discussions may have had an impact on young people's ethical judgements about diversity in family life. In particular, the findings demonstrated that as participants began to imagine the feelings of those who were born through ART, they developed an understanding of how the perceptions and actions of peers, and indeed wider society, might affect those who are growing up in diverse family forms. Moreover, unlike previous findings that people with high levels of knowledge about biotechnological interventions are both the most enthusiastic, and the most skeptical, about such techniques (Jallinoja & Aro, 2000), the participants in this study were either more positive, or equally positive, about diversity in family life after the engagement activity, with most emphasising that those from different family types shared the same emotions and fundamentals of family life and human experience as they did.

Interpreting these findings, and especially, which aspect of the engagement activity specifically impacted upon participants' perspectives, is difficult. However, it is noteworthy that other scholars have established that theatre may enhance viewers' feelings of empathy (Holland, 2009; Verducci, 2000). Similarly, the results from the present study would seem to suggest that theatre and storytelling are means by which young people may better empathise with how members of different types of families may feel. Given the negative experiences and bullying some young people face because of their family type, projects that enable young people to understand the first-hand experience of someone who is different from them, as well as reflect on the impact of their – or other people's – actions, could be particularly effective in improving the experiences of young people being raised in different family forms.

This study also highlighted the characteristics of an engagement activity perceived by young people to be important in facilitating their learning about family diversity. Importantly, no one medium or source of information was most valued amongst all of the participants. Yet, the majority of participants described that the engagement activity should be unbiased, allowing young people themselves to make up their own mind, it should be interactive, providing them with an opportunity to develop their understanding and clarify misconceptions, and finally, it should provide information in a comfortable way that does not make them feel awkward. Beyond the existing emphasis in the literature on the public understanding of science that 'trust' in the source of information may be significant (Gaskell et al., 2001), it seems that there are in fact several features of such sources that young people consider in their evaluations of effective methods of learning. It is noteworthy that the present study established the significance young people placed upon being able to discuss and deliberate over issues in a democratic, open forum: features that have also been deemed essential to learning about controversial issues in the school curriculum (Levinson, 2007).

The main limitation of this study was that all the participants were pupils at one secondary school. Although this limitation was the result of the practical challenges involved in bringing together all the actors and focus group facilitators on a single day, it would be important to replicate the study to assess how representative the findings are of young people's views more generally. Similarly, the fact that the school selected potential participants for the study based upon their academic attainment presents a limitation insofar as whether or not theatre would also be effective and engaging for less academically able students is not known. For future research, details of the issues faced in conducting the present study may be instructive. It is worth highlighting, for example, that the planning needed for such an event, including the requirement of actors, rehearsal space, and focus group facilitators, as well as the financial cost involved, were particularly challenging. Furthermore, the difficulties in finding a school interested in participating was also more problematic than originally anticipated. Whilst some of these difficulties resulted from practical challenges of finding a reliable contact within a school, it is noteworthy that at least one of the schools initially contacted did not wish to take part because of the nature of the topic being discussed. However, despite the challenges faced, it is also noteworthy that the activity seems to have had an unexpected longer term impact upon the young people who participated; the school later reported how their pupils had excelled in their learning following their visit, particularly in their religious education classes where they had been studying the topics of family life and fertility treatment.

Although this study established that individuals may have different preferences with regard to the provision of information about family diversity and ARTs, the findings seem to generally suggest that they are engaged by theatre, perhaps most of all as an introduction to learning about this topic. Although the costs of public engagement projects that employ theatre to teach about different family types are high, the results of this small-scale study indicate that when accompanied by facilitated discussions, this method can act as an effective means of stimulating empathy as well as imparting information about different family types. It is possible that videos that share the same characteristics as a piece of theatre (engaging, humorous, personable characters, story-form), when combined with discussions that allow young people to explore their own opinions in a safe, confidential and respectful environment, would be an effective and scalable way of achieving the same outcomes.

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