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[title] **Comparing Non-Medical Sex Selection and Saviour Sibling Selection in the Case of *JS and LS v Patient Review Panel: Beyond the Welfare of the Child?***
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Abstract The national ethical guidelines relevant to assisted reproductive technology (ART) have recently been reviewed by the National Health and Medical Research Council (NHMRC). The review process paid particular attention to the issue of non-medical sex selection, although ultimately, the updated ethical guidelines maintain the pre-consultation position of a prohibition on non-medical sex selection. Whilst this recent review process provided a public forum for debate and discussion of this ethically contentious issue, the Victorian case of *JS and LS v Patient Review Panel (Health and Privacy)* [2011] VCAT 856 provides a rare instance where the prohibition on non-medical sex selection has been explored by a court or tribunal in Australia. This paper analyses the reasoning in that decision, focusing specifically on how the Victorian Civil and Administrative Tribunal applied the statutory framework relevant to ART and its comparison to other uses of embryo selection technologies. The Tribunal relied heavily upon the welfare-of-the-child principle under the *Assisted Reproductive Treatment Act 2008* (Vic). The Tribunal also compared non-medical sex selection with saviour sibling selection (that is, where a child is purposely conceived as a matched tissue donor for an existing child of the family). Our analysis leads us to conclude that the Tribunal's reasoning fails to adequately justify the denial of the applicants' request to utilize ART services to select the sex of their prospective child.

Keywords Assisted reproductive technology; Sex selection; PGD; Saviour siblings; Health law; Selective reproduction

Introduction

The Australian National Health and Medical Research Council (NHMRC) recently reviewed the moratorium on non-medical sex selection in Australia, as part of its review of the national ethical guidelines concerning assisted reproductive technology (ART) (See NHMRC 2015). The outcome of this process resulted in the publication of the revised *Ethical guidelines on the use of assisted reproductive technology in clinical practice and research* (NHMRC 2017). Notably, these guidelines continue to prohibit non-medical sex selection in Australia (NHMRC 2017, ¶8.14.1). Although this review has not resulted in a change of policy concerning the specific issue of non-medical sex selection, the review process generated significant public debate around the question of whether this practice should be permitted, and if so, in what circumstances this might be ethically permissible. Given that most of the public discussion and debate concerning the review of the ART guidelines focused on the issue of non-medical sex selection, we think that it is likely to re-emerge as a topic for discussion again in the future. For now, however, it is clear that the practice is not generally permitted in Australia under national ethical guidelines.

A public consultation or review process of this kind is not unusual in terms of determining whether such a sensitive ethical practice should be permitted; non-medical sex selection has also been carefully reviewed and considered further afield. For example, the United Kingdom's Human Fertilisation and Embryology Authority (HFEA) undertook a consultation on the topic and published a report in 2003 which recommended that the practice should not be permitted in the United Kingdom—a conclusion that was heavily influenced by the weight of public opinion against such practices (HFEA 2003). When the U.K. legislative scheme was updated in 2008, this prohibition was given statutory footing (*Human Fertilisation and Embryology Act 1990* (UK) Sch 1, Para 1ZB(1)). Similarly, non-medical sex selection is prohibited in New Zealand (*Human Assisted Reproductive Technology Act 2004* (NZ) s 11(1)). On this basis, it is clear that there is a variance in terms of how the practice is regulated between different jurisdictions, with some jurisdictions passing legislation to completely prohibit non-medical sex selection and others leaving the matter to be determined by reference to ethical guidelines.

Although the NHMRC's review of the prohibition on non-medical sex selection is relevant in a national sense, our focus in this paper concerns the regulatory position in Victoria. This is because the position in Victoria is unique in terms of the Australian regulatory landscape relevant to non-medical sex selection. As outlined below, s 28 of the *Assisted Reproductive Treatment Act 2008* (Vic) (the ART Act) prohibits all sex selection practices unless there is either a medical need (in terms of avoiding transmission of a sex-linked disorder) or the state's Patient Review Panel (the Panel) approves selection in favour of a particular sex. Thus, although the legislative regime contains a prima facie prohibition on non-medical sex selection, it provides the Panel with a discretionary power to allow the practice—an approach that is not adopted in any other Australian jurisdiction. The Victorian case of *JS and LS v Patient Review Panel (Health and Privacy)* [2011] VCAT 856 (*JS and LS*) offers a rare instance where the prohibition on non-medical sex selection has been explored by a court or tribunal in Australia. This case involved an application by a couple to the Victorian Civil and Administrative Tribunal (the Tribunal) for review of a decision by the Panel, following the Panel's refusal to allow preimplantation genetic diagnosis (PGD) for non-medical sex selection. The couple were seeking permission to use PGD services for the purpose of selecting a child of one particular sex. The wish to conceive a child of this sex stemmed from the fact that the couple previously had a child of that same sex, who had died. The couple's other children were all of the opposite sex to that they were seeking to select. The couple attempted to persuade the Tribunal that selection in favour of the desired sex would help them move on psychologically, following the death of their child. The Tribunal dismissed the application on the basis that sex selection would not be in the best interests of the child to be born. What is particularly interesting about the Tribunal's reasoning is that it drew a comparison between non-medical sex selection and selecting a so-called "saviour sibling" for an ill child (a child who is purposely conceived using embryo selection technologies as a matched tissue donor for an existing child of the family). Although the Tribunal acknowledged that saviour sibling selection did not focus squarely on the welfare and interests of the child to be born, it deemed this practice to be morally more acceptable than non-medical sex selection.

In this article, we critically examine the Tribunal's reasons for denying the couple's application to scrutinize PGD for non-medical sex selection. In particular, we scrutinize the reliance by the Tribunal on the welfare-of-the-child principle in the ART Act as a basis for refusing PGD for non-medical sex selection. Before undertaking this analysis and to provide an outline of the relevant regulatory context, in the second part of this paper we provide an

overview of PGD regulation in Australia, focusing specifically on non-medical sex selection and saviour sibling selection. In part three, we outline the facts and reasoning of the Tribunal in the case of *JS and LS*. Our analysis of the decision is then undertaken in part four of this paper where we argue that the reasoning of the Tribunal is flawed on two key bases. The first is that the Tribunal did not clearly articulate how non-medical sex selection in this particular case was contrary to the legislative framework or contrary to the welfare-of-the-child principle, which is a key principle guiding the application of the Act. As we argue, the Tribunal's application of the welfare principle was based largely on general ethical concerns about non-medical sex selection. Second, given that the Tribunal's refusal in this case was based on its interpretation of the welfare-of-the-child principle, we also argue that non-medical sex selection is no more contrary to this principle than when applied to other types of selective reproduction (particularly the case of saviour sibling selection, which the Tribunal made reference to). We conclude that, although non-medical sex selection raises legitimate concerns about a slippery slope toward "designer babies," the Tribunal failed to adequately articulate why non-medical sex selection should not be approved under the ART Act in this case.

To clarify, the analysis that follows in this paper is not intended to serve as an evaluation of non-medical sex selection more generally. Instead, we aim to provide an evaluation of the reasoning of the Tribunal in the decision concerning *JS and LS* to demonstrate some of the inconsistencies in the Tribunal's reasoning around selective reproduction. And most significantly, we assess the extent to which the Tribunal's reasons for prohibiting the couple's request accord with the Victorian ART legislative framework. This has practical importance given that the Panel has endorsed the decision of the Tribunal in its guidance note on sex selection (Patient Review Panel 2013). Based on the reasoning that follows, we argue that this guidance is based on misapplied ethical reasoning.

The Regulatory Landscape Relevant to Assisted Reproductive Technology

Availability of PGD

Although sex selection is specifically regulated in Australia (predominantly by way of national ethical guidelines (NHMRC 2017, ¶8.13, ¶8.14)), an understanding of the regulatory landscape concerning ART more generally, and how it limits the accessibility of services, is important. Sex-selection practices in Australia are generally achieved using PGD techniques, but as some statutes impose eligibility criteria to limit the accessibility of ART more

generally, this in turn might preclude the utilization of PGD techniques where the eligibility requirements are not met. The regulatory position in this regard is therefore outlined below. It should also be noted that sex selection can be achieved by a process known as "sperm sorting," however, Chalmers observes that this practice has not been adopted in Australia (Chalmers 2013, 161).

Australia's federal legal structure complicates the ART regulatory landscape, which is made up of a combination of state legislation, national professional standards, and ethical guidelines (for an overview of the Australian regulatory framework relevant to ART, see Bennett and Smith 2014). Four states have passed specific ART legislation, including New South Wales, South Australia, Victoria, and Western Australia. However, eligibility criteria determining who may access services differs between these jurisdictions, with some limiting services to those who have a medical need for them and others remaining silent on the issue of eligibility (such as NSW). In the remaining jurisdictions where ART is regulated by national guidelines, the issue of eligibility is not addressed by the guidelines. Individual clinics are therefore left to develop their own protocols for access to, and eligibility for, treatment, which must accord with any state legislative requirements (such as anti-discrimination legislation). Importantly, under the revised NHMRC guidelines, restrictions on who may access treatments, imposed by clinics, must comply with the guiding principle that eligibility "must be just, equitable, transparent and respectful of human dignity and the natural human rights of all persons, including the right to not be unlawfully or unreasonably discriminated against" (NHMRC 2017, General Principle 7, 20).

In Victoria, the *Assisted Reproductive Treatment Act 2008* (Vic) limits ART services to women who are either unlikely to become pregnant without the use of ART services or at risk of passing on a genetic disease or abnormality through natural conception (s 10(2)(a)).[1] Accordingly, patients are only eligible to use PGD for sex selection where they meet at least one of these two criteria and where there is otherwise no presumption imposed by the legislation against treatment (ART Act ss 10, 14). Prospective parents who wish to use PGD solely for non-medical sex selection will fail to meet these eligibility requirements. Nevertheless, prospective parents who do not satisfy the eligibility criteria (or for whom there

[1] The NHMRC ART guidelines further restrict the use of PGD to screening out genetic conditions "that would severely limit the quality of life of the person who would be born" (NHMRC 2017, ¶8.15.1, ¶8.16). The Act also imposes a presumption against treatment where a woman or her partner have been found guilty of a sexual offence, convicted of a violent offence or had a child protection order made against them *(Assisted Reproductive Treatment Act 2008* (Vic), s 14(1)).

is a presumption against treatment) may apply to the Panel to obtain access to ART services, including PGD (ART Act ss 15(1), 85(b), (e)).

In deciding whether to grant access to treatment, the Panel must have regard to the guiding principles in the Act and whether a treatment procedure is for a therapeutic goal and consistent with the best interests of a child who would be born as a result (s 15(3); s 91(2)).[2] The guiding principles state, amongst other things, that the welfare and interests of persons born as a result of treatment procedures are paramount and that the health and well-being of persons undergoing treatment procedures must be protected at all times (s 5(a); s 5(d)). It was this mechanism—the statutory provision that provides for an application to the Panel for review, under s 15 of the Act—that enabled the couple in the Victorian decision to apply to the Panel for permission to access PGD for non-medical sex selection. As this paper focuses on the reasoning in that decision, the authors will not analyse the law in remaining Australian jurisdictions. Notably, however, access to PGD for non-medical sex selection is similarly restricted in South Australia and Western Australia as a result of general statutory eligibility criteria (although, in those states there is no option of applying to a review panel to circumvent such restrictions). Additionally, as outlined below, PGD for sex selection is also regulated in Australia by national ethical guidelines.

Prohibition on Non-Medical Sex Selection

In addition to the general statutory limitations imposed on access to ART in Victoria, the Act expressly prohibits the use of PGD for sex selection unless: (1) it is necessary to avoid the risk of transmission of a particular genetic abnormality or disease to a child (s 28(2)(a));[3] or (2) the Panel has otherwise approved the use of PGD for sex selection (s 28(2)(b)). It is a criminal offence to perform PGD for sex selection outside these two exceptions (s 28(1)), unless the Panel authorizes sex selection in a particular case. In contrast to the general power of the Panel to approve applications for PGD where parents do not satisfy the eligibility criteria or a presumption against treatment applies (s 15(3)), the power of the Panel to approve PGD for non-medical sex-selection appears on the face of the ART Act to be unfettered. However, principles of statutory interpretation require that the Panel's power to

[2] It is noteworthy that section 15(1) does not specifically mention non-medical sex selection. Given this omission, the Panel is arguably not strictly required to have regard to the matters in s 15(3) in making decisions about non-medical sex selection. See further discussion under Part B.

[3] For example, PGD may be used to avoid the transmission of a disorder linked to an X chromosome, such as muscular dystrophy or haemophilia.

authorize non-medical sex selection should be exercised in accordance with the purpose and objects of the Act. The Panel would therefore be bound by the guiding principles in the Act, in particular that the welfare and interests of persons born are paramount and that it is necessary to protect the health and well-being of persons undergoing treatment (ss 5(a), (c)). The Tribunal in *JS and LS* adopted this approach ([12]–[14]). The Panel has issued its own guidance note on sex selection, which endorses the decision of VCAT in the *JS and LS* case insofar as it states that any conflict between the welfare and interests of the child to be born and the health and well-being of the patients seeking sex selection "must be resolved in favour of the child's welfare and interests" (Patient Review Panel 2013, 3). The Panel's Guidance Note also states that the Panel will be assisted by any report of a clinical ethics committee's consideration of a proposal to use PGD for sex selection (Patient Review Panel 2013).

In addition to state legislation, national guidelines also prohibit the use of PGD for sex selection in Australia except "to reduce the risk of transmission of a genetic condition, disease or abnormality that would severely limit the quality of life of the person who would be born (NHMRC 2017, ¶8.13.1, ¶8.14.1) (this threshold appears higher than the Victorian threshold as the relevant genetic condition under the NHMRC guidelines must be one that would *severely* limit the quality of life of the person who would be born). The national guidelines acknowledge that sex selection is an ethically contentious topic, noting that "[a]ttitudes towards some of the more controversial practices and aspects of ART differ considerably, and are shaped by an individual's own particular set of values, preferences, and beliefs, or those of their family and/or community" (NHMRC 2017, 69). Although the national guidelines do not have the force of law, compliance with them is a key element in the national accreditation system for state- and territory-based ART clinics in Australia and is linked to federal funding (Fertility Society of Australia, Reproductive Technology Accreditation Committee 2010).[4] The national guidelines apply to all Australian states and territories, although for ART service providers in jurisdictions where specific ART legislation exists, there is a requirement to also comply with the relevant state or territory legislation (in which case, the legislation takes precedence) (NHMRC 2017, 13–14). It therefore remains open for the Panel to approve non-medical sex selection in Victoria in an individual case, provided it is consistent with the guiding principles of the Act.

[4] Accreditation is now mandatory under Commonwealth legislation regulating embryo research and human cloning (*Research Involving Human Embryos Act*, ss 8 and 11).

It is important to note that the relevant committee tasked with re-drafting the guidelines (the Australian Health Ethics Committee (AHEC)), acknowledged the conflicting ethical views that are central to the issue of whether non-medical sex selection should be permitted in Australia. Thus, it is observed in the NHMRC guidelines that:

> Following lengthy consideration, and the application of the guiding principles in Chapter 2 of [the] Ethical Guidelines, AHEC concluded that in some circumstances, sex selection for non-medical purposes is consistent with the guiding principles. AHEC's majority view is that there is an ethical difference between a desire to introduce variety to the existing sex ratio of a family and the desire to design the sex of the offspring based on the preferential selection of a particular sex due to an individual's or a couple's cultural or personal bias, influences or desires. … AHEC also recognises that many of the issues surrounding ART are as much social and political as they are ethical. With any controversial practice, society's readiness to accept a practice is a relevant and important consideration. At the time of publication [2017], there is limited research into the question of whether Australians support the use of sex selection for non-medical purposes. (NHMRC 2017, 71)

Regulating Saviour Sibling Selection

Given that the Tribunal in the case of *JS and LS* made a direct comparison with saviour sibling selection, it is also necessary to consider how the Victorian Act regulates this specific use of PGD. Unlike sex selection, saviour sibling selection is not prohibited under the Act. In fact, the second reading speech to the Act specifically refers to saviour sibling selection as an example of an application falling outside the standard eligibility requirements under the Act that may be approved by the Panel (Victoria, *Parliamentary Debates*, Legislative Council, 10 October 2008, 4190 (Gavin Jennings, Minister for Environment and Climate Change), 4192). Patients who wish to use PGD for tissue typing in conjunction with screening for a genetic abnormality or disease will satisfy the eligibility requirements under the Act (Taylor-Sands 2007; Smith 2012). However, when the existing child is suffering from a non-heritable disease, such that embryo screening for abnormality or disease is unnecessary, patients would not be eligible to use PGD for tissue typing alone as they do not satisfy the statutory eligibility criteria. Patients would, however, be entitled to apply to the Panel to obtain access to treatment in such cases. As stated above, the Panel must have regard to the guiding principles in the Act and whether a treatment procedure is for a therapeutic goal and

consistent with the best interests of a child who would be born as a result (ART Act, s 15(3)). Arguably, given that saviour sibling selection was specifically mentioned when the statutory provisions were debated in Parliament, together with the fact that saviour sibling selection is not prohibited on the face of the Act, the Panel might be more inclined to approve an application for this specific use of PGD compared to non-medical sex selection.

National guidelines provide more detailed guidance on saviour sibling selection and a level of national consistency in this area (NHMRC 2017, ¶8.17). The guidelines limit the use of PGD to cases where the intended recipient is suffering from a serious condition and stem cell treatment is the medically recommended management of the condition (NHMRC 2017, ¶8.17.2). Additionally, clinics must seek advice from an independent body, such as a clinical ethics committee, before providing PGD for saviour sibling selection (NHMRC 2017, ¶8.17.2). That body must establish that "there is no evidence to suggest that the person who would be born would not be a welcomed, respected member of the family unit" and that the use of PGD will not "significantly affect the welfare and interests of the person who would be born" (NHMRC 2017, ¶8.17.2). As discussed in part five of this paper, there are differing ethical bases underpinning such requirements, not all of which are necessarily focused on prioritizing the welfare-of-the-child principle.

The Decision of the Tribunal Concerning JS and LS

The decision in *JS and LS* concerned a couple who wished to utilize IVF and PGD to select the sex of a prospective child, following the death of their child. JS and LS were diagnosed as suffering post-traumatic stress disorder (PTSD) following the death of their child. The couple had other children, all of which were the opposite sex to the child that had died. They wished to extend their family further, but only if they could do so by conceiving a child of the same sex to the one that had died. Due to the restriction outlined in section 28 of the *Assisted Reproductive Treatment Act 2008* (Vic), they were not permitted to access IVF and PGD for non-medical sex selection. As outlined above, this section prohibits the use of ART for "producing or attempting to produce a child of a particular sex" unless such practices are utilized for preventing the transmission of a genetic abnormality or disease or where the Patient Review Panel has otherwise approved the use of such technologies for this purpose (the practice is also prohibited at a national level (NHMRC 2017, ¶8.14.1)). The applicants applied to the Panel for approval to use the technology for this purpose. The couple argued that by exercising discretion within the relevant provisions of the statutory framework, the Panel would allow the couple to "move on" and that this course of action would assist in

stabilizing the couple's emotional and psychological well-being. The Panel refused to exercise discretion under s 28 of the Act, relying primarily on the welfare-of-the-child principle. In particular, it observed that the reasons put forward by JS and LS for non-medical sex selection focused exclusively on their own interests and psychological well-being, without regard to the welfare and interests of any prospective child who might be conceived. The couple appealed this decision and emphasized to the Tribunal that they did not view this course of action as a means of treating their post-traumatic stress—which had onset following the death of their child—but, instead, as a way of moving on and completing their family. The Tribunal observed that all of the supporting statements and expert evidence submitted in relation to the couple's case had focused on the implications for the parents of having or not having a child of the same sex as the child that had died. The Tribunal concluded that there was insufficient evidence to support the view that conceiving a child of the desired sex would assist JS and LS in their recovery from PTSD or assist their psychological health or well-being. Moreover, it pointed out that all the mental health experts agreed that further pregnancies posed real risks to JS's psychological state. The Tribunal went on to say that, even if the evidence did support a finding that having a child of the desired sex would promote the well-being of JS and LS, their situation "would fall far short of the gravity of a condition of a third party which would justify giving permission for an ART procedure to create a saviour child" (*JS and LS*, [79]). The Tribunal further observed that the evidence in the case had neglected to address the fact that the welfare and interests of any child who may be born following the provision of treatment services should be prioritized as the paramount consideration under the Act. Thus, it was noted that the medical and supporting evidence was "concerned entirely with the interests of the parents" (*JS and LS*, [75]). Despite such observations, the Tribunal provided no clear indication as to what might amount to "sufficiently grave" circumstances to justify a decision to utilize IVF and PGD for non-medical sex selection in light of the welfare principle. Given the emphasis by the Tribunal on the gravity of the circumstances needed to justify selecting a particular child, it would appear that there is a line beyond which selection may be justified if the circumstances are sufficiently serious. Just where that line lies and how it is measured is left unanswered by the Tribunal. One potential reading of the decision is that the Tribunal is wary of allowing selection for trivial or insufficiently grave cases, which could represent a fall down the "slippery slope" toward "designer babies," an issue that we highlight in part four of the paper. Non-medical sex selection represents a clear departure from other accepted forms of selection, such as selecting out a serious genetic disorder and saviour sibling selection, which

(at least in theory) have some therapeutic goal. However, does a lack of therapeutic purpose mean non-medical sex selection should never be permitted? The Tribunal observed that the NHMRC guidelines and Victorian Law Reform Commission report preceding the ART Act specifically contemplate saviour sibling selection (but not non-medical sex selection) as potentially justifiable (*JS and LS*, [79]). However, the categories for selection are not closed and, as discussed in part two of this paper, the Panel is given a broad discretion to permit access to ART in individual cases. There are many varied reasons why parents may desire a child of a particular sex, including replacing the gender of a child who has died, "family balancing," cultural and/or religious reasons, or simply a gender preference. Whether or not the specific interests parents may have in non-medical sex selection are sufficiently serious to justify permission to use ART will depend on the individual circumstances of each case. Exactly where the line should be drawn is complex and will vary from case to case. Robertson points out that "at some point the divergence from what most people view as central to reproductive meaning will diminish the perceived importance of the reproductive interest at stake" (Robertson 1994, 431). Whilst some motivations might appear more problematic than others, there is currently no clear evidence that a child selected on the basis of their sex will be harmed in specific scenarios and each case requires a context-specific assessment (for a more detailed discussion of the ethical boundaries of non-medical sex selection, see M. Taylor-Sands, 2017).

The authors wish to acknowledge the difficult dilemma facing the Tribunal in the circumstances of the case; determining the boundaries of non-medical sex selection is an ethically fraught task, as is evidenced by the recent review of the NHMRC guidelines (NHMRC 2017, 70–71). However, given that the Tribunal placed such emphasis on the importance of considering the welfare principle in cases of non-medical sex selection, it is curious that no further reasoning was outlined to explain how welfare considerations might be relevant and, more importantly, congruent with the welfare of a prospective child who is selected on the basis of their sex. The Tribunal instead focused on drawing a comparison between non-medical sex selection and saviour sibling selection to justify why one is ethically acceptable and the other is not. It might therefore be argued that if a child's conception is indeed based only on the welfare considerations relevant to *that particular child*, it should follow that the use of embryo selection technologies for other purposes should not be justified by reference to the welfare and interests of others. Yet, this is not the reasoning that has been applied to other categories of selective reproduction using PGD.

Essentially, it is this underlying inconsistency that guides our comparison of non-medical sex selection and saviour sibling selection in the remainder of this paper.

Analysing the Tribunal's Reasoning

In this section of the paper we outline the problematic nature of the Tribunal's reasoning, particularly its application of the welfare-of-the-child principle under the ART Act, which ultimately led to the dismissal of the couple's application for non-medical sex selection. We demonstrate that this is problematic for two key reasons. First, the Tribunal failed to clearly articulate how non-medical sex selection was inconsistent with the welfare-of-the-child principle in the circumstances. The Tribunal was not provided with, nor did it rely upon, empirical evidence to substantiate the potential impact that non-medical sex selection might have on the welfare of any child who might be conceived. Undoubtedly, it would be difficult to establish and accurately measure—on the basis of empirical evidence—how non-medical sex selection might impact on the welfare of a prospective child. However, the Tribunal also failed to clearly articulate the specific type of welfare concerns that it was contemplating when applying the welfare principle to the issue of non-medical sex selection. As we discuss below, the welfare concerns that the Tribunal allude to are more closely aligned with normative concerns about the nature of selective reproduction and are based largely on speculative concerns or theoretical arguments.

Secondly, in this section of the paper, we also argue that non-medical sex selection is no more contrary to the welfare-of-the-child principle than when the principle is applied to saviour sibling selection. Specifically, the physical risks to a prospective child as a result of embryo biopsy during the PGD process for the purpose of determining sex are no greater than embryo biopsy for the purpose of establishing tissue type and/or a genetic condition. Similarly, some of the "means end" and "commodification" concerns are also no more significant in the case of non-medical sex selection than they are in other types of selective reproduction. Accordingly, it is for these reasons that we conclude that the Tribunal's main concern about allowing non-medical sex selection was instead underpinned by wider ethical reasoning, particularly the concern that allowing such a practice would represent a tread on the slippery slope towards "designer babies." Before undertaking this analysis, we first highlight the significance of the regulatory context, as this provides a clear underlying basis to show why the issue of non-medical sex selection is treated as an extraordinary type of selective reproduction under the regulatory framework.

The Differing Regulatory Contexts

As a starting point, it can be noted that the different regulatory positions concerning non-medical sex selection and saviour sibling selection provide a basis for regarding these issues as ethically distinct. Above, we outlined that the Victorian Act includes a prohibition on non-medical sex selection except in cases where the Panel (or the Tribunal) authorize it. In contrast, the legislation does not specifically prohibit or regulate saviour sibling selection in any way. Instead, saviour sibling selection is addressed by the NHMRC guidelines, which impose a number of factors that must be ascertained by an independent body prior to a family being granted access to IVF for this purpose.

Moreover, although PGD practices were initially heavily regulated in Victoria, including a specific policy on saviour sibling selection (Victorian Assisted Reproductive Treatment Authority 2010), review of the statutory framework led to a softening of PGD regulation (Smith 2012). This led to the policy on saviour sibling selection being revoked by the statutory regulatory body in Victoria (Smith 2012). Consequently, PGD in Victoria is now regulated only by national ethical guidelines, with the exception of the statutory provisions concerning sex selection. This context is significant in that the legislature has specifically prohibited one of these practices (although leaving discretion to the Panel to allow non-medical sex selection), while leaving the other subject to national ethical guidelines. This immediately suggests that the two uses of PGD are regarded as ethically distinct under the statutory framework and that these two examples of selective reproduction are not the most appropriate for comparison.

The Welfare of the Child Principle and its Application

As established above, the Tribunal's principal reason for denying the application of JS and LS was because the couple had failed to demonstrate how their wish to access IVF and PGD for non-medical sex selection prioritized the welfare of the prospective child—a principle that must be given priority under the ART Act (s 5(a)). Ascertaining the welfare of a child who is not yet born is a fraught process. As stated above, it would be extremely difficult to establish and accurately measure empirically how non-medical sex selection might impact on the welfare of a prospective child. Furthermore, there is a general lack of consensus about how the welfare of a child should be defined in the first place. Some theorists conceive the welfare of the child on an individual basis, most notably in terms of potential harm to the individual child (see, for example, Smith 2015). Others argue for a more relational interpretation of the welfare of the child, which views the interests of the child as inextricably connected with

collective family interests (Taylor-Sands 2013). Different interpretations of the welfare of the child ultimately lead to different approaches to evaluating the welfare of the child in relation to the interests of the parents and other family members. Viewing the interests of the child to be born as being in opposition to, rather than in connection with, the interests of the parents may ultimately lead to different outcomes as to what is acceptable.

To date, the welfare-of-the-child principle has been applied in Victoria according to a harm-based assessment to determine whether the prospective child's welfare might be compromised by the circumstances surrounding her or his conception. Thus, the Act imposes a presumption *against* treatment where there is a history of serious violent or sexual offences (s 14). The Act requires that a criminal record check is undertaken prior to treatment and, in the event that such offences are discovered, the parent(s) can apply to the Patient Review Panel to have the presumption reviewed by the Panel (s 15). Additionally, clinicians might deny services where the circumstances of the parent(s) raise concern about the prospective child's welfare. There are a number of Victorian cases involving the interpretation and application of the welfare-of-the-child principle under the ART Act (*ABY & ABZ v Patient Review Panel (Health and Privacy)* [2011] VCAT 1382; *Patient Review Panel v ABY & ABZ* [2012] VSCA 264; *ABY & ABZ v Secretary to the Department of Health (Human Rights)* [2013] VCAT 625; *PQ v Patient Review Panel (Health and Privacy)* [2012] VCAT 291). As summarized by Bennett and Smith (2014), these cases have essentially held that in determining whether access to ART services should be granted where a presumption against treatment exists, or where a clinician has determined that the provision of services does not accord with the potential child's welfare, there are a number of relevant factors that should be considered:

- The Panel (or the Tribunal in cases where a decision of the Patient Review Panel is appealed[5]) should consider all the circumstances of the case to outline any identifiable and established factors of risk that may impact on the potential child's welfare. In determining whether prospective parent(s) should be prevented from accessing ART services, the potential child's welfare is the paramount consideration (*Patient Review Panel v ABY & ABZ* [2012] VSCA 264, [48]);

[5] It should be noted that the Tribunal's function in such cases is not appellate, but is instead focused on making the decision from "the shoes of the original decision maker ... on the basis of the material before it": *ABY & ABZ v Patient Review Panel (Health & Privacy)* [2011] VCAT 1382, [31].

- This decision is not limited solely to a consideration of the issue that resulted in the presumption against treatment being imposed (where relevant) but should involve a review of all factors relevant to the potential child's welfare (*Patient Review Panel v ABY & ABZ* [2012] VSCA 264, [117]); and,
- The decision that the prospective parent(s) should be prevented from accessing ART services should only be made when, based on all of the evidence, the Patient Review Panel or the Tribunal is satisfied that there is a *real* risk of harm to the child (*ABY & ABZ v Secretary to the Department of Health & Anor (Human Rights)* [2013] VCAT 625, [39]).

These factors from the key Victorian cases demonstrate the harm-based focus of the principle. What is significant about the decision concerning JS and LS is that the Tribunal did not apply the welfare-of-the-child principle on the basis of the factors outlined above; there was no explicit mention of the key circumstances (i.e. "the identifiable and established factors of risk") that might potentially compromise the welfare of a prospective child selected on the basis of her or his sex. Instead, the Tribunal focused on the couple's failure to prioritize the prospective child's welfare and evaluated this on the basis of wider ethical reasoning.

One potential issue that might have been identified by the Tribunal as a welfare or harm-based concern but was not explicitly acknowledged as such is the potential for the embryo biopsy process to impact on the future development of a prospective child. Earlier findings on the safety of PGD techniques had concluded that the risk to the child from embryo biopsy procedures was "no greater for PGD babies than those conceived naturally, indicating that neither IVF nor embryo biopsy poses a serious threat to embryos" (European Society of Human Reproduction and Embryology Ethics Task Force et al. 2003; Verlinsky et al. 2004 cited in Ram 2006, 279). However, a research study published in 2014, which examined the impact of the PGD process on the embryos of mice, found that blastomere biopsy[6] caused male mice to experience peculiar behaviour alterations and changes in body weight (Sampino et al. 2014). This led the researchers to conclude that the process of blastomere biopsy has potential long-term effects on post-natal development and behaviour in mice (Sampino et al.

[6] Blastomere biopsy involves the removal of one or two cells from the embryo once it has reached the eight-cell stage (referred to as the "cleavage stage," which occurs three days after fertilisation), and this has been reported as less safe than trophectoderm biopsy, which is used to remove cells at the "blastocyst stage" (five days after fertilisation) (Scott, Long, and Scott 2013).

2014). Consequently, the study questioned whether PGD could be a risk factor for late-onset, neurodevelopmental and metabolic disease predisposition (Sampino et al. 2014).

Although the Tribunal did not explicitly address the risks inherent in the embryo biopsy process, this was implicit in the Tribunal's reasoning when referring to the use of PGD techniques to establish genetic disease and in the comparison to saviour sibling selection. The Tribunal observed that there "is a clear difference between *protecting a child to be born from inheriting a serious genetic disorder*, and bringing a life into being to provide tissue to save or prolong the life of a person who needs tissue from a compatible donor" (emphasis added) (*JS and LS*, [33]). The "clear difference" in this regard was not elaborated upon further by the Tribunal, but it seems to suggest that in cases where PGD is used to avoid transmission of a serious genetic disease, it has greater accord with the welfare-of-the-child principle as the prospective child will be born free from disease. This is a view that has been used to argue that the use of PGD for avoidance of genetic disease is more ethically sound than other types of selective reproduction, implying that the "benefit" of avoiding the transmission of genetic disease outweighs the potential risks in subjecting the embryo to biopsy. Applied to saviour sibling selection, it has been used as a basis to argue that an embryo biopsy for the sole purpose of establishing tissue type is less ethically justified due to the lack of "benefit" for the child (Ram 2006; McLean 2006; Wilkinson 2010). A similar argument might also be raised in relation to non-medical sex selection, as the PGD process is undertaken for the sole purpose of establishing the sex of the embryo and therefore does not confer a "benefit" to the child (at least in the sense that she or he is born without a genetic disease). Notably, however, commentators have refuted this risk-benefit claim by arguing that as the post-PGD embryo is not altered by the biopsy process in any way, the child born following the process is not "benefited" as such (Sheldon and Wilkinson 2004a; Wilkinson 2010). The use of PGD in this context therefore merely increases the probability of an unaffected embryo being implanted to achieve a pregnancy (in the context of avoidance of genetic disease) or that a "desired" embryo is implanted in cases of selective reproduction (Sheldon and Wilkinson 2004b, 533–537; McLean 2006, 82). On this basis, a specific welfare or harm-based concern that relates to the potential harm from the embryo biopsy process is applicable to *all cases of PGD*, irrespective of the purpose of testing. Consequently, given that the Tribunal regarded saviour sibling selection as acceptable in some circumstances and that this may occur for the *sole purpose* of establishing tissue type, the risk-benefit argument alone does not seem to provide a sufficient basis for contravening the welfare-of-the-child principle. For the same reasons,

the risk-benefit argument on its own would not provide a justification for concluding that the welfare of the prospective child is compromised by non-medical sex selection.

Careful reading of the Tribunal's reasons reveals underlying ethical concerns that relate more broadly to ethical perspectives that are often raised in debates concerning selective reproduction. In particular, the decision alludes to concerns about commodification, conditional love, and distorting the nature of the parent–child relationship. Throughout its reasons, the Tribunal emphasized the "morally" or "ethically undesirable" (*JS and LS*, [35], [82]) reproductive outcomes of non-medical sex selection, with the implication that these arguments were relevant to the application of the welfare-of-the-child principle. We analyse this reasoning below but wish to acknowledge the plight of the Tribunal's position; that given the *prima facie* prohibition on non-medical sex selection imposed under the ART Act, a decision to allow PGD for this purpose is likely to require more compelling reasons than other types of selective reproduction (the exact scope of when the Panel or the Tribunal might legitimately permit PGD for this purpose, under the Act, is unclear, although there is a specific guidance issued by the Patient Review Panel concerning sex selection (Patient Review Panel 2013)). Nevertheless, it might be argued that because of the regulatory context—which regards non-medical sex selection as an extraordinary case—the need to distinguish between relevant *welfare* considerations and other ethical reasoning is even more crucial. This is particularly so based on the view that some of the ethical reasoning used to justify saviour sibling selection is also capable of being applied to non-medical sex selection, as we outline below.

One further point of significance that is relevant to the Tribunal's application of the welfare-of-the-child principle, is that it might be argued that the Tribunal did not adequately consider the relevance of, and appropriately balance, the Act's other guiding principles. In particular, as outlined above, those responsible for administering the Act (including both the Panel and the Tribunal), are required to give effect to the guiding principles, one of which states: "health and wellbeing of persons undergoing treatment procedures must be protected at all times" (*Assisted Reproductive Treatment Act 2008* (Vic) s 5(d)). In the decision concerning JS and LS, the interests and welfare of a prospective child were given priority over the well-being of the couple. We acknowledge that the Tribunal was required to prioritize the welfare-of-the-child principle under s 5 of the ART Act, but one potential line of reasoning that could have been explored further was that the granting of the couple's request might be justified by balancing the welfare-of-the-child principle with the principle concerning the health and welfare of those seeking treatment.

In the wider context of ART services, furtherance of the interests of the prospective parent(s) is often considered to be a justifiable basis for permitting a particular type of ART procedure. One such example is a request to utilize ART services where the woman's partner dies unexpectedly and the woman seeks to have her partner's sperm retrieved for the purpose of having his child. In Australia, there have been numerous cases concerning posthumous conception, where the woman's request has been granted, often in circumstances where the deceased did not explicitly consent to the use of his gametes following his death (*Re H, AE (No 3)* [2013] SASC 196; *Edwards: Re the estate of the late Mark Edwards* (2011) 81 NSWLR 198; *In the Matter of Denman* [2004] 2 Qd R 595; *Re YZ and Infertility Treatment Authority* (2005) VAR 1). Nevertheless, such requests have often been approved on the basis that it would benefit the woman following the death of her partner and that the motivation for conception would not necessarily be contrary to the welfare or interests of any child who might be born. Although the Tribunal mentioned the relevance of the principle concerning the health and well-being of the prospective parents, the significance that it might have had in terms of the couple's request and their psychological well-being, was not adequately evaluated by the Tribunal and balanced against the welfare-of-the-child principle. (As previously discussed in part three, the Tribunal was not satisfied there was sufficient evidence to support a finding that non-medical sex selection would assist JS and LS in their well-being, which limited its discussion on this point.)

To conclude on the relevance of the welfare-of-the-child principle, the argument that JS and LS failed to prioritize the welfare and interests of the prospective child by focusing only on their own motives is not reason in itself to deny their request. This is not significantly different to a case where the parents prioritize the welfare of a sick child who might be cured using the tissue of a prospective saviour child. In both cases, the reason for selection is not focused solely on the interests of the prospective child who might be born following IVF and PGD; the motives instead relate to the interests of someone other than the child who might be born. Moreover, as we discuss in the next section, analysis of the wider ethical arguments underpinning the Tribunal's decision reveals that not all of these ethical bases are indicative of a concern about a prospective child's welfare, nor are they necessarily contrary to the welfare-of-the-child principle in the context of selective reproduction.

Beyond the Welfare of the Child: The Wider Ethical Concerns

The Tribunal's reasoning was supported by the expert evidence of two prominent ethicists, who were tasked with informing the Tribunal of the underlying ethical reasoning informing

the ART Act and the NHMRC guidelines (specifically the aspect of the guidelines addressing sex selection). Thus, the Tribunal cited Professor Thomson, who stated that "it was *morally undesirable* to choose to bring to life a child only if it was of the chosen gender" (emphasis added) (*JS and LS*, [35]). Additionally, Associate Professor Tonti-Filippini summarized the ethical issues as concerns about the conditional acceptance of a child based on its sex, and that the concern raised by non-medical sex selection is that parents are prospectively "treating the child to be born, not as a person to be loved and valued in his or her own right, but *as an object having a particular characteristic to serve a purpose or purposes of the parents*" (emphasis added) (*JS and LS*, [36]). Additionally, he stated to the Tribunal that to "have a child of a particular characteristic for the benefit of the parents is, in essence, *exploitative*" and that it "could reflect a mistaken notion of the *essential nature of parenthood*, that of *unconditional acceptance*" (emphasis added) (*JS and LS*, [36]).

Although such reasoning might assist in terms of understanding the justificatory basis for a prohibition on non-medical sex selection more generally, it is not necessarily conclusive on the issue of whether the circumstances surrounding a particular couple's reproductive decision will harm a prospective child. Furthermore, although these perspectives might help to explain why a general prohibition on non-medical sex selection might be deemed ethically appropriate, as outlined below there is inconsistency with the Tribunal's reasoning when it is considered and applied in the context of saviour sibling selection.

The first of the concerns outlined by the experts relates to the view that the child is intended to serve only as an object of the parents' wishes, thereby reflecting the Kantian objection commonly raised (and largely refuted) in debates over selective reproduction about commodification (Spriggs 2004; Deech and Smajdor 2007, 69). This deontological objection is based on the notion that, irrespective of any *harm* that may be caused to the child to be born, it is inherently *wrong* to treat the child solely as a means to an end (Kant 2001). An argument often cited in the bioethical literature concerning selective reproduction is that selection on the basis of specific traits fails to pay adequate respect to the child for his or her own worth and that children are regarded as commodities by being selected on the basis of their parents' desires. In the context of saviour sibling selection—which was regarded by the Tribunal as having qualified support from an ethical perspective—the application of this reasoning regards the saviour child as a means to an end (that being a source of tissue for another). Purposely conceiving a child for the furtherance of one's own interests (or the interests of another, such as an existing child of the family) appears to violate this deontological principle (Gavaghan 2007, 156). Nevertheless, it has been argued that Kant's

categorical imperative has been misapplied. Kant counselled not against using people as a means to an end but against treating them *merely* or *solely* as a means to an end (Sheldon and Wilkinson 2004a, 146). Additionally, it has been argued that in the general context of reproductive decision-making, many children are born in circumstances where there are no parental motivations for their conception or where the child is wanted to satisfy the interests of the parents. Katrien Devolder observes that there are often numerous reasons relevant to a family's decision to reproduce, such as the strengthening of a relationship, continuity of the family name, and the economic and psychological benefits a child brings to parents when they age (Devolder 2005, 584). On this basis, it has been asserted that the motives of prospective parents do not necessarily provide a justification to conclude that they will not fulfil their parental duties and act as good parents (Strong et al. 2011, 15). Moreover, as established above, given that the welfare-of-the-child principle has been applied as a harm-based principle intended to assess the risk to the child based on the parental circumstances, where the parents are committed to fulfilling their parental duties this argument may be irrelevant to determining the impact on the child's overall welfare.

While the ethical concerns highlighted by Thomson and Tonti-Filippini about commodification and parental acceptance may not impact directly on the welfare of the child to be born, this reasoning was clearly regarded as important to the Tribunal. Thus, the Tribunal concluded that "it is *ethically undesirable, **and** contrary to the welfare of the child,* to make *acceptance of a child conditional* on its sex" (emphasis added) (*JS and LS*, [82]). This suggests that it was the additional concerns, beyond those relating to the welfare of the child to be born, that influenced the Tribunal's decision about non-medical sex selection. And although these additional ethical concerns might potentially help to explain the legitimacy of the Tribunal's conclusion, unfortunately this reasoning was not clearly articulated by the Tribunal or outlined in accordance with the ART Act. As previously discussed, the ART Act requires the Panel in certain cases to have regard to whether a procedure is for a "therapeutic goal" (s 15(3)(b)(i)). Although this requirement is not specifically imposed on the Panel in relation to non-medical sex-selection, it may be a legitimate factor to which the Panel (and, in this instance, the Tribunal) may have regard in exercise of its broad discretion to authorize treatment. However, the Tribunal fell short of expressly articulating these concerns or the extent to which the ART Act addresses them. It is this gap in reasoning that renders the Tribunal's reasons insufficient to ultimately support its decision.

The second concern outlined by Tonti-Filippini (and also alluded to by Thomson) is about the "essential nature of parenthood" and that selecting individual traits implies a devaluing of the

notion of unconditional parental love. Thus, it has been observed in debates about selective reproduction that there is a need to ascertain the "authenticity of the parental project" and the "risk of the child becoming a commodity" (Spriggs 2004, 538). This is problematic because some commentators regard acceptance as an essential parental virtue (McDougall 2005; see also Wilkinson 2010), whereas others describe the notion of unconditional parental love as a central tenet of parenting (Sandel 2007, 49). Either way, this concern again extends beyond a consideration of the potential harm that might be inflicted upon a prospective child based upon the desired traits for which he or she was selected (for what might be considered trivial reasons that relate to parental preferences) and instead suggests a position that "disfigures the relation between parent and child" (Sandel 2007, 46). The view that the natural order of procreation is threatened by the use of embryo selection technologies is questionable. Social views concerning reproduction and family structures have changed significantly in recent times. As outlined in the report of the Human Genome Research Project:

> … dichotomy which contrasts natural reproduction (in which children are categorised as a 'blessing') with assisted reproduction (in which children are labelled more as products of their parents' desires) seems in some ways to be too simplistic to describe the complexities of reproduction in the 21st century. (Human Genome Research Project 2006, 165)

It is difficult to accept that parental decision-making should be generally limited to avoid the threat that such technologies pose to the "natural order of procreation." This argument does not succeed in the wider context of ART techniques, as IVF procedures are now generally accepted; nor does it provide a justifiable basis to prohibit other types of selective reproduction, such as saviour sibling selection. As discussed above, both of these viewpoints are not unique to the issue of non-medical sex selection. For these reasons, we conclude that the reasoning relied upon by the Tribunal (as outlined above) does not fully justify the refusal of the couple's request as similar arguments could be made for other types of selective reproduction.

Slippery Slope Concerns?

Although the Tribunal couched its reasons on the basis of the welfare-of-the-child principle, these concerns were in fact much broader in scope and arguably reflect an underlying uneasiness about the practice of non-medical sex selection; perhaps indicating a fear of treading on a slippery slope toward "designer babies." Given that some of the concerns relating to commodification and parental virtue and acceptance have been refuted for other

types of selective reproduction, it was fundamental that the Tribunal clearly articulate the reasons why non-medical sex selection was not ethically appropriate. In our view, one way that this might have been achieved is if the Tribunal explicitly acknowledged that it was cautious of permitting the practice, due to "slippery slope" concerns. For many, non-medical sex selection represents a step too far in selective reproduction, one that takes us beyond therapeutic goals and challenges established notions about parental acceptance and love. Returning to the legislative framework, these concerns are addressed to some extent within the ART Act by the requirement that the Panel have regard, at least in certain cases, to whether a procedure "is for a therapeutic goal" (s 15(3)(b)(i)). The slippery-slope objection to non-medical sex selection is arguably the most convincing point of distinction between non-medical sex selection and other forms of selection, such as selecting out disease or saviour sibling selection. In contrast to these latter cases, choosing the sex of a child for non-medical reasons represents a shift in focus from therapeutic outcomes to parental preferences for a particular "type" of child. Moreover, for some, the utilization of embryo selection technologies for the purpose of selecting the sex of future offspring opens up issues of potential discrimination and inequality. Thus, as noted by Chalmers, "[t]he danger of sex selection lurks in its tendency to shape and reinforce negative attitudes. This threat has also been expressed in the emotive terms of eugenics" (Chalmers 2013, 167).

As a matter of ethical debate, the NHMRC's review of the national ethical guidelines, demonstrates that there are significant difficulties in determining whether non-medical sex selection should be permitted in Australia (and, if so, in what circumstances). The conclusions of the consultation process undertaken by the NHMRC on this specific issue suggest that there is insufficient evidence about public opinion on the matter to determine whether non-medical sex selection should be permitted, and furthermore, that it is something that can be determined by each state and territory (NHMRC 2017, 71). Importantly, however, while this ethical debate is likely to continue in the background, until a more permissible approach is legislated, regulators and gatekeepers should be clear about the ethical reasons underpinning a restrictive position towards non-medical sex selection, so that the wider ethical concerns are not conflated with child welfare concerns, as it is the latter focus that takes priority under the Victorian ART Act. For these reasons it is difficult to contemplate the circumstances that the legislature had in mind in giving the Panel authorization to permit non-medical sex selection under s 28(2)(b) of the ART Act.

Conclusion

The decision concerning *JS and LS* provides a rare example of when the issue of non-medical sex selection has been considered in a quasi-judicial capacity. The decision demonstrates the ethically problematic nature of non-medical sex selection practices, which for many are seen as a step too far in selective reproduction. As outlined in this paper, we have provided the contextual regulatory background that is relevant to the Tribunal's decision, thus demonstrating that non-medical sex selection is regarded as an extraordinary type of selection under the regulatory framework. With this regulatory context in mind, it is fundamental that the reasoning underpinning a specific decision about non-medical sex selection should be both consistent and articulated in accordance with the provisions of the ART Act, as well as consistent with the normative underpinning that guides selective reproduction more generally. As discussed above, the ethical grounds for refusing the couple's request are not regarded as justifiable bases for restricting other types of selective reproduction, such as saviour sibling selection.

Lastly, we do not think that the ultimate conclusion of the Tribunal should be overly criticized, given the regulatory context and the lack of guidance under the statutory framework to outline when non-medical sex selection might be permissible. It is clear from a general perspective that the issue of non-medical sex selection is regarded by many as a step too far down the slippery slope towards "designer babies"; that for some, such practices carry an undertone of discrimination and negativity towards people of certain genders. However, these are distinct ethical grounds that the Tribunal could have relied upon to explain its conclusion, without resorting to a comparison of other types of selective reproduction. As determined by the NHMRC's response to the public consultation process, this reasoning, at least in part, seems to provide a basis for continued prohibition of non-medical sex selection in Australia. With this in mind, the limits of permissible selection on the basis of sex under the ART Act should be clarified by the Victorian legislature so that both the Panel and the Tribunal are clear about the circumstances, if any, where non-medical sex selection might be permitted under the Act.

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