

**Canadian High-Performance Female Athletes' Voices: Transgender Inclusion
in Elite and Olympic Sport Guidelines.**

Project Report

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1. Introduction

Best practice in evidence-based policy development necessitates meaningful stakeholder consultation of all affected groups. This should therefore underpin inclusive stakeholder engagement processes for the development of policies for transgender inclusion in high-performance sport categories.

Most sports are organised in single sex sport categories because of the well-established biological and performance-related differentials between females and males resulting in significant performance advantages for males in most sports^{1,2}. Male-advantage ranges from 8-12% in running¹ and swimming, through 16-22% for cycling, football kick, tennis serve, and golf driver speed, to 29-34% in sports requiring extensive upper body contribution including cricket bowl, volleyball serve and weight-lifting, to greater than 50% in baseball pitching and field hockey drag flick². Females have '31% lower LBM (lean body mass), 36% lower hand-grip strength and 35% lower knee extension strength' than males³ and males are disproportionately stronger in their upper compared to lower body while females show the reverse². Therefore, female high-performance athletes are centrally important stakeholders with respect to transgender inclusion policies. This is particularly important in policy guidelines which recommend the inclusion of transwomen in sport via female sport categories, given these categories are designed to include female athletes in high-performance sport by excluding puberty-related male advantage.

Female high-performance athletes are a hard-to-reach demographic category given the celebrity and high-profile status of many, some of whom are household names. They take significant measures to protect privacy and manage time by balancing the demands of training, travelling and competing with those of work, family and sponsors. Further, female high-performance athletes prepared to comment on transgender inclusion strategies are doubly difficult to access due to the highly contested nature of this policy arena. Previous research^{4,5} details a pervasive fear amongst female athletes of being accused of bigotry and transphobia, with serious sponsorship and career repercussions, if they comment in this difficult policy area. Therefore, their voices as majority stakeholders are often missing from both public debate and consultations regarding transgender eligibility criteria developed by international and national sporting infrastructures. This leaves a significant gap in the evidence base for stakeholder engagement when devising transgender inclusion policies.

¹ Handelsman, D.J., A.L. Hirschberg and S. Bermon 2018. Circulating Testosterone as the Hormonal Basis of Sex Differences in Athletic Performance. *Endocrine Review* 39 (5): 803-829.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6391653/>

² Hilton, E.N. and T.R. Lundberg 2021. Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage. *Sports Medicine* 51(2):199-214.

<https://link.springer.com/article/10.1007/s40279-020-01389-3>

³ Harper, J., E. O'Donnell, B. Sorouri Khorashad, et al. 2021. How does hormone transition in transgender women change body composition, muscle strength and haemoglobin? Systematic review with a focus on the implications for sport participation

British Journal of Sports Medicine <https://bjsm.bmj.com/content/55/15/865>

⁴ Devine, Cathy. 2021. 'Female Olympians' Voices: Female Sport Categories and IOC Transgender Guidelines.' *International Review for the Sociology of Sport*.

<https://journals.sagepub.com/doi/abs/10.1177/10126902211021559?journalCode=irsb>

⁵ Sports Council Equality Group (2021) SCEG Project for Review and Redraft of Guidance for Transgender Inclusion in Domestic Sport 2021:

<https://equalityinsport.org/docs/300921/Project%20Report%20on%20the%20Review%20of%20the%20Guidance%20for%20Transgender%20Inclusion%20in%20Domestic%20Sport%202021.pdf>

International and national governing bodies of sport have developed a range of different transgender inclusion strategies. World Rugby⁶, FINA⁷ and International Rugby League⁸ offer categories based on biological sex which either include transwomen in male rather than female categories, and transmen not supplementing with testosterone in female categories, or aim to provide additional categories. Many international federations include transgender athletes in opposite sex categories based on a requirement for transwomen to suppress testosterone to below a specified circulating level (originally 10nmols/L and now more often 5nmols/L and even 2.5nmols/L for the UCI⁹ and World Triathlon¹⁰) as a condition of eligibility for female categories. In these sports, although transmen are eligible for male categories with no restriction, in reality, transmen and female non-binary athletes often chose to remain in female categories, given that supplementing with testosterone does not make them competitive in male categories^{11,12}. This means transmen may choose to socially transition only whilst competing in high-performance sport.

National sport organisations often require their high-performance athletes to compete according to the rules of their respective international federations. However, some countries, including Denmark, the UK and Canada provide over-arching guidelines for their national sport organisations. Denmark¹³ outlines that in elite sport it is 'equal competition' that matters rather than inclusion, the UK guidelines⁵ specify that inclusion of transwomen in female categories cannot be balanced with fairness for female athletes, whilst in Canada the CCES transgender guidelines¹⁴ have become the de facto national guidelines and recommend inclusion in sport for transgender athletes via opposite sex categories based on gender identity alone.

However, the scientific evidence is clear that the 'fix' of testosterone suppression in transwomen adopted by some sports, leaves most puberty-related male advantage intact^{2,3}. As a consequence, a number of international and national sport organisations have already reviewed (World Rugby⁶, FINA⁷, UCI⁸, WT¹⁰, IRL¹⁵) or are currently reviewing or planning to review (football, badminton,

⁶ World Rugby. 2020a. 'World rugby transgender guideline.' <https://www.world.rugby/the-game/player-welfare/guidelines/transgender>

⁷FINA. 2022. Policy on eligibility for the men's and women's competition categories. <https://resources.fina.org/fina/document/2022/06/19/525de003-51f4-47d3-8d5a-716dac5f77c7/FINA-INCLUSION-POLICY-AND-APPENDICES-FINAL-.pdf>

⁸ IRL. 2022. Statement on transgender participation in women's international rugby league. <https://www.intrl.sport/news/statement-on-transgender-participation-in-women-s-international-rugby-league/>

⁹ UCI Management Committee. June 2022. <https://www.uci.org/pressrelease/uci-management-committee-approves-the-federations-agenda-2030-and-awards-the/2YzsHNKvfDZTytpsYw5e6p>

¹⁰ World Triathlon. 2022. World Triathlon Executive Board approves Transgender Policy. https://www.triathlon.org/news/article/world_triathlon_executive_board_approves_transgender_policy

¹¹ Cohen, Shawn. 2022. 'Trans UPenn swimmer Lia Thomas is CRUSHED twice in Ivy League women's swim meet by Yale competitor Iszac Henig, who is transitioning from female to male'. January. <https://www.dailymail.co.uk/news/article-10382019/Trans-UPenn-swimmer-Lia-Thomas-wins-200m-freestyle-race-two-seconds.html>

¹² Travers A. Queering Sport: Lesbian Softball Leagues and the Transgender Challenge. *International Review for the Sociology of Sport*. 2006;41(3-4):431-446. <https://journals.sagepub.com/doi/abs/10.1177/1012690207078070>

¹³ Danish Sports Confederation (2021) 'Inclusion of different gender identities in sports.' https://www.dif-dk.translate.google.com/translate?x_tr_sl=da&x_tr_tl=en&x_tr_hl=en&x_tr_pto=sc

¹⁴ Canadian Centre for Ethics in Sport. 2016. 'Creating Inclusive Environments for Trans Participants in Canadian Sport.' <https://cces.ca/sites/default/files/content/docs/pdf/cces-transinclusionpolicyguidance-e.pdf>

¹⁵ <https://www.theguardian.com/sport/2022/jun/20/no-magic-solution-in-the-battle-over-trans-inclusion-in-womens-sport>

hockey, athletics, and lacrosse¹⁶) their transgender inclusion policies. Whereas historically female athletes have not been consulted during the drafting of transgender inclusion policies⁴, some sports are now rectifying this omission and developing revised policies informed by the views of their high-performance female athletes (World Rugby¹⁷, FINA¹⁸). Further, female athletes have and still are resorting to open letters¹⁹, petitions²⁰ and surveys²¹, often anonymous, when excluded from decision-making in this conflicting rights policy area, in an effort to make their voices heard.

In Canada, there has been no stakeholder consultation with high-performance Canadian female athletes. Further, in the absence of any over-arching Sport Canada policy/guidelines, the CCES report 'Creating Inclusive Environments for Trans Participants in Canadian Sport: Guidance for Sport Organizations', provides de facto policy guidance on transgender inclusion in sport in Canada¹⁴. This Guidance recommends eligibility into opposite-sex categories based on gender identity alone. It was produced by an Expert Working Group, and acknowledges input from 'members of the trans community, and...trans and cis athletes who brought critical perspectives' but a footnote explains that only two female athletes were interviewed, and their views were not disclosed. This then is a gap in the evidence base in this area of policy development in Canada.

The recently released FINA Policy on Eligibility for the Men's And Women's Competition Categories⁷, was developed by a Working Group consisting of three groups: the Athlete Group, the Science and Medicine Group and the Legal and Human Rights Group. The Athlete Group 'was comprised of current and retired Aquatics athletes and coaches (including transgender athletes and coaches), who brought to account their views and the views of their broader communities.' The Legal and Human Rights Group 'was comprised of legal experts in sex discrimination, human rights, and international sports law, including the jurisprudence of the Court of Arbitration for Sport (CAS)'.

The FINA Policy is ground-breaking in acknowledging the international human rights framework as it pertains to female athletes. FINA sets out four important human rights principles for sport:

- i. Non-discriminatory opportunities for all athletes and no hierarchy of human rights:
'FINA is committed to providing safe, fair, inclusive, and non-discriminatory opportunities for all Aquatics athletes wishing to compete in FINA competitions.'
- ii. Inclusion in sport is provided by way of a range of categories:
'Without eligibility standards based on biological sex or sex-linked traits, we are very unlikely to see biological females in finals, on podiums, or in championship positions; and in sports and events involving collisions and projectiles, biological female athletes would be at greater risk of injury.'

¹⁶ <https://www.ft.com/content/d50f6c76-6ac7-4fa9-b793-b9da4afc2a6d>

¹⁷ World Rugby. 2020b. 'Transgender meeting 2020: Player results.'
<https://resources.world.rugby/worldrugby/document/2021/02/22/fec411ad-b1f2-4095-9779-17d07787331b/17.-Transgender-Group-2020-Player-Survey-Results.pdf>

¹⁸ FINA Extraordinary General Congress | 19th FINA World Championships | Budapest
<https://www.youtube.com/watch?v=tlujU5nUq6A>

¹⁹ <https://www.theguardian.com/sport/2022/apr/06/head-of-team-gb-olympic-cycling-transgender-rule-change-uci>

²⁰ <https://www.swimmingworldmagazine.com/news/petition-launched-to-urge-usa-swimming-to-prioritize-fairness-in-womens-sports/>

²¹ <https://www.thetimes.co.uk/article/nine-tenths-of-female-cyclists-dont-want-to-race-against-trans-women-according-to-survey-d2nhxkn9v>

- iii. Equality of opportunity for both male and female athletes. This is a foundational principle in all human rights instruments which has often been overlooked in transgender inclusion policies:
 - 'FINA's core commitment to equality of opportunity for both male and female athletes',
 - 'the sport's commitment to: 'ensuring equal opportunity for both male and female athletes to participate and succeed in the sport, including through the equal representation in its programs and competitions of athletes of both biological sexes'.
- iv. Non-discrimination against females on the basis of sex. This means biological sex. This again is a foundational principle in all human rights instruments which has often been overlooked in transgender inclusion policies:
 - 'FINA's effort not to discriminate against female athletes and thus to ensure a sex-based women's category itself has exclusionary effects'.

Both the Canadian Charter of Rights and Freedoms²² and the Canadian Human Rights Act²³ outline that the Canadian Government should not discriminate against girls and women on the basis of sex in relation to laws, programs, employment and services. This means that females have a legal right to equal opportunities with males. It can be assumed, therefore, that female high-performance athletes should have the right to equal competitive opportunities with males in high-performance sport and to be meaningfully consulted regarding policy development with respect to eligibility criteria for female sport categories. The Canadian Human Rights Act also explicitly and separately protects transgender people from discrimination on the basis of gender identity and/or expression.

Given the robust scientific evidence base for the significant puberty-related male advantage in most sport forms, it is inevitable that the rights of females to equal opportunities in sport on the basis of sex, and for transgender athletes to compete in opposite sex categories on the basis of gender identity, are competing human rights claims. Consequently, the concept of competing human rights is directly relevant to the sensitive and difficult policy issue of the inclusion and accommodation of transgender athletes in opposite sex sport categories. Usefully, the Ontario Human Rights Code and Human Rights Commission set out both a policy and a framework for reconciling any competing human rights²⁴. Recognition of, and consultation with, the different demographic groups involved in a competing rights policy area is essential since 'It is critical that all parties involved have a chance to be heard and to hear the perspectives of opposing parties.'

All international human rights instruments recognise freedom of speech as a fundamental human right. The Canadian Charter of Rights and Freedoms²² outlines the fundamental 'freedom of thought, belief, opinion and expression' which is 'guaranteed equally to both sexes' and 'guaranteed equally to male and female persons'.

It is clear then that the difficult discussion regarding the fair inclusion of both female athletes and transgender athletes in high-performance sport should be contextualised within the over-arching human rights framework, the consensus of the scientific research, and the underpinning principles

²² Government of Canada. 1982. Canadian Charter of Rights and Freedoms. [The Canadian Charter of Rights and Freedoms \(justice.gc.ca\)](https://www.justice.gc.ca)

²³ Government of Canada. 1997. Canadian Human Rights Act. [Canadian Human Rights Act \(justice.gc.ca\)](https://www.justice.gc.ca)

²⁴ Ontario Human Rights Commission. 2012. Policy on Competing Rights. [Policy on competing human rights | Ontario Human Rights Commission \(ohrc.on.ca\)](https://www.ohrc.on.ca)

and values of inclusion fairness and safety. Further, it should acknowledge the full range of stakeholders, particularly since transgender inclusion strategies involving transgender inclusion in opposite sex categories asymmetrically impact female categories and female athletes. This is indeed the process which has been adopted by World Rugby and more recently by FINA.

2. Female athletes voices

Over the last four years there have been three surveys of female elite and Olympic athletes' views regarding transgender inclusion strategies: an exploratory academic research project detailing nineteen Female Olympians Voices regarding the IOC Transgender Guidelines (2019)⁴, World Rugby's Elite Player Survey of 193 players (2020)¹⁷ and the UK's Sport Council Equality Group's Review of Guidance for Transgender Inclusion in Domestic Sport including an unspecified number of female athletes (2020)⁵. In addition, FINA has undertaken an online survey but at present it is unclear what the numbers were and whether this was of (female) athletes only¹⁸. Two surveys have documented the extent to which female athletes' voices have been excluded and silenced. Indeed, the appropriate language to discuss this policy area is strongly contested to the extent that athletes may be called transphobic or bigoted when using scientifically accurate terminology^{4,5}.

The 2021 research project⁴ with 19 female (Olympian) athletes reported that,

'Of real concern was that the majority of athletes felt unable to ask questions, speak freely or participate in evidence-based discussion, without being accused of transphobia.'

The direct quotations from these Olympians include:

'In my role with a sporting organisation I have been advised to be careful about what I say on the matter until their guidelines on this subject have been finalised. Athletes are wary. I have been abused on social media for commenting on this issue. The abuse is generally vitriolic and aggressive.'

'consultation anonymously will be only way to get current (active sport career) females to speak up.'

'This is a really sensitive discussion and very difficult to discuss publicly. It therefore requires federations and the professional bodies to be engaging professionally with this within their work in order to take up the lead, rather than leave it to others. Professional bodies should be helping athletes to manage the issue, not the other way as the questions above suggest.'

Similarly, the UK Sports Council Equality Group⁵ found:

'Several current female athletes suggested that although all or most athletes considered transgender athletes have an advantage if they compete in women's sport, almost no-one would be brave enough to discuss this in public. One athlete said that the potential for a social media "pile on" would be too great, so it is easier to keep quiet and acquiesce.'

'The overwhelming majority of people who considered fairness and safety could not be achieved with transgender inclusion into female sport did not feel confident to voice these opinions. Some said that they had been threatened with sanction or disciplinary action if they spoke out.'

'A significant number of interviewees said that they would only be involved if anonymity was assured because people were afraid to say in public what they privately believed.'

'Many of the interviewees who held positions with sporting agencies said their personal opinions were in direct conflict with that of their employer or agency's stated position, many felt they had no option but to remain silent in order to keep their job. This was a frequently voiced frustration which regularly reduced the interviewee to tears or hostility.'

Female athletes have historically been excluded from sport and from decision making in sport, and still struggle to have their voices and concerns heard²⁵. Sport Canada has a legal duty to ensure no discrimination against female high-performance athletes (as compared with male athletes) on the basis of sex, and transgender high-performance athletes (as compared with athletes with a range of different gender identities, or, presumably, no gender identity) on the basis of gender identity. As a consequence, Sport Canada has an ethical imperative to consult with both female athletes regarding eligibility for opposite *sex* categories, based on *gender identity*, and with transgender athletes regarding their preferred inclusion options. Further, it is important that this stakeholder engagement is conducted with the athletes themselves, rather than organisations with a remit to represent them, given the research shows that the views of athletes may well be in direct conflict with the stated position of a range of sporting agencies.

3. Aims

This project is an exploratory study designed to address the gap in stakeholder consultation in Canada by soliciting the voices of Canadian high-performance female athletes in relation to transgender inclusion strategies at high-performance levels.

The overarching benefit of the research is the inclusion of, and consultation with, female high-performance athletes who are majority stakeholders in the development of eligibility guidelines for female sport categories.

For the avoidance of doubt, this project was not commissioned or designed to consult with transgender high-performance athletes who are also an important stakeholder group in this policy area. Neither does it address the separate and distinct issue of inclusion strategies for athletes with 46 XY DSDs (disorders or differences of sexual development) in sport.

4. Scientific Context

The Canadian High-Performance Female Athlete Survey and interviews are informed by the consensus of the scientific research. This details the well-established sex-related performance gap between females and males in most sports, and the minimal effect of testosterone suppression on performance-related male advantage in transwomen. This research is detailed in two definitive scientific reviews of the evidence for performance-related retained male advantage in transwomen following testosterone suppression. The Hilton and Lundberg² review is published in the journal *Sports Medicine* and reviewed 13 studies. It concluded,

'Longitudinal studies examining the effects of testosterone suppression on muscle mass and strength in transgender women consistently show very modest changes, where the loss of lean body mass, muscle area and strength typically amounts to approximately 5% after

²⁵ Ewing, L. 2022. Canadian gymnasts echo growing call for investigations into abusive practices, toxic culture. The Canadian Press. <https://www.cbc.ca/sports/olympics/summer/gymnastics/canadian-gymnasts-calling-for-investigation-into-abusive-practices-toxic-culture-under-gymcan-1.6399721>

12 months of treatment. Thus, the muscular advantage enjoyed by transgender women is only minimally reduced when testosterone is suppressed.⁷

Similarly, the Harper et al³ review (with a transwoman as a lead author) is published in the *British Journal of Sports Medicine*, reviewed 24 studies and concluded,

'In transwomen...hormone therapy decreases strength, LBM and muscle area, yet values remain above that observed in cisgender women, even after 36 months. These findings suggest that strength may be well preserved in transwomen during the first 3 years of hormone therapy.'

More recently, in June 2022, the FINA Science Group⁷ reported:

'biological sex is a key determinant of athletic performance, with males outperforming females in sports (including Aquatics sports) that are primarily determined by neuromuscular, cardiovascular, and respiratory function, and anthropometrics including body and limb size. The extent of the male/female performance gap varies by sport and competition, but the gap universally emerges starting from the onset of puberty'

Further, the FINA Science Group explained:

'if gender-affirming male-to-female transition consistent with the medical standard of care is initiated after the onset of puberty, it will blunt some, but not all, of the effects of testosterone on body structure, muscle function, and other determinants of performance, but there will be persistent legacy effects that will give male-to-female transgender athletes (transgender women) a relative performance advantage over biological females. A biological female athlete cannot overcome that advantage through training or nutrition. Nor can they take additional testosterone to obtain the same advantage, because testosterone is a prohibited substance under the World Anti-Doping Code'.

Consequently, the consensus of scientific opinion is that there is a well-established and significant sex-related sport performance gap between the sexes in most sports and that testosterone suppression in transwomen only minimally mitigates puberty-related male advantage.

5. Methodology

1. Terminology

The term 'sex' referring to biological sex has long been recognised in international human rights instruments and human rights and equality legislation in nation states. More recently, 'sex' and 'gender identity' are increasingly recognised as distinct legal concepts, including in Canada. Statistics Canada²⁶ explains that 'sex at birth' refers to 'a person's reproductive system and other physical characteristics'. It therefore means biological sex. Whereas gender refers to 'an individual's personal and social identity as a man, woman or non-binary person'. Further, the Canadian Government²⁷ explains:

²⁶ Statistics Canada. Filling the gaps: information on gender in the 2021 census

<https://www12.statcan.gc.ca/census-recensement/2021/ref/98-20-0001/982000012021001-eng.pdf>

²⁷ Government of Canada. Sex and gender in the Government of Canada. <https://www.canada.ca/en/treasury-board-secretariat/corporate/reports/summary-modernizing-info-sex-gender.html#h-2>

'An important principle of the policy direction is that sex and gender are separate personal characteristics:

- sex refers to biological characteristics, such as male, female or intersex
- gender refers to a social identity, such as man, woman, non-binary or two-spirit'.

In sport, inclusion is achieved by offering categories based on the performance-related biological differences between demographic groups, for example, age, sex, and ability/disability, so that the social, health and economic benefits of sport are distributed as widely as possible. The female and male categories in sex-affected sports relate to the performance-linked differences between biological females and males in sport, and ensure that the performance-related benefits of androgenisation at puberty are excluded from female sport categories. The difference between biological sex and self-identified gender is therefore of central importance when determining female and male sport categories.

The Canadian High-Performance Female Athlete Survey is based on the widely accepted scientific consensus outlined by the Endocrine Society Scientific Statement²⁸ that:

'Sex is an important biological variable that must be considered in the design and analysis of human and animal research. The terms sex and gender should not be used interchangeably. Sex is dichotomous, with sex determination in the fertilized zygote stemming from unequal expression of sex chromosomal genes...both humans and animals have sex, but only humans have gender.'

'But sex is not the same thing as gender and using these terms as equivalents obfuscates differences that are real and important in society in general....'

'The classical biological definition of the 2 sexes is that females have ovaries and make larger female gametes (eggs), whereas males have testes and make smaller male gametes (sperm); the 2 gametes fertilize to form the zygote, which has the potential to become a new individual.'

'Gender identity is a psychological concept that refers to an individual's self-perception; while associations between gender identity, neuroanatomic, genetic, and hormone levels exist, a clear causative biological underpinning of gender identity remains to be demonstrated.'

The survey uses the terms 'sex', 'biological sex', 'female', 'male', and 'gender identity' in line with these scientific understandings. 'Sex' refers to the biology of sexual reproduction and the two sexes: female and male. 'Gender identity' refers to an individual's self-perception and identification with a range of different gender identities, if indeed they so identify. In recognition of the wide range of different and contested understandings of sex, gender and gender identity, both the survey questionnaire and the interview schedule asks participants for their understanding of some of these terms.

The term 'sex assigned at birth' which is sometimes used instead of 'sex' or 'biological sex' to refer to males and females, is not used in the survey since it may be misunderstood to indicate that sex

²⁸ Bhargava, Aditi, Arnold, Arthur, Bangasser, Debra, et al. 2021. 'Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement', *Endocrine Reviews* 42 (3); pp. 219-258. <https://doi.org/10.1210/endrev/bnaa034>

changes with different lifestyle stages. Whereas this may be true for legal sex status, it is not true for biological sex, which is the status relevant for high-performance sport categories. Therefore, this term is avoided.

In addition, the concept 'gender equality' which used to be widely used as a synonym for 'sex equality', now more often conflates biological sex and self-identified gender identity. The use of this term in relation to biological sex categories in sport may mean that any rights conflicts between female athletes and transgender athletes in high-performance sport are rendered invisible. This would be out of step with international and Canadian human rights law, the biological sciences and single sex sport categorisation. Consequently, this term is avoided.

There is significant room for misunderstanding language use on these questions, so that the terms 'transwoman' or 'trans female', for example, are sometimes understood as referring to a biological female who identifies as a man and sometimes a biological male who identifies as a woman. In particular, the terminology 'trans female' when used to refer to a transgender person who is biologically male but self-identifies as a woman is widely misunderstood, given it conflates the technical language of biological sex with gender identity.

Nevertheless, it is important to recognise that acknowledgement of the distinction between biological sex and self-identified gender identity does not preclude a demonstration of care and concern for either transgender or female high-performance athletes. Further, neither the term 'biological sex' nor the term 'gender identity' are used pejoratively. In addition, there is no reason to assume that questions which refer to 'biological sex' and 'gender identity', as distinct legal and scientific concepts, will result in discrimination, trans-exclusionary positions and transphobia. The distinction is made between biological sex and gender identity when exploring single sex sport categories, because ethically justified research and informed participant consent necessitate scientific accuracy.

As a consequence, in common with other surveys which have asked high-performance female athletes for their views (Devine 2021⁴, World Rugby¹⁷, UK SCEG⁵), the survey uses the terminology of both biological sex (to distinguish from legal sex) and self-identified gender identity. It refers to the two sexes as biologically male or female, or female and male; and to those athletes who identify as the opposite sex or as neither, as transwomen, transmen and non-binary.

As the 2020 World Rugby Policy⁶ explains

'the use of "biological male" is ...simply to distinguish between people whose development is influenced by androgens such as testosterone, and others defined as "biological females" (who derive no changes due to androgens during puberty)'

'Sex: (is) used in this Guideline to refer to an individual person's biological and physical characteristics, associated with being male or female.'

'Biological male: For the purposes of this document, refers to a person who produces testosterone at puberty and adolescence, and experiences the resultant androgenizing effects thereof.'⁷

'Biological female: For the purposes of this document, refers to a person who does not produce male levels of testosterone at puberty and adolescence, and thus does not experience the resultant androgenizing effects thereof.'

Similarly, the 2022 FINA Policy⁷ outlines that

'The word "sex" denotes natural biological differences between females and males, including chromosomes, sex organs, and endogenous hormonal profiles. This Policy uses the word "sex" and the term "biological sex" interchangeably.'

'The word "female" means possession of XX chromosomes and (in the absence of medical intervention) ovaries and increased circulating oestrogen and progesterone starting at puberty.'

'The word "male" means possession of XY chromosomes and (in the absence of medical intervention) testes and increased circulating testosterone starting at puberty.'

'The term "transgender" refers to individuals whose gender identity and/or expression differs from what is typically associated with their sex.'

'FINA recognises that some individuals and groups may be uncomfortable with the use of medical and scientific terminology related to sex and sex-linked traits'.

'Nevertheless, some use of sensitive terminology is needed to be precise about the sex characteristics that justify separate competition categories and to ensure that the Policy's terms are understood by all Aquatics stakeholders.'

Clear language is of central importance in research design, validity and reliability. According to the Canadian Research Ethics Board²⁹, language used in research should 'be easily understood by those without prior knowledge of the subject' and ethically justified research involving human participants is required to be 'scientifically sound'³⁰. Therefore, for the sake of scientific accuracy and clarity, the survey and interview schedule distinguish between biological sex and gender identity, and refer to either transwomen, or transwomen (biological males), and the interview schedule to either transmen, or transmen (biological females) as appropriate.

II. Ethical framework

Ethically justified research involving human participants should adhere to the following principles^{26,31}:

- The research should be scientifically sound,
- The potential benefits should significantly outweigh the potential for harm,
- There should be justice or fairness in participant selection,
- There should be informed consent/assent, privacy and confidentiality,
- The research should acknowledge potential biases and limitations,

²⁹ Government of Canada. Research Ethics Board: 2.1 Plain language summary:
<https://www.canada.ca/en/health-canada/services/science-research/science-advice-decision-making/research-ethics-board/apply-ethics-review.html>

³⁰ Government of Canada. Research Ethics Board: Policies, guidelines and resources:
<https://www.canada.ca/en/health-canada/services/science-research/science-advice-decision-making/research-ethics-board/policy-guidelines-resources.html>

³¹ Government of Canada. 2018. Tri-Council Policy Statement. Chapter 1: Ethics Framework.
https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter1-chapitre1.html

- There is an ethical imperative to adhere to knowledge translation and dissemination of findings.

As outlined in the scientific context and terminology sections above, the survey design was informed by the consensus of scientific research in the field and scientifically accurate language which distinguishes between biological sex and gender identity.

The primary benefit of the research is that for the first time in Canada, a previously excluded stakeholder group, female high-performance athletes, were given the opportunity to express their views regarding the transgender inclusion strategies of national and international sport organisations, and international federations of sport. In particular, they were asked to comment on the 2021 IOC Framework³², and Canadian CCES transgender guidelines¹⁴ which recommend the inclusion of transwomen in high-performance sport by way of female sport categories. Given that previous research with female athletes has detailed their significant fear of contributing to this policy discussion, it was important that female athletes had trust in the research team, were able to comment anonymously and confidentially, that the language used was language they could understand and relate to, and that they had a safe space in which to contribute. Including the Independent Researcher Cathy Devine in the team was considered particularly important in order to establish trust with Canadian high-performance female athletes, given her work with female Olympians and the 2015 IOC Transgender Guidelines⁴. This research has been published in a high impact academic journal, has an extremely high 'reach', the anonymity and privacy of these Olympians has been seen by the female high-performance community to be upheld and this research is now included in the Olympic World Library of the IOC³³.

The potential harms include that survey participant confidentiality is breached and participants are subject to harms including targeted harassment and bullying for participating in the research. This potential harm is mitigated by the snowball sampling methodology and by ensuring confidentiality and anonymity of participants. Further potential harms include that the survey distribution protocol and confidentiality is breached and researchers are subject to harms including targeted harassment and bullying for designing and undertaking the research. This potential harm is also mitigated by the snowball sampling methodology

A further potential harm is that, in particular, female transgender high-performance athletes who are eligible to complete the survey, including transmen and non-binary athletes, might feel uncomfortable with the questionnaire design which inevitably must refer to both the biological sex and the gender identity (both explicitly protected characteristics in the Canadian Human Rights Act²³) of high-performance athletes. It is important to note that given the target group for the project was female high-performance athletes, no transwomen, some of whom may find this

³² IOC. 2021. 'IOC Framework on fairness, inclusion and non-discrimination on the basis of gender identity and sex variations.' https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-inclusion-Non-discrimination-2021.pdf?_ga=2.244885574.2123514635.1644508765-930040168.1637087907

³³Olympic World Library.

[https://library.olympics.com/Default/search.aspx?SC=CATALOGUE&QUERY=cathy+devine+&QUERY_LABEL=#/Detail//query:\(Id:0,Index:1,NBResults:1,PageRange:3,SearchQuery:\(FacetFilter:%7B%7D,ForceSearch:lf,InitialSearch:lt,Page:0,PageRange:3,QueryGuid:a0753679-2960-42dc-afb6-d0cb4f9d5451,QueryString:'cathy%20devine%20',ResultSize:10,ScenarioCode:CATALOGUE,ScenarioDisplayMode:display-standard,SearchGridFieldsShownOnResultsDTO:!\(,SearchLabel:',SearchTerms:'cathy%20devine',SortField:In,SortOrder:0,TemplateParams:\(Scenario:',Scope:Default,Size:ln,Source:',Support:',UseCompact:lf,UseSpellChecking:\(n\)\)\)](https://library.olympics.com/Default/search.aspx?SC=CATALOGUE&QUERY=cathy+devine+&QUERY_LABEL=#/Detail//query:(Id:0,Index:1,NBResults:1,PageRange:3,SearchQuery:(FacetFilter:%7B%7D,ForceSearch:lf,InitialSearch:lt,Page:0,PageRange:3,QueryGuid:a0753679-2960-42dc-afb6-d0cb4f9d5451,QueryString:'cathy%20devine%20',ResultSize:10,ScenarioCode:CATALOGUE,ScenarioDisplayMode:display-standard,SearchGridFieldsShownOnResultsDTO:!(,SearchLabel:',SearchTerms:'cathy%20devine',SortField:In,SortOrder:0,TemplateParams:(Scenario:',Scope:Default,Size:ln,Source:',Support:',UseCompact:lf,UseSpellChecking:(n))))

language uncomfortable, would be participating. As acknowledged by World Rugby and FINA, the terminology used to discuss transgender eligibility guidelines can be controversial and not all terms are used or agreed on by all people. Nevertheless, this should not be a reason to forgo consultation with a majority stakeholder group, or depart from the over-arching scientific consensus in this policy area and accessible clear language.

Justice and fairness necessitate that all stakeholder groups are involved in consultations in order that their views can inform policy development in this area. The survey was designed to solicit the views of a small sample of one stakeholder group, namely female high-performance athletes. The research was exploratory rather than representative because of the difficulty of providing a safe environment in which female high-performance athletes felt comfortable to give their views in this contentious policy area. Nevertheless, going forward, it is important that Sport Canada and/or the Canadian national sport organisations build on this research and consult their wider female high-performance athlete population utilising their extensive databases before implementing national or sport specific transgender inclusion guidelines.

Informed consent/assent, privacy and confidentiality were extremely important for the Canadian High-Performance Female Athlete Survey. Athletes were assured they would not be identifiable via sport, national or international events attended, or podium placings. Due to the sensitive policy area, respondents were also asked to keep the survey confidential and refer any additional athletes to the original cascading athletes or the research team to ensure submissions are verified as from female high-performance athletes. The project related only to transgender inclusion strategies and not strategies for inclusion of athletes with 46 XY DSDs. Athletes were assured that all responses would be reported anonymously.

Potential biases and limitations include that the research is exploratory and targets a hard-to-reach neglected stakeholder group. Consequently, the non-probability research design using snowball sampling did not test hypotheses and did not make predictions for the wider female high-performance athlete population. Therefore, the sample reached may not be representative of the wider female high-performance athlete population.

Knowledge translation and dissemination are an important ethical imperative for any research which asks human subjects to invest time and energy in a research project. This is even more important for participants from a hard-to-reach group in a contentious policy area where developing trust between researchers and athletes is of paramount importance. The Canadian Research Ethics Board³⁴ explains,

‘Researchers have an obligation to share the results of their research. When the research involves human participants, it is especially important that the participants themselves, and their communities, receive and can benefit from the results of the research. Thus, applicants must explain their knowledge translation plan and how they intend to disseminate the results of their research, including whether the results of the study will be made available to the study participants.’

It was explained to the athletes that the research would be written up as a report for Sport Canada to inform and balance policy insight in this area. Further, that it may also be written up in an

³⁴ Government of Canada. Canadian Research Ethics Board, Knowledge translation and ethics plan: <https://www.canada.ca/en/health-canada/services/science-research/science-advice-decision-making/research-ethics-board/apply-ethics-review.html>

in the time available, interviews were offered to those athletes who agreed to be interviewed but had indicated in the survey that did not feel they could ask questions and speak freely about the inclusion of transwomen in female sport categories without undue fear of being accused of transphobia, and/or were concerned about the reaction of their national sport organisation and/or sponsors if they asked questions and spoke freely about the inclusion of transwomen in female sport categories (10/16). Given that 7 athletes who did not feel they could ask questions and speak freely about the inclusion of transwomen in female sport categories without undue fear of being accused of transphobia did not want to be interviewed, those with the similar fears were considered a priority for interview. It may be that any follow up work could extend the interviews to include all athletes who indicated they would be happy to be interviewed.

The interviews were conducted via Zoom which was the ideal format given the distances involved between researchers and athletes and the range of time zones across Canada. The interviews were semi-structured and open ended and all athletes interviewed were asked all 12 questions. Interviews were recorded in order to aid data analysis. Data was organised into themes which generally followed the interview schedule and selected quotations are included in the Project Report. As with the survey completions, extremely sensitive material was excluded from the main report but communicated separately to an individual Sport Canada staff member in a confidential report. The Interview Guide is included as Appendix C.

V. Breach of Confidentiality and Open Letter

Unfortunately, despite the snowball sampling design intended to mitigate the risk of harms to the respondents, the research team and the project, the survey distribution protocol and confidentiality were indeed breached by one respondent. The survey was forwarded to an American activist/lobbying group Athlete Ally which then attempted to close the survey down via an Open Letter to Sport Canada and the Sports Minister³⁶. The letter termed the research 'anti-transgender', claimed it perpetuated 'discriminatory views', and described one of the research team as 'biased'. The Open Letter was signed by two of the respondents to the survey. The Open Letter could be considered to be targeted harassment and bullying of one of the research team via ad hominem attacks on her research and academic reputation, and may have had a chilling effect on female high-performance athlete participation.

As a consequence of the leak, the research team added two further layers of security to the survey in order to protect the integrity of the data. Respondents were first asked to provide an email address in order to verify their identity, and subsequently, dedicated email links to the survey were provided directly from the research team to current and former high-performance female athletes interested in completing the survey. Finally, the survey was closed three days early in order to preserve the integrity of the data once a breach was identified, but fortunately most of the data had been collected by this stage and so this ultimately did not affect the project to any significant degree. Indeed, it served to support one of the over-arching themes raised by respondents, that is, the on-going attempts to silence female athletes (see discussion).

Interestingly, the Open Letter did publicise the survey to a wider athlete population than the snowball sample could achieve, and two of the survey respondents were made aware of the project directly via the Open Letter and consequently contacted the research team. Further, the research team were contacted by an athlete representative from a national sport organisation who offered to explore distribution of the survey via their athlete database. However, when the snowball sampling technique was explained, it was felt, understandably, that this research design would not be

³⁶ Athlete Ally. <https://www.athleteally.org/scholars-athletes-condemn-sport-canadas-funding-of-anti-trans-research/>

appropriate for a national sport organisation which would wish to disseminate to their complete mailing list. This athlete representative did express the view that Sport Canada should undertake the task of devising a national transgender inclusion policy and survey instrument which could be cascaded to all athletes since it was not ideal to leave this to national sport organisations.

6. Survey Results

Participants

Twenty-five completions which could be verified as from high-performance female athletes were received. An additional two were discarded as no verifying data were included. These appeared to be vexatious completions following the survey leak after which an additional layer of security was added. Not all respondents answered all questions. Represented sports included but were not limited to: skiing, rugby, boxing, athletics, cycling, skating and triathlon. Table 1 gives details of the spread of ages and highest performance levels reached. Some of the athletes who responded to the survey disclosed extremely sensitive testimony which is detailed in a separate and confidential report to Sport Canada.

Table 1: Age and Competitive Level Data

Age	Numbers	Competitive Level	Numbers
<20	1	Olympics/Paralympics	8
20-29	4	Pan American Games	4
30-39	2	World Cup/ World Championships	7
40-49	8	International	1
50-59	2	Commonwealth Games	1
60-69	2		

Clusters

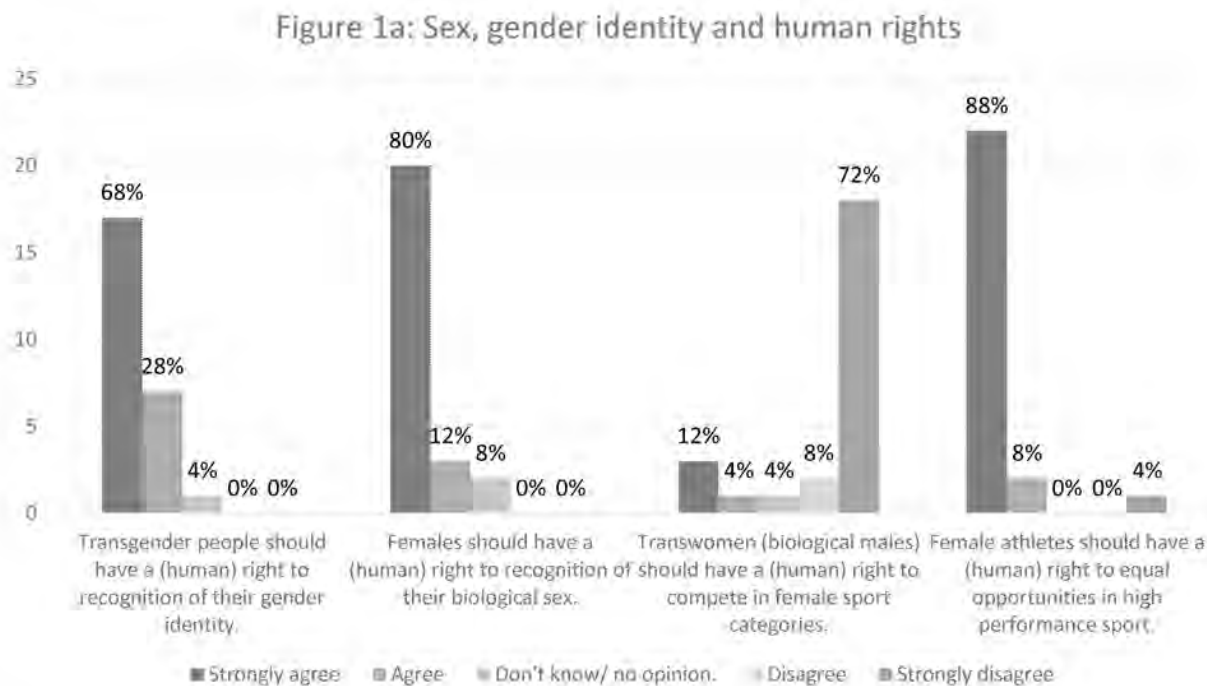
The survey results will be reported throughout as responses from the whole group of 25 respondents. However, it is apparent that there are two distinct groups with significantly different views. The large majority (22) responded apparently unproblematically to survey questions and where appropriate will be referred to as Cluster 1. A small minority (3) commented that they found the survey itself and questions posed to be 'transphobic' or 'biased' and where appropriate will be referred to as Cluster 2. Cluster 2 respondents comprised one athlete in each of the 20-29, 30-39 and 40-49 age bands.

Question 1: Sex, gender identity and human rights

Figures 1a and 1b show that a large majority of all respondents recognise both the rights of female athletes as based on biological sex (23) and transgender athletes as based on gender identity (24). Nevertheless, a large majority (20) do not agree that transwomen athletes should have the right to compete in female sport categories and either strongly disagreed (18) or disagreed (3) with the view that gender identities are more important than biological sex when deciding eligibility criteria for high-performance sport categories. A large majority of respondents either agreed (3) or strongly agreed (17) that biological sex is more important than gender identities when deciding eligibility for high-performance sport categories; and either agreed (3) or strongly agreed (19) that females should have a right to compete in dedicated female sport categories in sex-affected sports. Finally, a large majority (20) agreed that everyone has a sex and a smaller majority (16) that everyone has a gender identity. Interestingly, with regard to the belief that everyone has a gender identity, five athletes did not know or had no opinion and a small minority (3) did not agree.

A number of the comments made demonstrate care and compassion for transgender athletes whilst at the same time asserting that female sport categories should be based on biological sex not gender identity.

Figure 1a



Cluster 1 comments include:

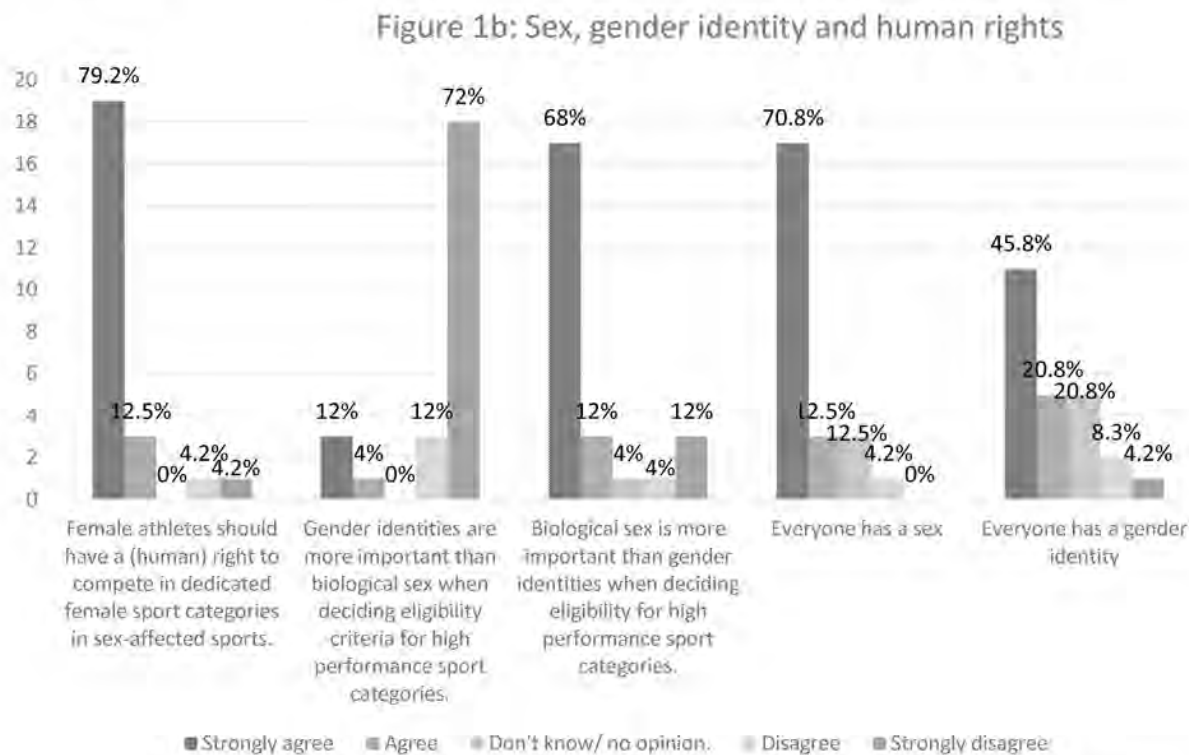
‘We are not attacking anyone's gender here.... it is biological sex...’ and ‘I think just because you identify as a woman (which by all means, live your life how you want, I totally support you), that doesn't mean you can compete in the women's category if you are not biologically born a woman.’

‘You're born with what you're given. It's okay to change your body, it's okay to say I want to identify as something else and act in that manner but biologically it does not change enough to make sport fair.’

‘One of my current frustrations at the high-performance sport level is that we do not ask for sex, just gender.’ ‘Historically a line was drawn in the sand for men and women's sport, which was really based upon male and female sport. In the modern era of sport where we've moved to gender we've confounded the definitions of sex and gender, leaving sport gender based...’. ‘Biological Sex is more important’.

‘The reason I said, “don't know” with the question everyone has a gender is because i think it's fact i.e., science that everyone has a sex but I think gender is a term that has been developed / defined by ones society, culture’.

Figure 1b



'I believe in the difference between biological sex and gender: one being a scientific reality, the other a social construct. People can feel differently inside themselves in relation to gender norms and expression, but biologically I believe you are either male or female and that is not something that can ever change.' 'To say that a person who was born a man can suppress their testosterone for a few years and suddenly be a woman is ridiculous.' 'I don't think that trans women's right to gender expression trumps ciswomen's right to compete against other biological women on an even playing field..'

'The category of sex has always meant biological sex. I does not make sense that a category have 2 different definitions for the same thing. the female category being defined by biological sex makes sense based on observable performance differences between male and female athletes.' 'The concept of gender identity is also not stable or verifiable. What would happen if a TW set a female record then detransitioned. Does that record stand?' 'Female athletes deserve to be centred in their own category and at times it feel like they are nothing more than a backdrop for the wishes of TW to compete in their opposite sex category.'

'Bodies play sports, not identities.'

'I strongly feel that transgender people have a human right to be treated in a fair and humane way in respect to their gender identity, and that they suffer greatly from discrimination on many levels. As such, it's important to be able participate in sport in a way that fits with your gender identity i.e., it is a human right to be able to participate in sport. It is not, however, a human right to be an elite athlete/Olympian/professional athlete.' 'I cannot imagine the difficulty involved in making the transition from your biological sex to the sex you felt you were meant to be and I really hate that trans athletes are a target for so much hyperbole, when it really just seems like all people just want to be themselves and

participate in the sports they love. That said, when going through male puberty gives such a distinct performance advantage, I feel that the biological female athletes need to have a protected biological sex category’.

‘I believe that every person should be granted, for the most part, equal opportunities. Trans Women should not be disadvantaged in professional setting where physiology plays a role, for example in roles of business, management.... I do have a strong opinion when it comes down to womens sport.’

‘Bodies play sports, not identities. Exclusive categories: sex, age, weight class, ability, drugfree etc are the essence of what make sport fair’.

Interestingly, these athletes all use the language of biological sex *and* gender identity, and distinguish between the two in relation to inclusion solutions for transgender athletes. This demonstrates the importance of both sex and gender identity as distinct scientific, legal, conceptual and linguistic entities in particular in relation to single sex sport categorisation.

The small minority of respondents (3) comprising Cluster 2 consider gender identity to be more important than biological sex and that the survey itself, the questions posed and the researcher/research team, are ‘transphobic’ and/or ‘biased’. Although the reasons for this are unclear, they appear to relate to the distinction made between biological sex and gender identity in transwomen, and in one case to the conflation of transgender athletes with athletes with DSDs/VSDs.

Cluster 2 comments include:

‘These questions are transphobic. I feel like I'm being tricked.’

‘I think these questions are very obviously biased based on equating transwomen with "biological males".’ ‘I don't see how someone who is on androgen suppression is still a typical biological male.’

‘...binary categories are outdated and oversimplified. We know scientifically that there is greater within-sex variation than between-sex variation’ ‘...how are you defining "biological males/females"??? Did we learn nothing from Caster Semenya's case??’

Question 1 reveals from the outset, the two distinct groups of respondents. The large majority (22) in Cluster 1 distinguish between biological sex and gender identity unproblematically and indeed require this terminology to express their views. They think that gender identities should be recognised but that biological sex is more important to ensure fairness and a level playing field in sport, given the biological differences between males and females. In contrast, the small minority (3) in Cluster 2 object to the distinction between biological sex and gender identity and one athlete conflates transgender athletes with athletes with DSDs/VSDs. Although some nuance is apparent, in general, these two groups are diametrically opposed in their views.

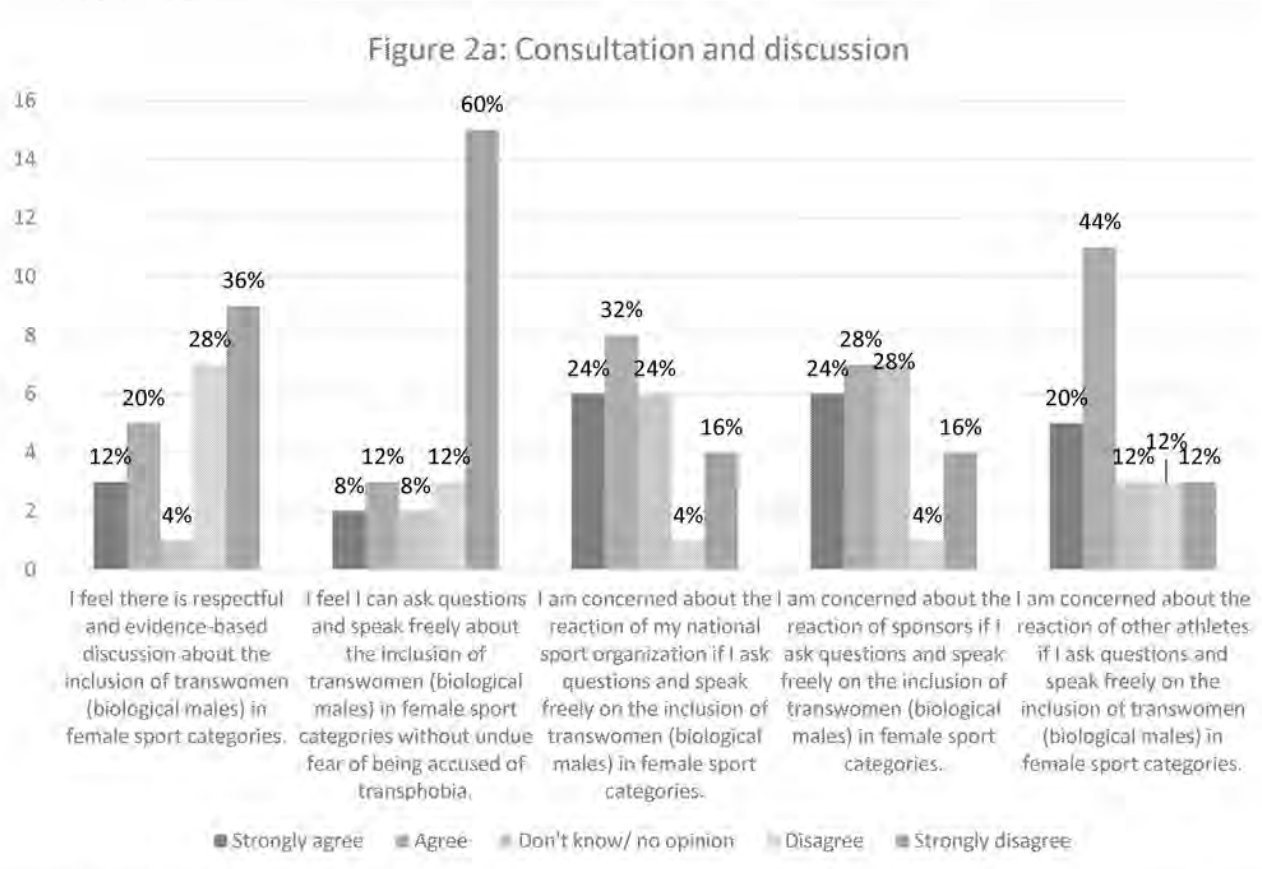
Question 2: Consultation and discussion

Figures 2a and 2b show that a large majority of all athletes disagree (7) or strongly disagree (9) that there is respectful and evidence-based discussion about the inclusion of transwomen in female sport categories. Similarly, a large majority (18) do not feel they can ask questions and speak freely about the inclusion of transwomen in female sport categories without undue fear of being accused of transphobia. Further, the majority are concerned about the reaction of their national sport organisation (14), sponsors (13) other athletes (16) and the effect on their career (14) if they ask questions or speak freely about the inclusion of transwomen in female sport categories. The

majority do not think their national sport organisation has either consulted female athletes (14) or facilitated respectful and evidence-based discussion amongst female athletes (17) about the inclusion of transwomen in female sport categories. Finally, although the majority would not feel comfortable raising concerns with sport body administrators (14) the athletes are unanimous in feeling comfortable with raising concerns with trusted team-mates and in surveys and research as long as anonymity is guaranteed.

It is clear that the majority of these athletes consider biological sex to be more important than gender identity in eligibility criteria for high-performance sport categories, and feel they have not been consulted, their voices are dismissed and they are unable to speak about this policy area without being called transphobic. They voice considerable sadness, distress, frustration, fear and anger in relation to 'speaking up'.

Figure 2a



Cluster 1 comments include:

'I tried speaking about the issues ...with an admin and she was receptive but I asked for more transparency and conversation ... and everything has been hidden from us.' '...nothing came from my meeting.' 'I can talk to 3 other female athletes that feel the same but all of us fear speaking up about it because we will instantly be labeled transphobic...they are even calling this survey transphobic.'

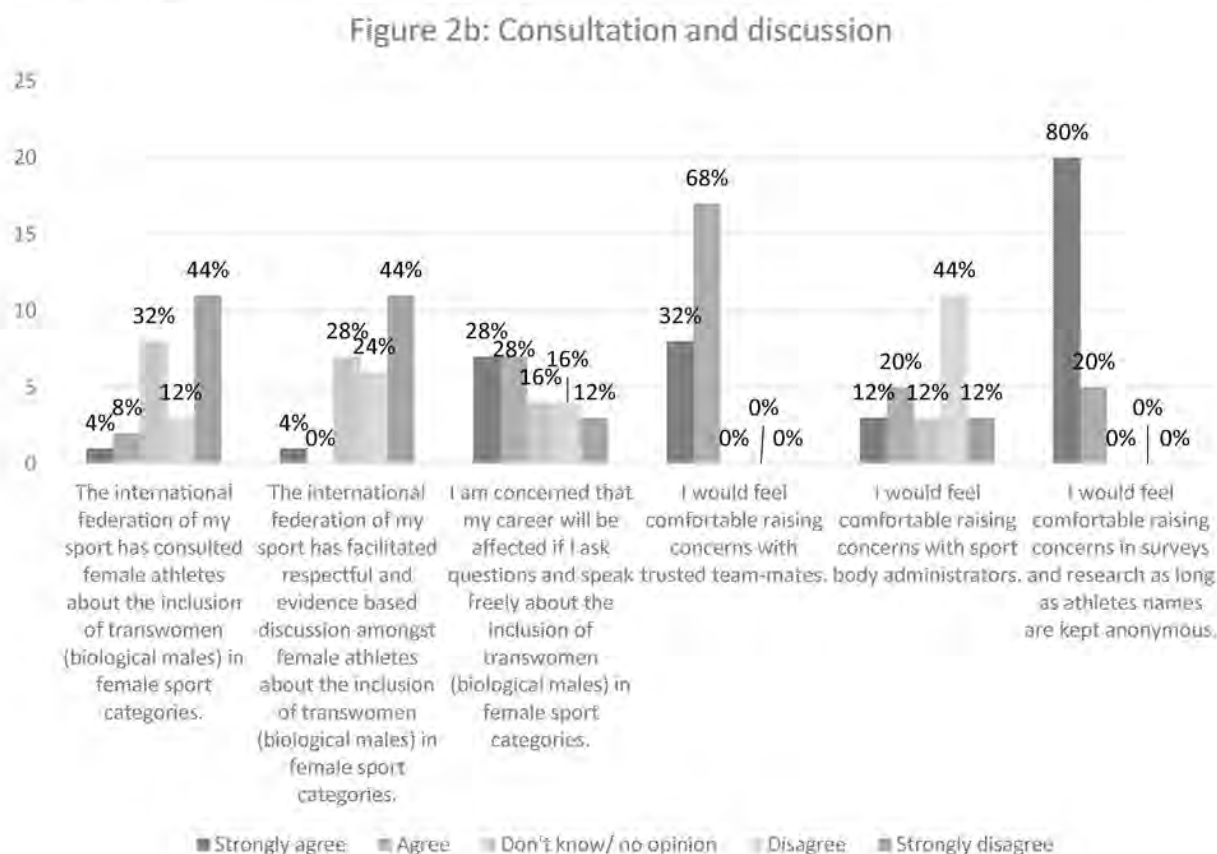
'Even if a lot of us share the same opinion, we are in constant fear of speaking out and being accused of jealousy or transphobia. The only people I can talk to about this are friends who

are not in the sport, family and female teammates that I trust. Anyone else, I can't open up to because I fear retribution and losing my career.'

'I am not transphobic. I would like everyone to have a place to play. But I am concerned if I ask curious questions that I'll be considered transphobic. I'd really like to ask the IOC, the CCES, and other governing bodies why we do not collect information on both gender and sex.' 'It also makes me sad when I go to fill out forms for competitions and it asks me for my gender and then says 'male' or 'female', which leads me to believe that the governing bodies do not understand the difference between sex and gender.'

'I also don't feel that myself or other athletes have been consulted about these policies before or been given the space to raise our concerns.

Figure 2b



'From my perspective it feels that on the other side of the argument there is a "you're either with us or against us" mentality and that those people who are pro trans participation in women's sport are quick to degrade opposing views to "transphobic" or any other similar type of ignorance. It appears it has quickly become a very political topic almost.'

'It appears to me that folks of all sexes and / or genders speaking about concerns they have related to trans women participation in natal female sports get dismissed as transphobic, even though we may identify as trans, bi, gay, lesbian, non- binary etc.' 'Everyone has a right to an opinion presented in a respectful, professional manner without being abused and

dismissed as transphobic. Many of us work, have family and or friends - loved ones, team mates who identify as Trans, bi, gay, lesbian, non-binary etc.'

'Most people want to be accepting and inclusive of trans people in all areas of society. I think the idea of questioning their place in women's sports is awkward to bring up because of this. The trans movement is also very organized against people who don't agree with their ideologies... I think a lot of women are afraid to speak up. When I hear people talk about transwomen in women's sports it's mainly men telling women that they need to accept it.'

'The past few years it has become even more difficult and sensitive for female athletes to speak about this issue than it was even in the past.' 'One would expect it should be easier now, that there would be more evidence to discuss to determine if integrating TW in F sport was fair and possible. But instead the ability to discuss has been in fact diminished and female athletes have a great deal of pressure from multiple points to stay silent on the issue, indeed they see colleagues praised if they support TW in F sport.' 'All the controversies are in the female category. Females are in general very accepting even celebrating in gender nonconforming athletes be they non binary females or trans men, but adding now TW who bring male sport advantages into female sport...' 'It's not fair at all to the majority of female athletes who want to compete drug free against those with the same biology.'

'I do feel strongly about this matter but I don't want to jeopardize my own athletic career if I were to voice my opinion. I think this survey that allows us to voice our concerns while keeping anonymity is really good.'

'The existence of this survey is why I checked agree r.e. "The international federation of my sport has consulted female athletes about the inclusion of transwomen (biological males) in female sport categories."' 'It is very difficult to have open discussion about this topic because it is so emotive and the issues are nuanced (i.e. human rights vs. fairness in competitive sport - which are not one and the same). You can want trans people to have equal human rights while still wanting women to have a separate, protected biological sex category, especially for high-performance sport.'

In contrast and of note, the Cluster 2 minority (3), who consider the survey itself to be 'transphobic', do not feel the same lack of consultation, dismissal and fear about speaking and all three feel there is respectful and evidence-based discussion and comfortable raising concerns with sport administrators. Further, all three are not concerned about the reaction of their national sport organisations, or sponsors, or other athletes if they ask questions or speak freely about the inclusion of transwomen in female sport categories.

One of these athletes however commented:

'Yes, I feel there is respectful and evidence-based discussion on this topic, but this question and, by extension, this survey, is NOT respectful and does not seem to be evidence-based. As I expounded on above, the use of the phrases "biological males" and "biological females" is NOT respectful and isn't accurate. You can't sex-test people.'

However, interestingly the same athlete qualifies this with:

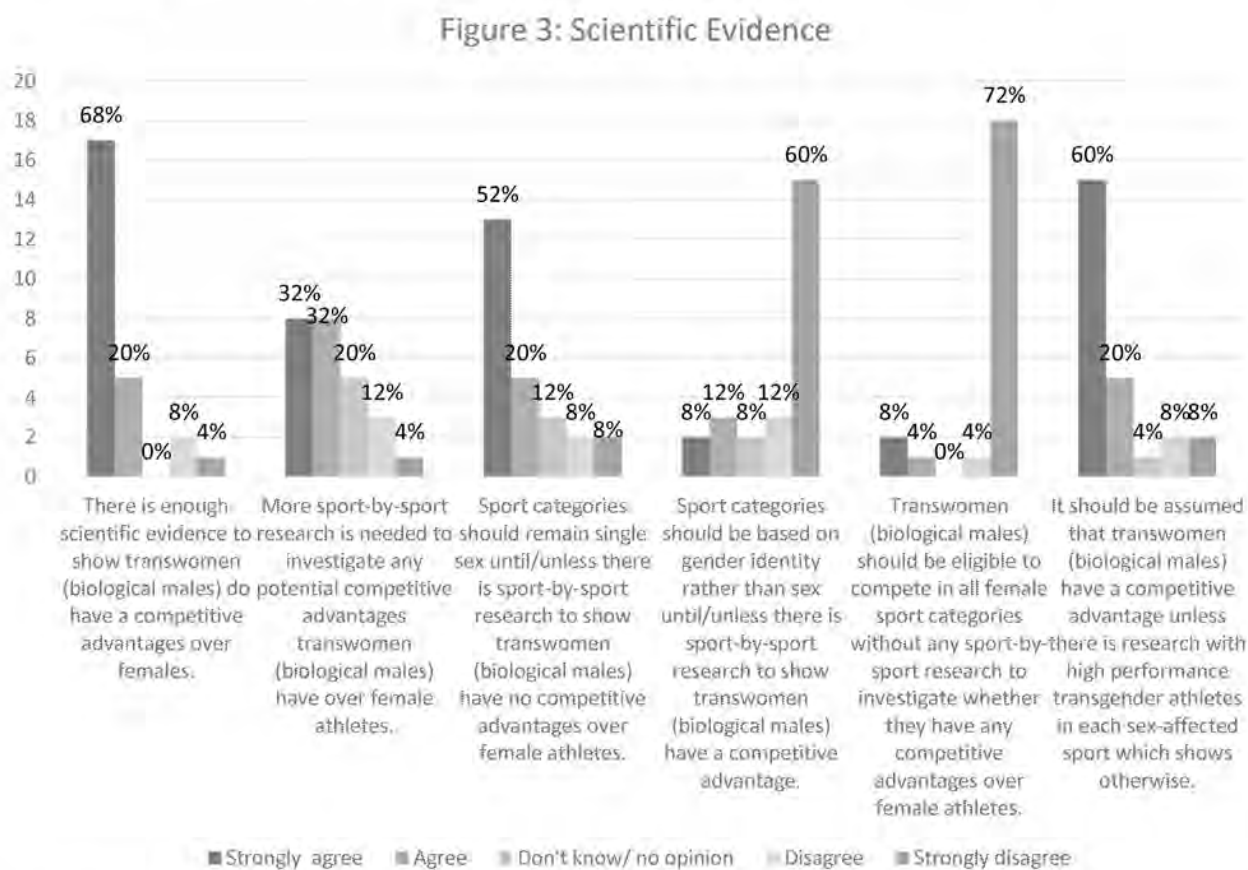
'I'm not saying that sex doesn't exist, because it obviously does. I'm also not saying that there aren't differences between sexes, because there are. But I'm saying that it cannot be as neatly categorized as these questions are trying to make it seem, and we definitely can't abide by a blanket policy.'

This athlete again demonstrates an antipathy to the language of biological sex despite acknowledging that sex exists, and conflates transgender athletes with athletes with DSDs/VSDs.

Question 3: Scientific evidence

Figure 3 shows that a large majority of all respondents either strongly agree (17) or agree (5) that there is enough scientific evidence to show that transwomen have a competitive advantage over females. Also, that sport categories should remain single sex (18) until/unless there is sport-by-sport research to show transwomen have no competitive advantages. Further, that it should be assumed that transwomen have a competitive advantage unless there is research with high-performance transgender athletes to show otherwise (20). This large majority also either strongly disagree (18) or disagree (1) with the view that transwomen should be eligible to compete in all female sport categories without any sport-by-sport research to investigate whether they have any competitive advantages over female athletes. Finally, a large majority (18) think sport categories should remain single sex and did not agree they should be based on gender identity, without any sport-by-sport research to investigate whether they have any competitive advantages over female athletes.

Figure 3



Cluster 1 comments include:

‘It is not just testosterone in the moment does not reverse the androgenizing effects from birth through to puberty and beyond (i.e., reducing testosterone does not mitigate the gained advantage). There are testosterone effects before puberty too...’

'I do think there has been little regard for the muscular advantage retained even after transitioning and I think that is something that needs to be more researched within individual sports.'

'The evidence is already before us to have an XX category and an XY category. It is our chromosome certificate which we received before we were born. Research is not needed for this.' 'A chromosome/biological sex certificate is to designate XX or XY categories.'

'There is a reason a separate category was created for females. Fairness, safety, equitable opportunities etc. It took years of advocacy to recognize that females deserved their own safe, fair sport categories. It seems a few people and organizations are working hard to reverse history at the expense of females.'

'I don't think there is enough info on whether simply suppressing testosterone makes a man "poof" become a woman. If you look at a trans woman you can usually see male secondary sex characteristics that are not "erased" by reducing testosterone. Women are not a hormone level.'

'I am in favor of more research which should help sport rule makers decide if there should be additional categories besides male and female. But I am not in favor of TW competing in female sport while we wait for the answers.'

'It's great that there has been research to "prove" biological male retained advantages" but years of sports data and simple observation makes it obvious already'.

'I think it is ridiculous we even need to question whether trans athletes have an advantage or not. A mediocre male cyclist could most likely out race a top female cyclist on any given day, but that will never happen the other way around. This is a "women's issue" which makes it seem like its not being taken seriously. This is incredibly frustrating. You don't have to ask a scientist to know that it's inherently advantageous physiologically to be a biological male...'

'It seems that more data and research makes little difference at the decision-making table. The "equity and inclusion" movement is completely political. Most sports leaders know the truth but they feel they must comply with the current dogma AND with the IOC & international federation.'

'TW were allowed to compete in the female category first without clear evidence it would be fair to female athletes. This was the wrong way to go about it. Now that TW have been allowed in the female category its expected that the onus will be on female athletes not to prove that TW have an advantage. The people who put these policies initially in place did not act responsibly with the interests of female athletes equally in their mind'.

'...there is enough scientific evidence showing that transwomen have a competitive advantage over biological females and that high-performance sport policies need to prioritise fairness and safety for female athletes over inclusion of transwomen into biological female categories at this time, but be willing to adjust if better/different/more thorough, peer reviewed scientific evidence comes to light. The assumption should be that biological male athletes do have an advantage over women until shown otherwise, not the other way around'.

The three athletes in Cluster 2 who felt gender identity is more important than sex, all thought that sport categories should be based on gender identity rather than sex and that transwomen should be

eligible to compete in all female sport categories until/unless there is sport-by-sport research to show transwomen have a competitive advantage. They also strongly disagreed with the view that it should be assumed that transwomen have a competitive advantage unless there is research with high-performance transgender athletes in each sex affected sport which shows otherwise.

Two athletes commented and said:

'I believe it is more important to allow transwomen to compete in high-performance sport while science catches up on the advantage/fairness question.'

'The only "fair sport" is one that is inclusive, and allows all to compete as their authentic selves. This also minimizes performance down to physical qualities. Performance is about SO much more than that. Sure, someone who went through puberty as a male may have more muscle mass. But that doesn't factor in anything to do with resilience, mental performance, etc. It's only one element of the equation.' 'The only way to address this is case-by-case, in a way that prioritizes dignity and gender-expression.'

Question 4: The IOC Framework

Figures 4a and 4b show that the majority of all respondents either strongly agree (9) or agree (7) that high-performance sport should include both athletes who were born female and transgender athletes. Interestingly, a large minority (8) disagreed with this which may be because they assume this means including transwomen in female categories, given this has been the dominant inclusion framing used by governing bodies of sport. However, a large majority either strongly agree (15) or agree (5) that the inclusion of female athletes in high-performance sport depends on female categories because of puberty-related competitive male advantage, and either strongly agree (15) or agree (5) that including transgender athletes with retained male advantage in female categories in high-performance sport excludes female high-performance athletes from selection, competition and podium opportunities. A large majority also either strongly disagree (17) or disagree (4) that including transgender athletes with retained male advantage in female categories does not discriminate against female athletes. An extremely large majority either strongly disagree (20) or disagree (2) that transwomen should be included in female sport categories with no elimination of male competitive advantage as outlined by the CCES. Further, they either strongly disagree (17) or disagree (4) that fairness for females is less important than inclusion for transgender athletes and strongly agree (17) or agree (4) that inclusion for transwomen does not have to be in female categories. Finally, a large majority (15) strongly disagreed or disagreed (5) with the IOC principle that transwomen should not be presumed to have an advantage in female categories until there is specific sport-by-sport research with elite transgender athletes available.

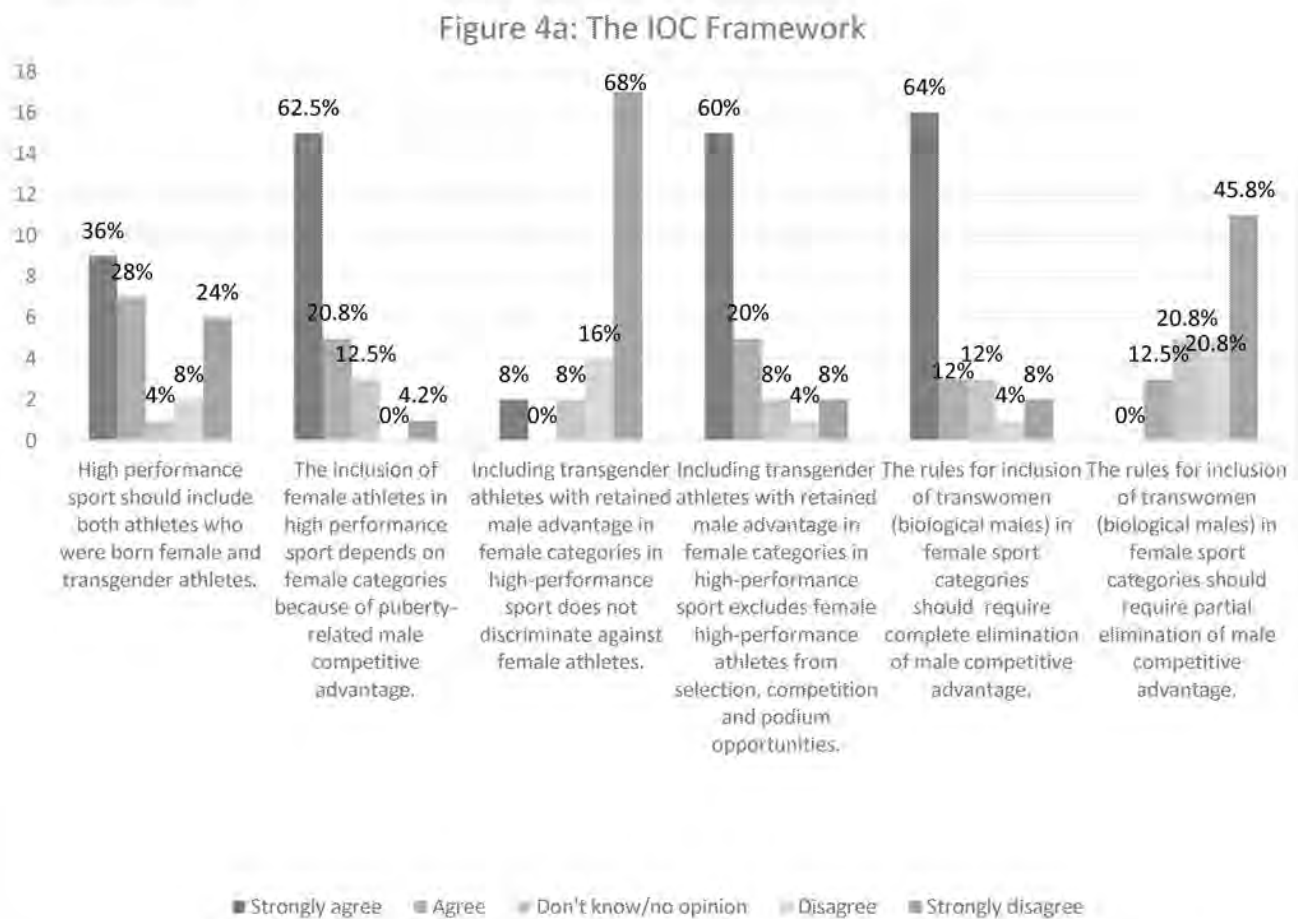
Cluster 1 comments include:

'All we talk about is trans athlete inclusion but what about the biological women competing...don't their right matter? This is the first survey/interaction I have seen that actually asks us directly what we are feeling, thinking, etc. We also have rights to play sports in a fair way....People say women should speak up.... but we don't because we fear retribution. The few that do become heads of the cause and they receive backlash, lose their spot on the team, etc. and it causes a lot of stress.'

'Retained male advantage in transwomen gives these individuals an advantage over females. If the current argument that says transwomen not being allowed to participate in womens/female sport is discrimination then the same argument is true female athletes when they speak to competing against those with retained male advantage.' '...it is

impossible with our current science to eliminate the male competitive advantage.' 'I think that needs to be made clear to the general public.' 'Inclusion for transgender women does not need to be in female categories. Again, the conversation of transmen (and yes, ok, not the focus of this study, but I'd argue an essential part of this conversation) and inclusion and where. I think that should start the discussion and how we think about giving everyone a place to play competitively that is fair (in that it acknowledges male competitive advantage from an evolutionary biology perspective).'

Figure 4a



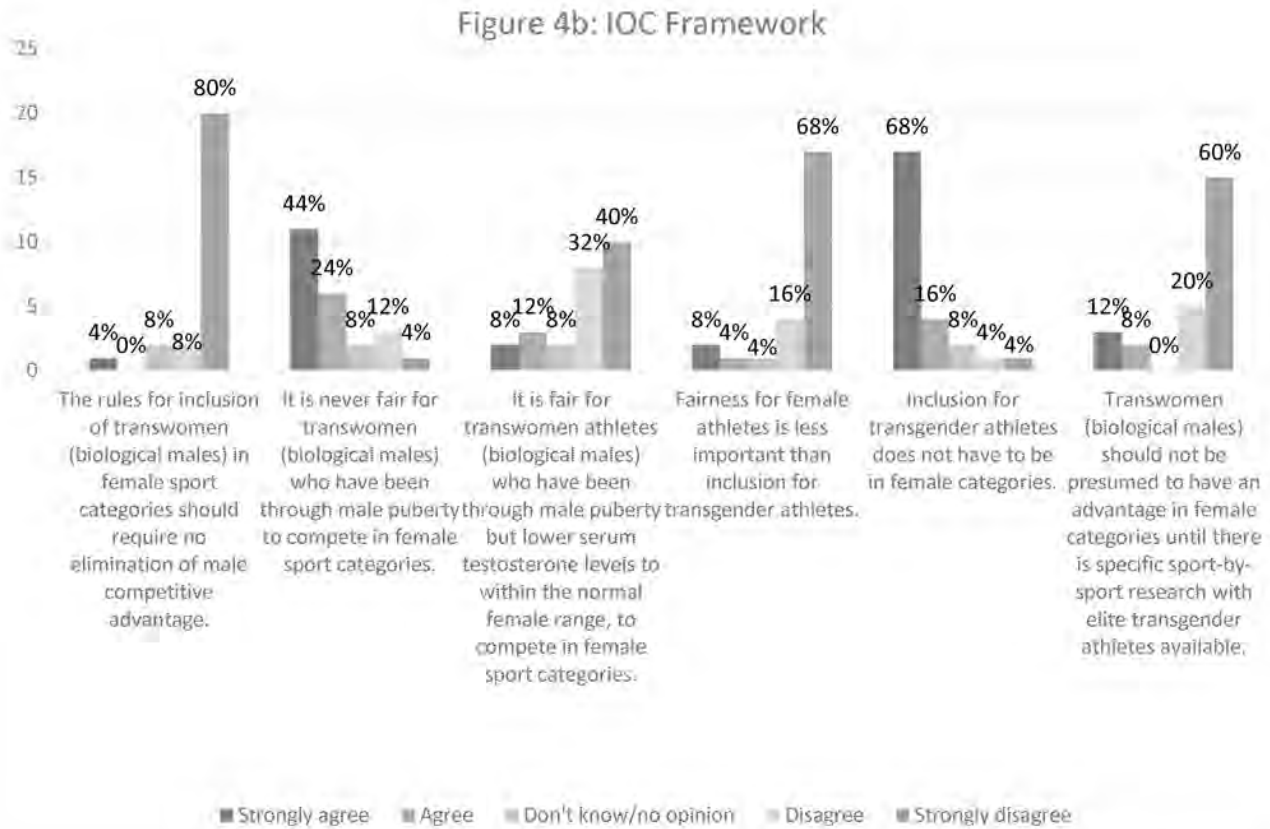
'I think that the fairness of sport for biological females should be prioritized over the inclusion of trans women, but that the inclusion of trans women does not necessarily mean that the sport is unfair. If it has been shown that trans women do not have an advantage in the sport then they should be included, however, if research shows that they do have an advantage then I think they should either be excluded from women's categories or there should be work put in to developing protocols to account for and eliminate these advantages.'

'I believe inclusion for all is very important at all ages - but it seems like with the current evidence we have available, we have to assume biological males have a significant advantage over biological females and should not be competing in the same category'.

'Fairness for the female athlete means transgender have their own category. Whatever the reason for a male wanting to be female may be complicated and an ongoing study. I don't

believe it is high-performance sport to figure out those questions. It is the responsibility of female sport to set our boundaries.'

Figure 4b



'The reason I answered strongly disagree to the question , "inclusion of trans women should require complete elimination of ..." is I don't believe any one should have to change biology through hormone treatment or surgery to participate in sport. There are many other options to allow for dignity and inclusion including: continue participating with ur biological sex, create a trans category...' 'I think the research is there that proves the overall unfairness to natal females if trans women compete. I think that trans women and trans organizations should provide the scientific evidence that proved fairness to participate in biological female sport. Why is the onus on natal females? Why do females always have to proof themselves to retain their space, rights, fairness? Seems somewhat mysoginistic to me. I don't think sport organizations, NSO's have the resources to complete the research.'

'If a transwoman wants to compete in an elite sport, they could have their own category, or else compete as a male. Trans people are a very small proportion of the population.. women are over 50% of the population.'

'There are some sports like equestrian and skeet shooting in which biological sex seems to make a minimal difference. I believe we already know which sports those are and the new "all inclusive" rules should only apply to those ones.'

'All I can say is that there are two categories for a REASON!!!! plain and simple. the only time it should be black and white..... cause this seems clear as day to me.... inclusion for every other aspect in life is extremely important and I would never question that.'

'Compete in your sex, transgender or not, fairness is that simple'.

Interestingly, two of the three athletes in Cluster 2 who consider the survey itself to be 'transphobic' because of reference to the biological sex of transwomen, agree that the inclusion of female athletes in high-performance sport depends on female categories because of puberty-related male competitive advantage. Further, these two athletes strongly disagreed with the inclusion of transwomen in female sport categories with no elimination of male competitive advantage. However, they agreed that it is fair for transwomen athletes who have been through male puberty but have lowered serum testosterone levels to within the normal female range, to compete in female sport categories. This suggests these athletes, either do regard transwomen as biologically male but strongly object to any reference to this fact, and/or regard a transwoman as not 'a typical biological male'. Only one athlete agreed with the Canadian CCES transgender guidelines that the rules for inclusion of transwomen in female sport categories should require no elimination of male competitive advantage. Interestingly, two Cluster 2 athletes thought that fairness for female athletes is less important than inclusion for transgender athletes.

The only comment provided was:

'I feel that my above answers are fairly clear, apart from the fact that I disagree with the researcher on what constitutes "fairness".'

Question 5: The IOC Transgender Guidelines: 2003, 2015, 2021

Figure 5a

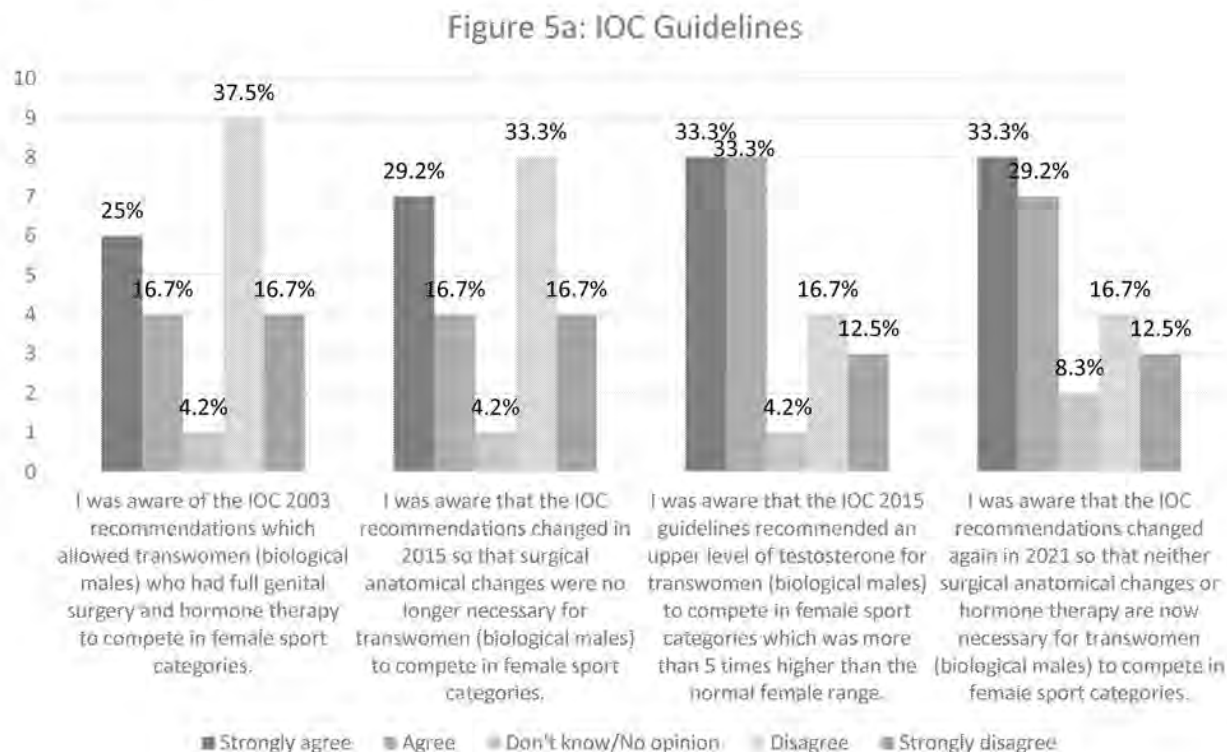
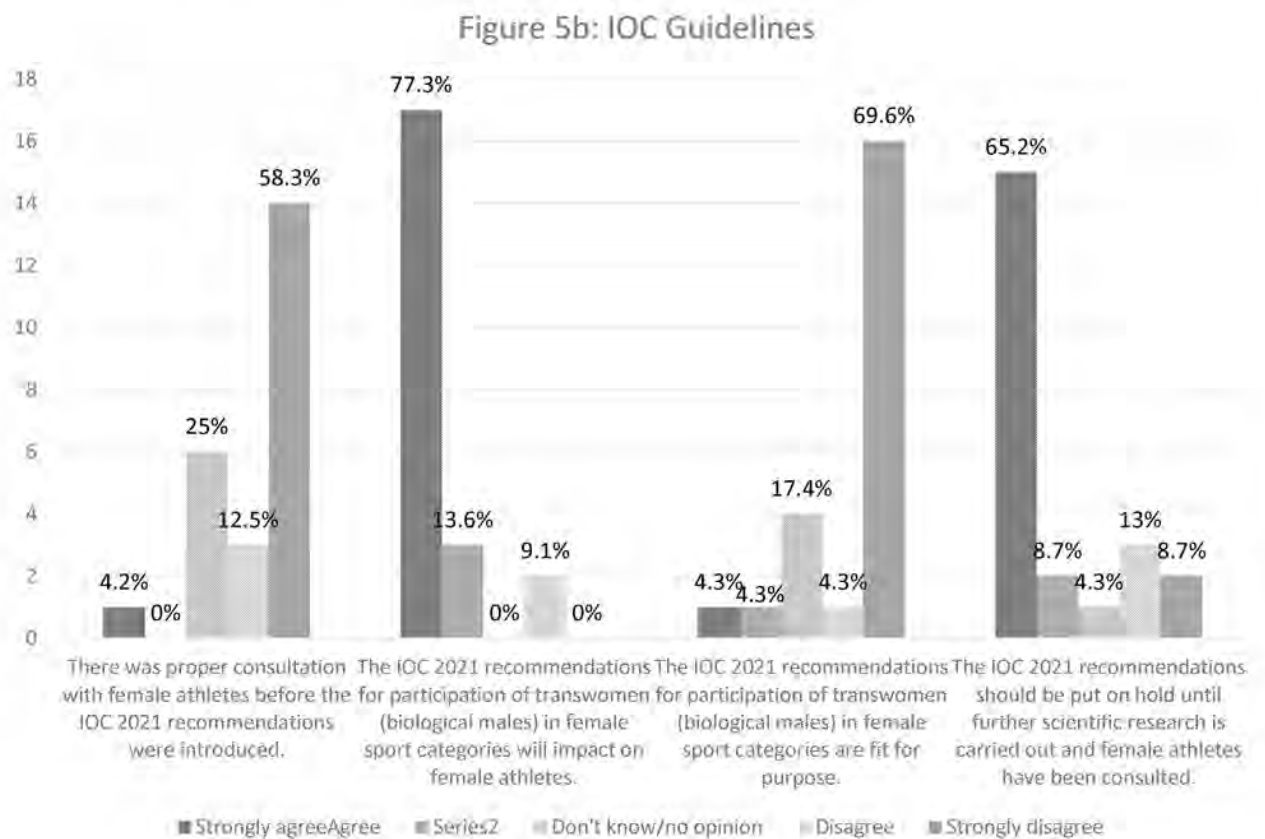


Figure 5a indicates that athletes have become increasingly aware of the IOC Guidelines for transgender inclusion from 2004 to 2021. Figure 5b indicates that the majority of all athletes either strongly disagree (14) or disagree (3) that there has been proper consultation with female athletes before the IOC 2021 recommendations were introduced and six did not know whether or not this had happened. However, a large majority strongly agreed (17) or agreed (3) that the IOC 2021 recommendations for participation of transwomen in female sport categories will impact on female athletes, strongly disagreed (16) or disagreed (1) that they are fit for purpose and strongly agreed (15) or agreed (2) that the recommendations should be put on hold until further scientific research is carried out and female athletes have been consulted’.

Figure 5b



Cluster 1 comments included:

‘I don't even understand the logic behind these recommendations... basically, you can say you identify with one gender or the other and you can compete with that gender? It is ridiculous....Female athletes are not being consulted at all once again and I am shocked at the 2021 recommendations, I had no idea. I was already baffled by the 2015.....’

‘I do not believe the IOC used any credible evidence to write their document. I don't think it's just the consultation of current olympians either. Former Olympians and those that did not quite make it should have been part of the investigation.’

‘I think that more research needs to be done into high-performance trans athletes in sport to determine what the guidelines should be. I don't know if this has been extensively

researched, but I feel that some advantages are not being accounted for and need to be in order for sport to be a fair and equal place.'

'...the changes are very sad for women's sport. Between this and other shady things the IOC has done over the past few years I have very very little respect for them...(they gave) little to no second thoughts about how it impacts women and girls of all ages and abilities'

'It is obvious there has been a slow and calculated master plan of the IOC for the inclusion of transgender athletes in female sport. Shameful.'

'I can't believe that IOC has not hired experts and made these decisions that discriminate against natal females. One just shakes their head with, " Here we go again, females having to fight for their rights, yet again".'

'I completely disagree with the IOC framework presumption of no advantage for TW in F sport. This is completely without evidence and it's not fair the onus is on female athletes or sports to have to prove retained male advantage. It should be for those seeking accommodation into the female category to prove they have eliminated all male sport advantage. the current IOC framework is not very helpful for anyone athletes and sport policymakers in my opinion.'

'The IOC has failed to consult women and/or has chosen to not listen to the preferences of female athletes at all points along this journey, starting with their athlete survey in 1996. It's a pity. A shame.' 'So much controversy could have been avoided had the IOC undertaken proper consultation with scientists and female competitors. Now everyone is at risk - including the IOC, which is at risk of losing any credibility they had left after the 1980s doping scandals and other ethical lapses.'

'Just because I know about the regulations does not mean I agree with them. I completely, wholeheartedly disagree with them. I think the regulations are unfair and against spirit in sport. It's about competing with other athletes who are like you, biologically female to see which of the biological females are the strongest and fastest..'

Conversely, all three of the Cluster 2 athletes did not think that the IOC recommendations should be put on hold, and two thought they are fit for purpose whilst two did not think they would impact on female athletes.

One of these athletes commented that

'...female and women athletes should both be consulted. Only consulting female athletes would be exclusionary and not right.'

Question 6: Impact of rule changes

Figure 6 shows that a large majority of all respondents strongly agree (12) or agree (5) that these rule changes are likely to increase the number of transwomen qualifying, competing, winning and setting world records in female sport categories and strongly agree (9) or agree (5) that they are likely to decrease the number of biologically female athletes qualifying, competing, winning medals and setting world records in female sport categories. A large majority strongly agree (15) or agree (3) that these rule changes are open to exploitation by some countries.

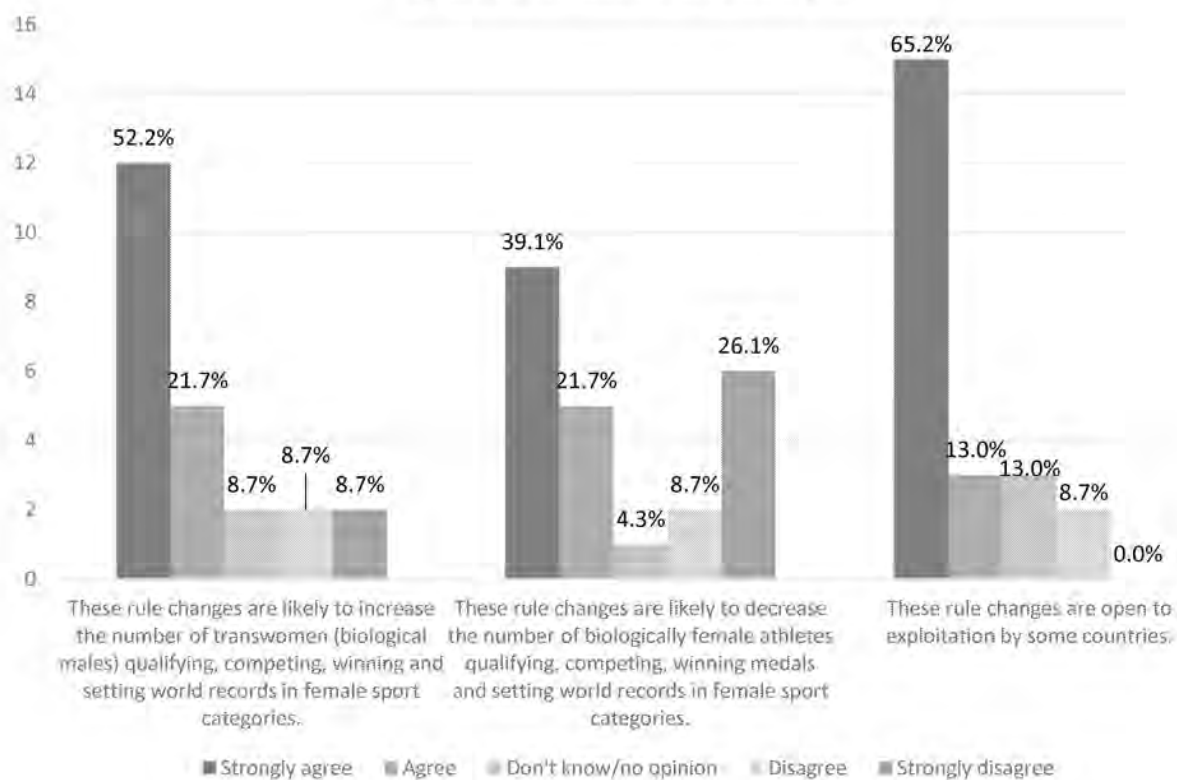
Cluster 1 comments included:

'I think it's more about inclusion rather than have more records or participations by trans athlete. But it can be exploited by some countries as well....'

'I think the first two questions are 'not yet' but it will be soon. I think the average transwoman competing was average (i.e., not talented in the definition of showing great promise and doing well in a sport prior to transition). I think if you take a biological male with talent, layer that with they worked hard prior to transition, there will be an even greater advantage. In addition, as it becomes more acceptable to be a transwoman, transman, etc. there will be more of these people competing at the top. As said above, I don't think you'll have droves of transmen dominating male sport, but as the numbers increase on the transwomen side, and they have the retained competitive advantage, they will naturally trickle to the top and quickly.'

Figure 6

Figure 6: Impact of rule changes



'Of course countries are going to exploit this. Not all countries are on the same ethical playing field. China - CRISPR, Russia – current crisis. Not to say that they will do that, but that their ethical standards are different.'

'It's so sad to even be discussing this travesty of justice for women. We have to battle through menstrual cramps and anemia due to significant blood loss to drag ourselves to the start line.'

'Exploitation is already evident w some nations intentionally filling the female team roster in part with trans women athlete, e.g., Iran women's soccer and yes where being gay in a

country is punishable by death what choice does one have so really there are other issues involved for this happening to. However, this is eliminating bio-female participants opportunities, careers, sponsorships, and creating an unfair competition environment for other teams they compete against.'

'It's up to the individual sport federations now to make policy and rules that keep fairness in the female category. The IOC abdicated its responsibility and any leadership in this are with their new framework.' 'The IOC with its policies in 2003 and 2015 have created a big problem in sport and its disappointing the way they exited and left it to others to fix it.'

'The potential for manipulation of the rule is enormous - precisely because the rule is vague and eligibility is now unverifiable.'

'exactly true. this is not fair. I have talked with a friend who is a paralympian who feels similarly about athletes being classified in the wrong category to better their chances of a medal and success. this feels like it's the same thing.'

All three of the Cluster 2 athletes did not agree that these rule changes are likely to increase the number of transwomen qualifying, competing, winning and setting world records in female sport categories or that they are likely to decrease the number of biologically female athletes qualifying, competing, winning medals and setting world records in female sport categories. However, one of these athletes did think these rule changes are open to exploitation by some countries and one did not know or had no opinion.

One athlete states that they regard the questions themselves as biased. This is presumably because they regard any question which makes a distinction between biological sex and gender identity, or female athletes and transwomen athletes, to be inherently biased. A second athlete thinks it unrealistic that countries (and people) could exploit these rules. Interestingly, this is a young athlete who perhaps has less experience of the historical and contemporary problems with doping that older respondents may be more aware of.

Comments included:

'There is a huge difference between qualifying and setting world records. Do I think eliminating undue barriers for transwomen to compete in sport will increase the number of transwomen in sport? Yes. Do I think this will increase the number of transwomen achieving higher levels in sport? Probably - because there will actually be transwomen competing. But just like the continued increase in AFAB athletes participating in female categories - the more people in the female category in sport, the more people who will be winning and setting records. These questions are so biased, I don't know how you can actually call this valid "research".'

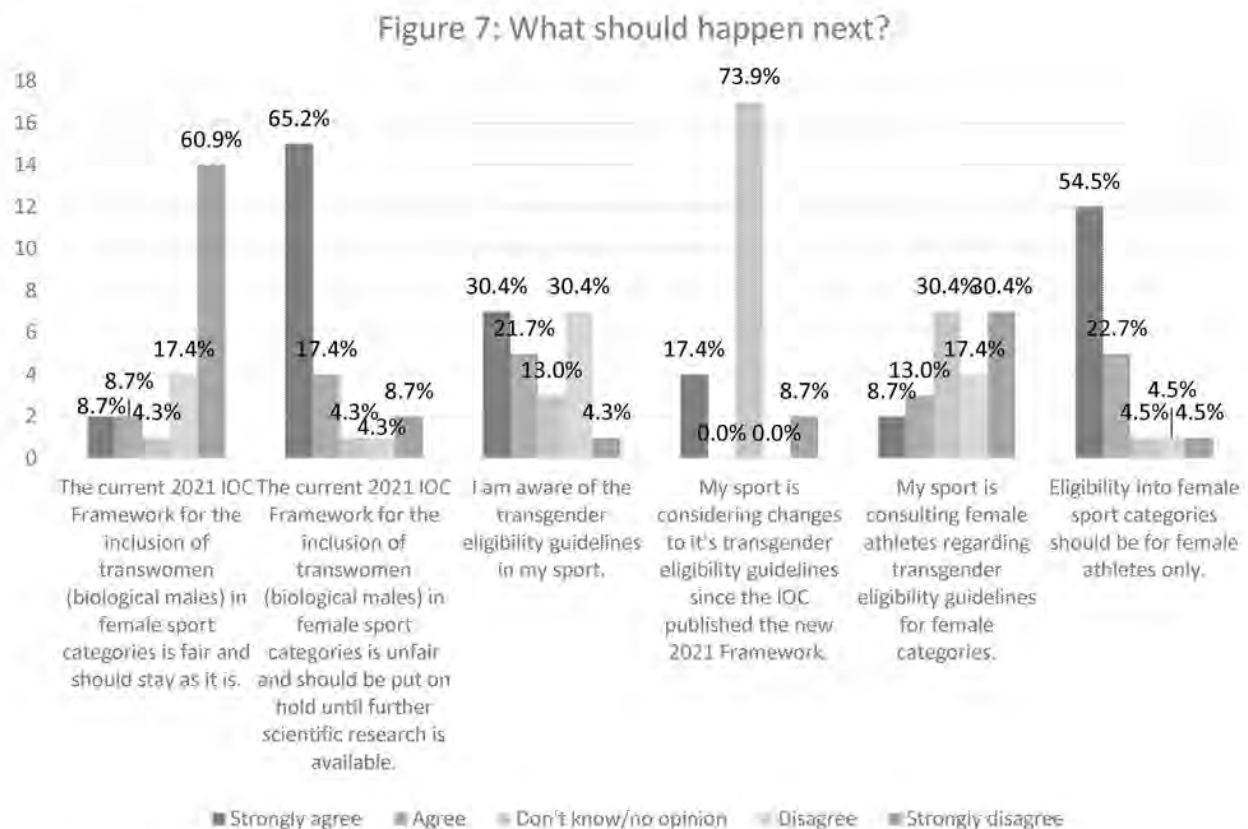
'Sure, theoretically, people and countries could exploit these rules. But this attitude is extremely fearful and unrealistic. Protectionist attitudes are, not to be too confrontational, anti-feminist. They hold us back.'

Question 7: What should happen next?

Figure 7 shows that a large majority of all respondents either strongly agree (15) or agree (4) that the current 2021 IOC Framework for the inclusion of transwomen in female sport categories is unfair and should be put on hold until further scientific research is available. In addition, a large majority of respondents either strongly agree (12) or agree (5) that eligibility into female sport categories should

be for female athletes only. Of concern is that most athletes do not know if their sport is considering changes to the transgender eligibility guidelines since the IOC published the new 2021 Framework and a majority of respondents either strongly disagree (7) or disagree (4) that their sport is consulting female athletes regarding transgender eligibility guidelines for female categories. A further seven do not know.

Figure 7



Cluster 1 comments include:

‘I would like the IOC to publish something with credible evidence, even if the document outcome stays the same. I do not believe there is any evidence supporting this work. Again, as I said above, I do not think more research is needed. The research exists to demonstrate the differences between males and females. I think the major change needs to include the discussion of both gender and sex in sport.’ ‘You have the right to identify. I have the right to compete in safe and fair sport. Women’s sport and Female sport are not the same. Historically we used women to describe the female category. I think this is the start of the challenges that current sport faces.’

‘My sport has more restrictive guidelines on testosterone levels than the general IOC guidelines however testosterone levels are the only restriction placed on transgender athletes.’

'I feel for the NSOs - they are stuck between a rock and a hard place right now - do you choose women's right to safe and fair competition, or inclusivity for all?'

'The scientific evidence is there to support retention of female sport categories. It took generations for females to obtain fair participation in sport. Don't undue all the work of our pioneers, the inclusive, fair, equitable advancements for females to date.'

'My sport organization allows you to self identify for any events. It does not require any form of knowledge of if you are trans. There is no statement saying athletes all abide by its rules. Their policy is inclusion. At the cost of their women....'

'I am hopeful that my sport will finally consult female athletes on this issue and also commit itself to developing a new policy that is supported by actual evidence and if the evidence is not conclusive I hope that they take the stance that the default is that female sport is only for female athletes until such time that there is a protocol (at the moment unknown) that can 100% eliminate male sport advantage from TW who might wish to compete in the F category.'

'The IOC needs to return to its pre-1996 approach to screening. This time using better technology to determine the presence (or not) of the Y-chromosome (not just the barr bodies using the old cheek swab). After a Y-chromosome is detected in a "woman" or "girl", there could be a second step that helps determine whether that athlete has CAIS. (I think it might be reasonable to permit CAIS individuals to compete in the women's category - although even THIS exception would need to be studied carefully.) Once the reality of the athlete's biological status is determined privately, it would be very easy to: (a) Treat the ineligible athlete with respect and help them avoid media scrutiny. (b) Secure the female athlete category.'

'I have not heard a peep from (national sport organisation) regarding this issue. I don't know what will happen if my spot is threatened by someone who is a trans athlete.'

The three athletes in Cluster 2 all agree that the current 2021 IOC Framework for the inclusion of transwomen in female sport categories is fair and should stay as it is. All three disagree strongly with the view that eligibility into female sport categories should be for female athletes only.

Cluster 2 comments include:

'Do I think males should be included in the female category? No. Do I think transwomen are male? NO. So my answer is based on the female athletes including transwomen, which obviously you do not consider "female".'

'...it needs to be case-by-case... At the high performance / professional level, there should be meaningful discussion between the governing bodies and the prospective athlete to determine how to proceed.'

The first athlete had earlier said that transwomen were not *typical* males and here goes further to say that transwomen *are not male* and believes that transwomen are female. The large majority of respondents do not have any difficulty with using both the terminology of biological sex and that of gender identity in their comments and clearly regard transwomen as biological males. This respondent however indicates once again that either they are not happy with a distinction being made between the biological sex and gender identity of transwomen, or even, that they regard

transwomen as *biologically female*. The second athlete's comment is different in that there is an acknowledgement that there is a biological difference between transwomen and biological females.

Question 8: Category preferences

Figure 8a shows that the most popular category preference for transgender inclusion is in additional transgender categories (rank 1 = 8 athletes, rank 2 = 2 athletes) as the fairest way to include transgender athletes in high-performance sport. Inclusion in male categories called men's categories (rank 1 = 4 athletes, rank 2 = 5 athletes), and inclusion in open categories (rank 1 = 4 athletes, rank 2 = 3 athletes), are the second most favoured options. Figure 8b gives a weighted ranking across all responses and shows a similar ranking preference with additional categories the most favoured option, followed by the open and female categories combination, and then male sport categories called men's categories.

Figure 8a: Preferred category solutions ranked 1-3

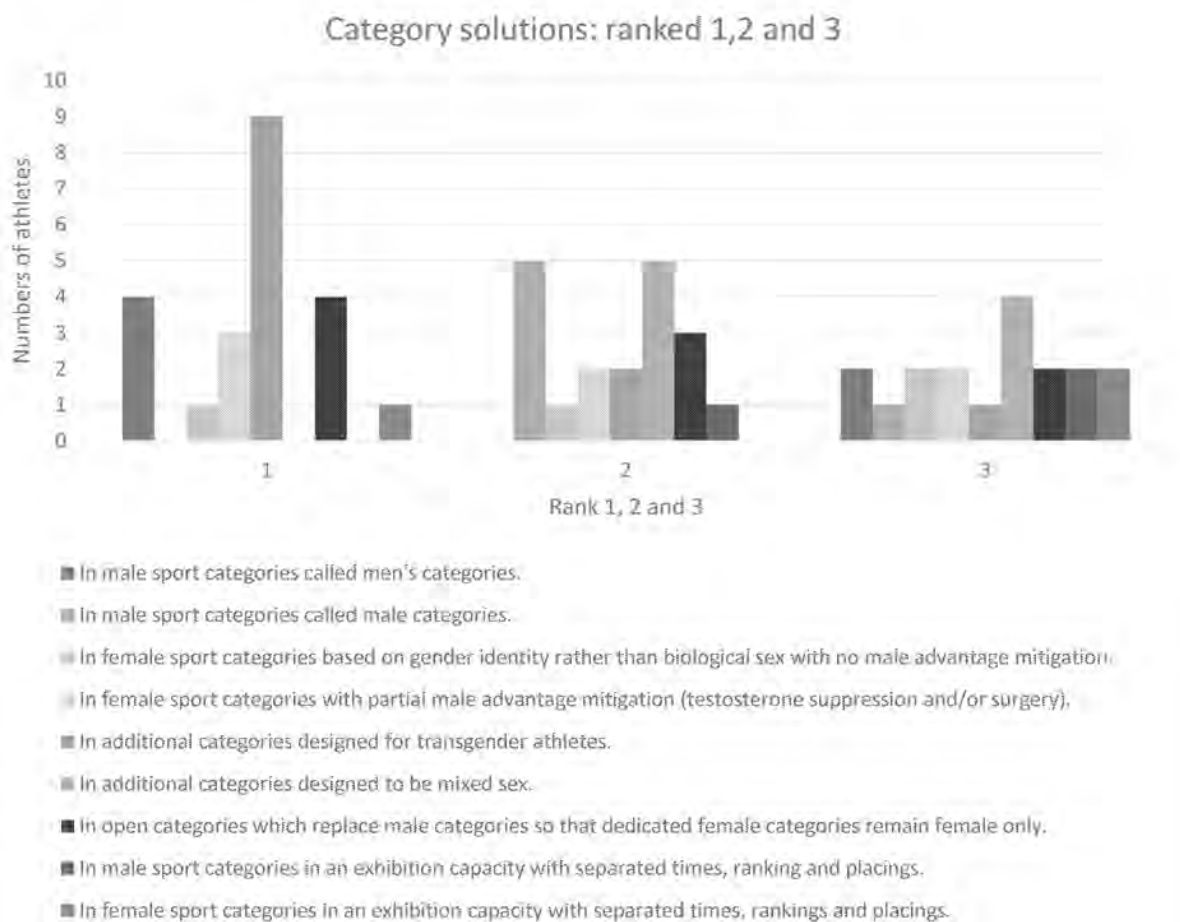
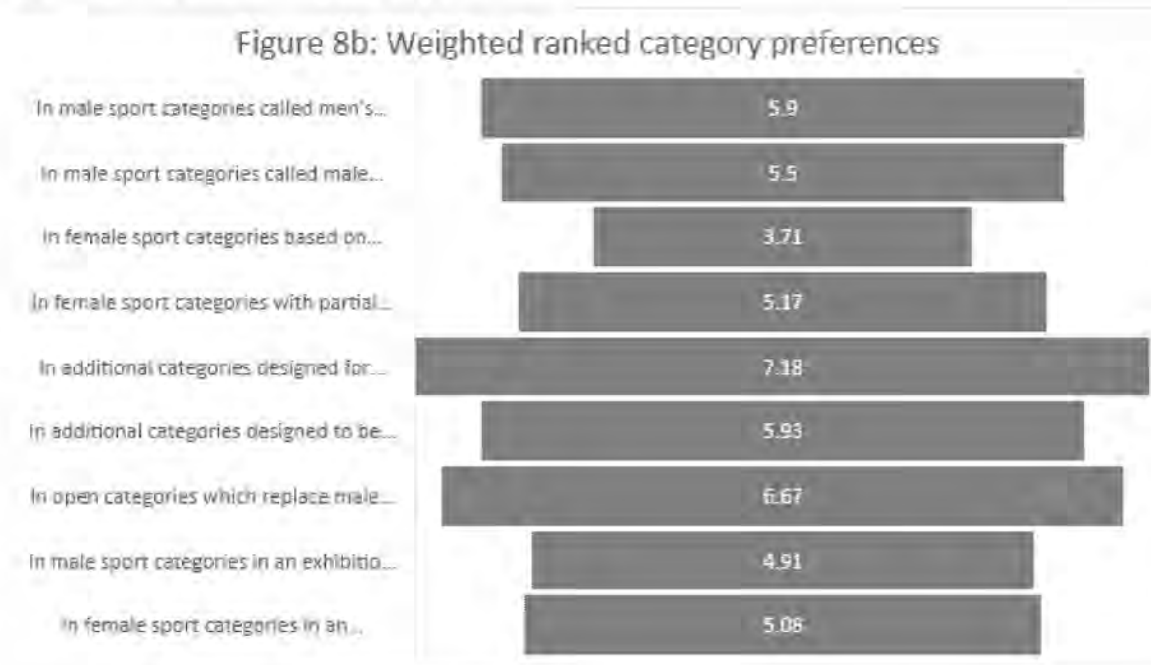


Figure 8b: Weighted ranked category preferences

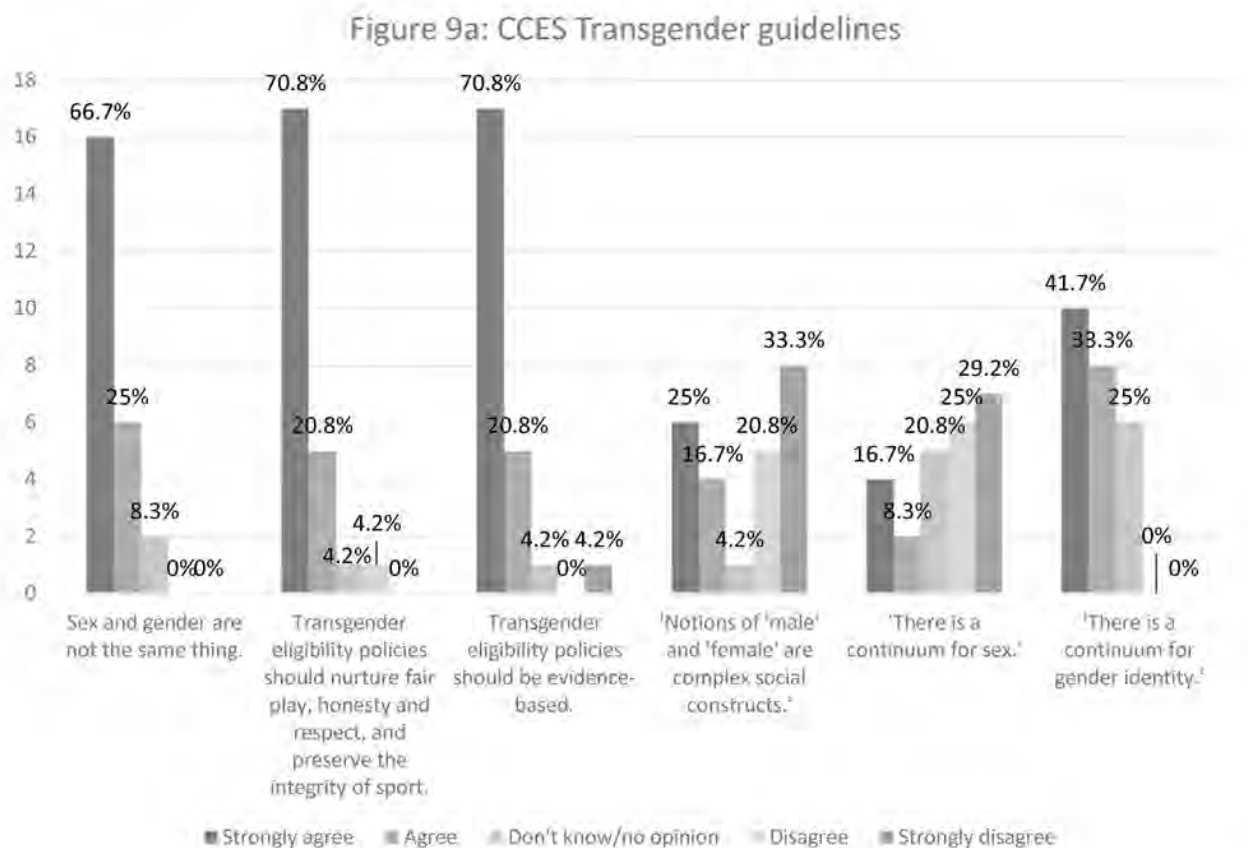


Question 9: CCES transgender guidelines

Figure 9a indicates strong agreement amongst most respondents that 'sex and gender are not the same thing' (strongly agree, 16; agree, 6), 'transgender eligibility policies should nurture fair play, honesty and respect, and preserve the integrity of sport' (strongly agree, 17; agree, 5) and 'transgender eligibility policies should be evidence-based' (strongly agree, 17; agree, 5). Although there is more of a spread of opinion for the next three questions, the majority of athletes did not agree that 'notions of 'male' and 'female' are complex social constructs' (13) or that 'there is a continuum for sex' (13) whereas a large majority agreed 'there is a continuum for gender identity' (18).

Figure 9b indicates that a significant majority of all respondents either strongly agreed (10) or agreed (11) that 'it is a fundamental human right for everyone to be recognized in the gender with which they identify' whereas there are a spread of opinions regarding the statement 'transfemales are not males who became females. Rather these are people who have always been psychologically female but whose anatomy and physiology, for reasons as yet unexplained, have manifested as male.' However, a large majority did not agree that 'while we can observe that participants in men's sport, on average, out-perform participants in women's sport, current science is unable to isolate why this is the case' (strongly disagree, 13; disagree, 7), or that 'all individuals should be able to participate in sport in the gender category with which they identify without being required to undergo any kind of medical intervention' (strongly disagree, 13; disagree, 5). The majority also disagreed that 'all individuals should be welcome to participate in sport in accordance with the gender with which they identify...(this) should apply equally to genderfluid or gender non-binary individuals.' (strongly disagree, 11; disagree, 3).

Figure 9a



Following on from this, figure 9c shows the majority disagreed with the view that '[this means] individuals moving between men's/women's teams more than once, or simultaneously participating on a men's team in one sport and the women's team in another' (strongly disagree, 11; disagree, 4). There is a much more even spread of opinion regarding the last four questions relating to: access to facilities based on gender identity, 'cisgender' people or transgender people seeking alternative arrangements if feeling uncomfortable sharing, access to hotel rooms based on gender identity and thinking 'about the ways in which your position as a cisgender person gives you power and privilege every day.' For all of these four questions there are four or five athletes who don't know.

Cluster 1 comments include:

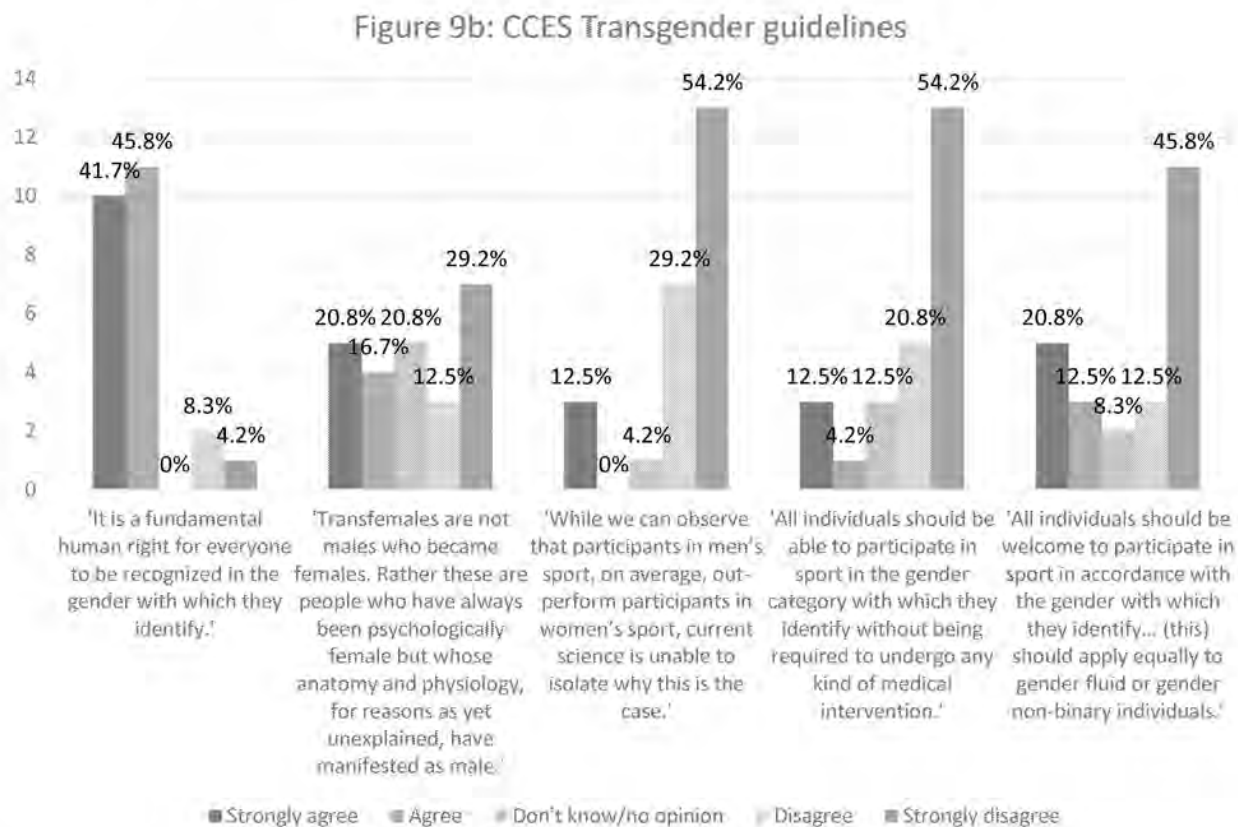
'if I reach out about anything making me uncomfortable in the situation, I am immediately labeled transphobic'

'Generally speaking, I believe the credible evidence in science says that there really isn't a continuum for sex. Yes, we do have genes that express differently. But from most (I think it's 99.9% of our DNA) we express as either male or female. Gender Identity is the continuum. I think CCES might have confounded these two ideas or used biased research to support their data. There are transwomen and transmen not trans females.' 'I think CCES confounded the terms, which leads others to be confused. They need to do better as experts in their fields.' 'I don't ever want to tell someone they cannot identify as they choose to.' '...a teammate can say they are uncomfortable sharing a room with a transwoman.' 'Both parties in the room

need to be comfortable. The transgender woman should also not need to share a hotel room with someone who does not accept their identity; that too is unfair.'

'...trans people should not be allowed to participate in high level sport without any medical intervention. Trans people should be required to meet some medical criteria (for example, testosterone levels) based on more extensive research that determines the most accurate criteria that will guarantee fairness.'

Figure 9b



'It's all very tricky, I definitely don't have the answers, just hope that we can all be respectful of each others values and beliefs.'

'It is not based on research or an individual's strength. It is solely based on XX and XY.'

'Sex you're born with - it's decided for you. gender is how a society has constructed/developed views - their thinking on how a male or female ought to be/behave-mannerisms, roles, dress, etc. Different nations and societies within those nations have different expectations of the different sexes.' 'Male and female are biologically defined w social construct influencing what is perceived as normal for each - social/ society context-this has been evolving to more inclusive for both male and female'. 'No one should have to alter their biological sex or take hormones to participate in sport. Compete in sex based categories, while being the gender you feel best as/in and cis gender to be accepting of this.' 'We need to provide safe, comfortable space for all without compromising safe, comfortable space for others... Why is it the Cis persons role/responsibility to seek out a new space? Pls,

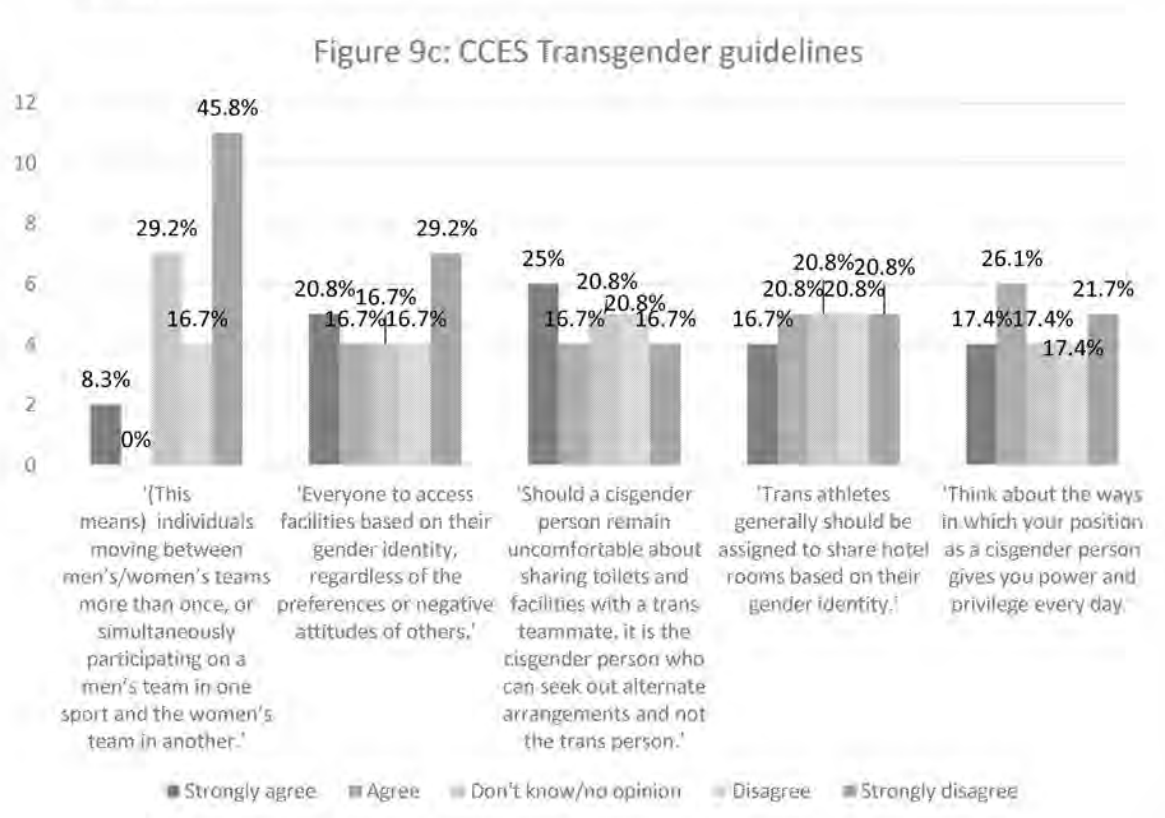
provide safe space for trans people without comprising safe, comfortable cis space.' 'I think both people involved (cis and trans) should be asked with regard to their comfort and agreement with sharing a room with a person whose bi- sex is different...' 'If they agree to share, further discussion may be desired on boundaries and expectations e.g., comfort with nudity - agree to change in private -in the bath room etc.'

'...gender identity and sex separated sport at the elite level are very difficult to reconcile in the same structure. Sex separated sport is relevant and matters to female athletes especially. When transgender athletes compete on teams corresponding to their biological sex they should be protected by strong anti bullying policy (as should all athletes).'

'CCES position is absurd!'

'The integrity of sport to me means the integrity of fair play, you wouldn't think it was fair to compete against someone who is doping.... a trans athlete would have an advantage on even the best 'doped' female athlete.....'

Figure 9c



'People will always have different perspectives and comfort with others of difference gender identity and I feel like teams can work it out. I.e. have people room together who are comfortable in that situation'. 'I am very tall and many times people have just looked up briefly, and gasped "wrong change room!" because a quick sense of my height made them assume I was a man. These reactions based on assumed gender identity are hurtful, disappointing, awkward every time so I definitely feel empathy for transwomen and how rude ppl can be if you don't look female enough for them.'

'I am not sure as a biological female I always feel power an privilege so I am not sure on the last note. I think that issues of entitlement versus marginalization are present in the trans debate. Not everyone has the "right" to elite sport. It is not available to everyone for a variety of reasons from talent, to opportunity etc... Lots of females would like to also be elite and just don't make it. I do feel fortunate that I don't deal with mental health issues related to sex and identity so that may make me more powerful.'

'There is a difference between participating in recreational sport (which I feel should be open for all) and competing in elite sport. (Which I feel should be strictly regulated for all types of performance enhancing substances etc.'

There were no comments from Cluster 2.

Question 10: Additional questions

Figure 10a shows that the majority of all respondents either strongly object (8) or object (5) to being called 'a cisgender athlete', while 5 don't know or have no opinion and 6 do not object. There are only 3 of 22 Cluster 1 participants who do not 'object to being called a cisgender athlete'. However, although 9 Cluster 1 participants agreed they did not have a gender identity but did have a sex, there were an equal number of 9 Cluster 1 respondents who disagree. Conversely, a majority of all respondents either strongly agreed (9) or agreed (8) that they have both a gender identity and a sex and this included 14 Cluster 1 respondents.

A large majority of all respondents either strongly agree (15) or agree (4) that they are concerned that girls will drop out of sport if they see transwomen qualifying, competing and winning in female categories, and only one respondent from Cluster 1 disagreed with this. A majority of all respondents strongly agree (10) or agree (6) they are concerned about a lack of role models in sport for girls if they see transwomen qualifying, competing and winning in female categories and only two respondents from Cluster 1 disagreed.

Similarly, Figure 10b shows that the majority of all respondents either strongly agree (8) or agree (9) that they are concerned about an increase in eating disorders, osteoporosis, menstrual disorders and/or injuries if female athletes attempt to train harder to compete on a level playing field with transwomen. Only 2 respondents from Cluster 1 disagree. The majority of all respondents are concerned that parents will discourage girls from taking up sport if there is an increase in transwomen in female categories (strongly agree, 6; agree, 8), and agree they are concerned about an increase in injuries in contact and collision sports if there is an increase in transwomen in female sport categories (strongly agree, 12; agree, 6). Just 3 and 4 respondents respectively from Cluster 1, disagree.

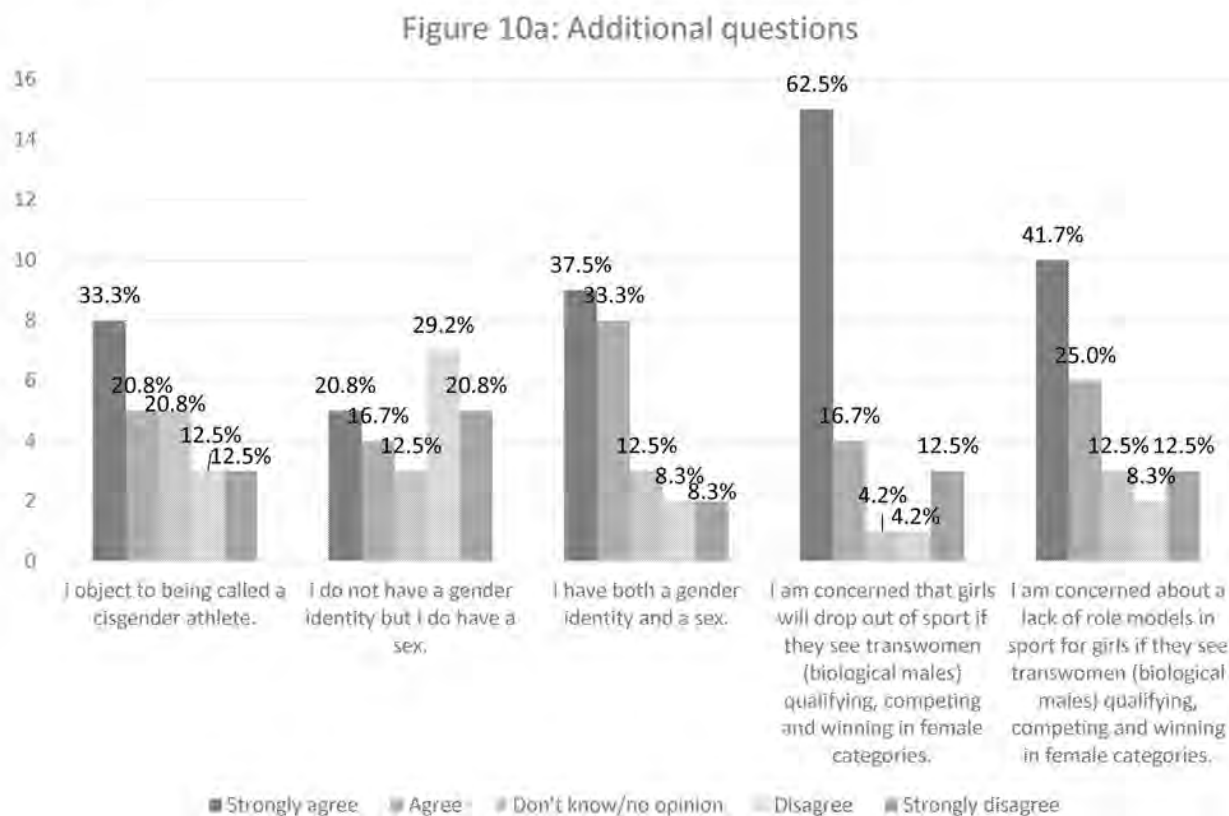
Of particular note is that a majority of all respondents either strongly agree (10) or agree (6) they would not object to the reintroduction of minimally invasive sex testing (for example a cheek swab) in high-performance sport. None of the respondents from Cluster 1 disagreed.

Cluster 1 comments include:

'I think that the inclusion of more people in sport is a good thing for sport in general. I do not think that trans women should be excluded from sports because that is unfair to them. However I do think there should be well-researched guidelines for trans women in high level sports. I do not think that the inclusion of trans women in female categories will lead to "an

increase in eating disorders, osteoporosis, menstrual disorders and/or injuries". I think this is already a significant issue in women's sports which goes largely unaddressed and is a separate area which needs more research and support. I also do not think that the inclusion of trans women in female categories will create a lack of role models for cis women and girls. Instead, I think this will just mean more role models for trans women and girls which is very important, as well as the continued existence of cis role models.'

Figure 10a



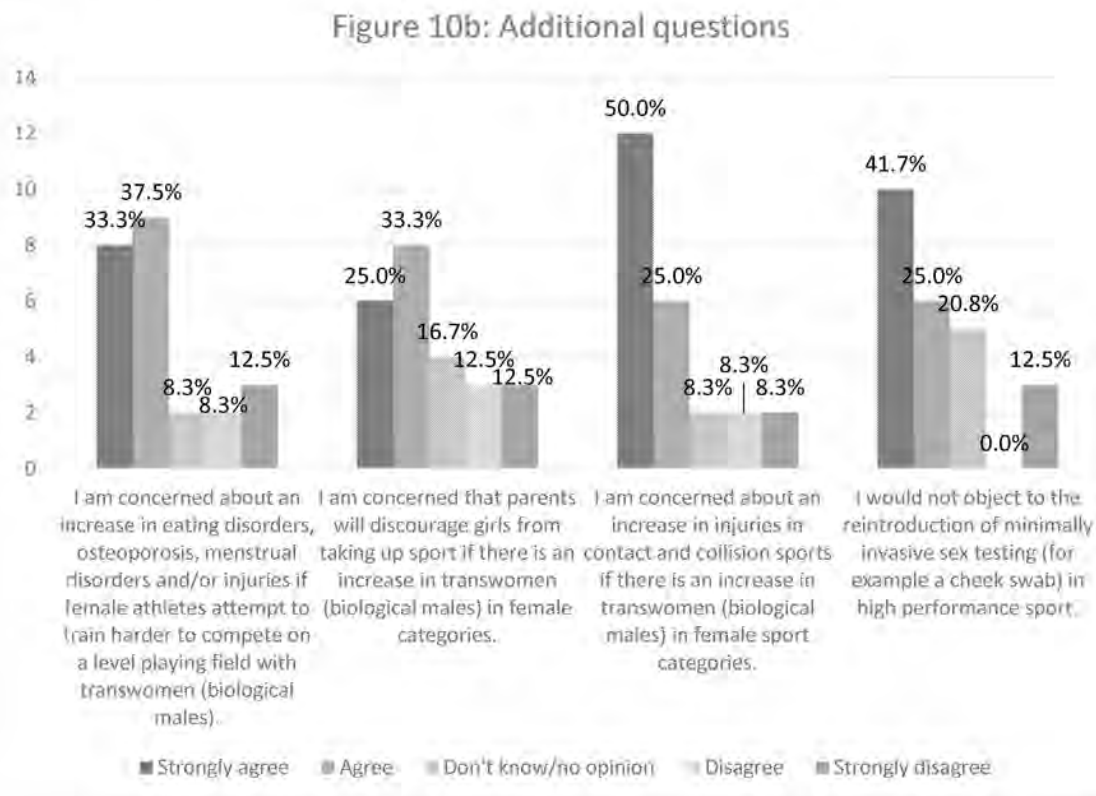
'I am actually not too worried about our highest performers - they will likely get there - it's the girls on the edge of feeling they are "good enough" to keep training and competing, they are the ones likely to get pushed out of sport at an early age...or not get the chance to move their career forward just because they weren't the best right away. It seemed like not that long ago we were starting to focus on keeping girls in sport because their drop out rate was significantly higher than boys - I definitely feel this will impact that.'

'I am also concerned that trans women and other trans folks risk many long term serious debilitating medical issues if they undergo hormone treatment, and or surgery, which may be irreversible as well as traumatizing.' 'I had a swab and it was not an issue. Placing the result on a visible Olympic ID picture credential I would have issue with.'

'I am also concerned that there are a lack of transgender role models for the younger generation. I do object to sex testing. I'd rather see something less invasive, like the inclusion of sex on participation 'forms'.

'As female athletes indicated on the 1996 IOC survey, keep testing/screening, please! The female category requires rigorous gatekeeping to maintain the level playing field for women and girls.'

Figure 10b



'I have already seen all of these. I dropped out.... If I had kids (girls), I would not put them in high performance sport given the current trends. I have felt the pressure to train harder and do more than physically possible. I have been belittled by coaching staff for not being able to do what a transwomen can.'

'I do not appreciate words like breeders, chest feeders, cisgender, bleeders etc. Dehumanizing descriptions to avoid calling a biological female a woman is insulting, confusing, belittling and annoying. It is ridiculous to try to say that there is no difference between a man deciding he is a woman and a woman and try to then equate the two.' 'The lack of logic and reason in the gender discussion is confusing. I don't understand why this is so hard to grasp that one is not the other.'

The Cluster 2 respondents do not object to being called cisgender. Interestingly, they are not at all concerned about girls dropping out, a lack of role models in sport, an increase in eating disorders, osteoporosis, menstrual disorders, or injuries, parents discouraging girls from taking up sport, or an increase in injuries in contact and collision sports. The reasons for this are perhaps encapsulated by one respondent who commented:

'For the most part, being concerned about these things would indicate bigotry, plain and simple. Yes, in some cases, there may be safety concerns. But as I said above, we're talking about such a small percentage of the population. Again: case-by-case basis.'

Finally, all three Cluster 2 respondents strongly object to the reintroduction of minimally invasive sex testing.

7. Interview Results

Sixteen athletes indicated that they were willing to be interviewed. This was significantly more than expected since only four Olympians from the Female Olympian Study had agreed to be interviewed. Given it was not possible to interview all 16 athletes in the time available, ten athletes who did not feel they could ask questions and speak freely without undue fear of being accused of transphobia, and/or were concerned about the reaction of their national sport organisation and/or sponsors if they asked questions and spoke freely, were selected and interviewed. Some of the athletes who responded to the survey and agreed to be interviewed disclosed extremely sensitive testimony in relation to the consequences of the silencing of female athletes. These are detailed in the separate and confidential report to Sport Canada. Comments below are grouped into one paragraph for each athlete but not numbered in order to enhance anonymity.

1. Sex, gender and gender identity.

a. Sex, gender and gender identity

All ten athletes described sex in terms of biology, referring variously to chromosomes, XX and XY, female or male, biological sex, DNA, sexual dimorphism and anatomy. Some of them laughed at having to spell this out. Descriptions for sex include:

'...what you're born, your biology...'

'...you either have like the male sex organs and hormones or female' 'XY and XX chromosome I guess...'

'...what you're biologically born into so either male or female. Biological male and biological female is the sexual organs you were born with...'

'...it would be m or f' 'it's an XX XY situation...' '...what you're born with, XX you're gonna die with XX, and when they dig up your bones, someone's gonna say this was a woman and this was a man regardless of the tag on your toe...'

'...biological sex is what I think of first, you know being born female or male and all the other things that go along with that...you know basic anatomy (laughing) I guess that's physiology...biology, that's what I think of...'

'...so we're born with certain parts that men aren't born with (laughs) and vice versa...we're born with DNA that's different, our chromosomes are different.....I never ever thought I'd have to have this discussion...we're all born, we're born male or female, so biologically you are male or female...'

'...biologically how your chromosomes express, XX vs XY... and then just the Caster Semenya there are rare cases in which...where the sex is indeterminate and some of them can androgenize testosterone but some of them can't...'

'...sex is um what you're born as so either a male or a female assigned at birth...'

'...sex is...determined at conception...and determines whether the fetus goes down one pathway to become a male or another to develop as a female...'

know, is it any different?' '...just wanting to be how they feel like presenting as...yeah, I don't know that it's much different...'

'...it would be who you feel you are, how you express which I guess comes down to if you are going to be more stereotypically feminine or masculine...' '...there is true gender dysphoria, if you feel you are born in the wrong body...'

'...I wonder if gender is how people perceive us whether that's with pronouns...and gender identity would be how I choose to express myself...'

'I've seen a lot of children who, you know boys that play with dolls and girls that are more tomboyish but we've always grown up with, that's OK, and the boy might end up being heterosexual but just likes girly things when he's little or he turns out gay...but now it's like we're trying to convince these children that you must be born in the wrong body, you must be born the wrong sex so we're gonna convert you, we're gonna transition you now, and I just, I have a real problem with this' 'I think it's been around forever and how have we all survived?'

'...I feel like gender and gender identity are in the same boat...'

[Re original term of transsexual] '...my understanding was that was a person who felt more comfortable living their life as the opposite sex. They weren't, you can't change your sex, your sex is hard wired...since conception...but was a person who felt more comfortable living as the opposite sex...' '...so this concept of gender identity I guess is supposed to encompass that that feeling of wanting to be the opposite sex, however it can also mean feeling more masculine or more feminine...' '...certainly as a female athlete you certainly are in a pool of women who have a wide range of so-called what I would say gender identities, some very masculine, some very feminine...and all in between...' '...so we're told it's sort of a spectrum but...then... it's male athletes who absolutely want to compete in the female category. They don't wanna compete in a middle category...gender identity is sort of a spectrum, a fluid thing, as we are told, but then to the people that these rules and policies are applying to, it means a binary thing.' 'So, if you use gender identity as a sport category when it can't be defined it can't be tested for ...nobody seems to be able to explain exactly what it is... unless something can be defined how do we protect it, how do we judge it?' '...how would I define gender identity; I have no idea' (laughs). 'That's why nobody wants to answer questions about it cos they can't really...'

'...it is a continuum...of humanity...it's not so black and white...'

- b. Do you think it is important to talk about both biological sex and gender identity when thinking about the fair inclusion of transgender athletes in sport?

All ten athletes were very clear that both the terminology of biological sex and that of gender/gender identity (but particularly sex), are important in relation to fair inclusion of transgender athletes in sport. Comments include:

'...yeah, I think it's really important...' '...on a recreational level I think its OK...' '...but at a high-performance level I don't, I don't...oh sorry...'

'Very much so'

'I believe the answer is yes...yes, now you have to do that, and just like in the disabled sport...B1 cannot compete with B2 and B2 cannot compete with B3, this is the deal' 'as a Masters athlete...you can't compete in a lower category, you cannot, I don't care how many

parts are now younger than the other parts of you [referencing Cher], you still are this age...'
'...you can compete with stronger younger ones but you can't go up category and everybody has their category...' '...you can't jump back into another category...'

'Yeah, definitely, I mean if it isn't obvious already, I think sports has always been segregated by sex, and gender identity doesn't have much of anything to do with it, so yes, it's definitely very important to talk about...' '...a strong yes...'

'I think it's more than that actually...the terms gender and sex have been confused by the media...and much...of the public and the society doesn't understand the difference between the two and I think it's really important to untangle the two...' '...sport ...did a really good thing by looking at gender but I think then they lost their way by forgetting to include sex...I don't think that we should forget that once upon a time a line was drawn in the sand because females cannot keep up with males...' '...I can't imagine what it would be like racing against a biological male...there's a lot of contact in that sport...'

'Biological sex to me is everything. It's what you are born as.'

'Yes.'

'Yeah, I think so cos I think there are two very different things and for me there's a reason that male and female athletes don't compete with each other and it has nothing to do with gender it has to do with the capabilities of your body that you were born into, like if it didn't have anything to do with anything then we would all be competing together in one category. And again, I don't think that reason is because one person lives their life as a female or as a male, I think it has to do with the sex that you were born into.'

'Absolutely yes, yes. Mainly for the question of fair sport, when somebody with like a biological advantage comes onto the playing field it kind of undermines the rest of the playing field...' '...I would feel sad for a young woman who, they are looking up and they are aspiring to compete and like they don't feel they'll ever make it because that's what they're competing against [transwomen] to get there...'

'In my mind basically, sex is the sport category that needs to be protected...the rules that needs to be officiated, is the thing that matters for sport performance...' '...the sport rules need to concern themselves with the sex categories, how you are gonna define sex and you are gonna make sure the athletes are in the right category, but gender identity as part of the anti-bullying policy, part of the diversity and inclusion policy, part of accepting everybody for who they are...' 'In the case with transwomen, if they would be competing in the male events as is their sex, it's exact same thing as what has been such a difficult situation for many gay men in male sport, feeling bullied, feeling harassed, not feeling accepted to be themselves, the same thing needs to be done, address the non-discrimination, the non-bullying, the acceptance of your male peers no matter what their gender identity or expression. So, one should be in the rules and the other should be in the anti-bullying policy, addressed in that way.'

2. Now, can you tell me about your understanding of the term's 'transwoman' 'transman' and 'non-binary'?

All ten athletes were fairly clear what the varying definitions of these terms are, and use the language of biological sex together with identity and expression to explain. Some mention the shift from transsexual to transgender and the differing definitions associated with these two

terms. Some expressed exasperation that non-binary should be considered any different from not conforming to gender stereotypes of typical feminine and masculine behavior, since gender non-conformity has been evident in sport, particularly for females, for decades.

a. Transwoman and transman

Descriptions include:

'Transmen, is just someone who was born female and believes, or they identify as a man, and then vice versa.'

'My understanding of transwoman is that its natal or biological male... I don't like the word cis...so born as a biological male but has chosen to present themselves as women, whether or not they've gone through any hormone or physical changes but maybe in terms of how they present themselves and dress.'

''...it's interesting 'cos it used to be transsexual, I don't know when it changed to transwomen and transmen...people who feel they are born in the wrong body and want to either transition by appearance or transition medically, to be as close as they can to be, to live as the opposite sex, whatever that might mean to them...'

'Transwoman...is a biological man that now identifies as female whether or not they have any sort of surgery or hormone therapy, I feel like a transwoman simply needs to say I identify as a woman and it doesn't matter if anything else, if they have a penis or they haven't taken any hormones, they are a woman. And same with transmen. I always used to think that trans meant they had had a sex change which is...now I understand that trans just simply means that they identify as such.'

'...my understanding of transwoman is a, male, a biological male who has transitioned to be a female, whether they just identify that way or they've taken the hormone or the sex reassignment or whatever other options there are now...'

'...that definition of a transwoman had really broadened to...basically in Canada anybody who just says they're a woman...any male who says they're a woman is considered a woman, so that would be a transwoman. So as transwoman requires that you are male sexed but you wish to identify as a woman and the opposite with obviously a transwoman [presumably means transman] you are a female sex but you wish to identify as a man...' '...transwomen like A are calling themselves female, biological females, so again this confusing creep that transmen and transwomen used to mean... wanting to be viewed and live their life as the opposite sex, but now, the whole definition of sex is considered by some people to mean, gender, gender identity, that is your sex'. '...so even B said that basically I'm female, I just basically, my body developed like this and a little bit of surgery and a few drugs basically fixed a birth defect...' '...wanting to live their life as the opposite sex, so it is completely pinned to sex. Everybody knows their biological sex.'

b. Non-binary

Descriptions include:

'Non-binary, so I don't know if it's the same as fluid but...sort of just accepting of both...so maybe objecting to the definitions and just choosing to be sort of neutral...' 'So, identifies as both or none...'

'The non-binary...I'm not sure what non-binary is, I thought it was a computer term...'

'...but I guess my biased understanding is well any woman can be any degree of feminine or masculine...I mean I grew up and was called a tomboy, ...hated wearing dresses or pink, I often think well if I was growing up today would I say I was non-binary, how would that be any different'

'I believe non-binary is when you don't identify as male or female or sometimes you identify as one or the other, but you don't have a specific gender identity so, they, is the term for non-binary, I'm still trying to understand this I would like to sit down and actually talk to someone that is non-binary and hear what they have to say, I feel I don't know enough about it.'

'And the non-binary ...who defines a male identity and a female identity...like you can't define it...everybody is somewhere in between in identity, like there's no definitive male identity, no definitive identity...' '...now we have obviously our first trans Canadian Olympian is non-binary, athlete Quinn, and so non-binary in the sport world has really grown and...it's not really coherent when you see a female with short hair playing on the women's national team, but yet they, they have this special status, so talking to another athlete who has another non-binary athlete in their sport, this is A, they felt like it's a bit of a marketing gimmick, it's a bit of a gimmick, like it gets that person attention. In the sport world there are so many women, like the complete gender spectrum, gender expression spectrum...and somebody like Quinn calls themselves non-binary ...and yeah you can call yourself that but what does it mean? It doesn't really mean anything.' '...things like Hockey Newfoundland...they have a sport policy for non-binary athletes, and that they will be allowed to go into whatever sport category that they want and so, yeah it's something that is really incoherent, does not again make any sense as a...class within sport, however sports policies are quickly giving these people a special status...they can pick the sex class that they want to compete in...' '...so a male can get access now to female sport in these non-binary policies just by saying I'm non-binary and it doesn't mean anything...' 'So, there's definitely something quite concerning where you have basically this possibility now...that the sex categories now have become basically meaningless to a lot of people, that you just identify, just like the Thundercrit thing, you just identify into, you know there's no guidelines...'

3. Can you explain to me your understanding of the reasons for separate female and male categories in most sports?

There was a lot of exasperation at having to spell out the difference between the two biological sexes, evidenced both through ironic/weary laughter and the comments made, many of which included 'obvious'. Further, a number of the athletes reference their lived experience of training and competing with male athletes and one referred to observation and experience, while coaching, of the effect of puberty on boys. Comments include:

'...it kinda seems obvious, biological males have such a big advantage, in terms of like, muscle strength, muscle mass, bone density, height, just how big they are...' '...the top female will never even win in the same level, if they were competing with males...' '...biologically they are so different it makes sense there's two categories, like you're competing with your own, something that's comparable...' '...I just, like, it seems logical there are two categories...'

'The majority of sports it's cos of the advantage males have over female, for some sports its safety issues, like I know rugby you would definitely not want both on the same field...'

'It's based on, generations back when it was obvious, and science shows it, that there is a major physical difference between biological males and biological females...in terms of physical ability, whether it's um larger heart, larger lungs, ... more blood flow or haemoglobin, musculature and then, you know, the difference of hormones...' '...the reasons being safe, equitable, providing...ethical basically place for both parties to participate in sport...fairly and safely...'

'...in most sports it's based on what you can do physically and I think it's been proven that the male body can achieve higher speeds, higher weights that they can lift, the muscles are more developed, it's just how it is and it wouldn't be fair to female to compete with the male...'

'Well, that's the definitive category: XX, XY' 'as an adult, you don't deplete that muscle mass...my goodness if I weren't to (do sport) for years and years and years, I'd still have that muscle memory...' '...who is in charge of making these decisions, it has not been the scientist...'

'Oh [sighs], well the reasons go back to biology and inherent born advantages in strength, physiology, testosterone, you know going through puberty...I mean [laughs], I'm just like I'm still amazed we even have to talk about this...' '...there's just an obvious um, you know, like all the science is great that's happened recently but like the science aside, I mean it seems like, why do we need the science to prove this, we've got years of data of results of men against women, and so even if you didn't have like all the physiological science, you know looking at the hormones it seems like it's so...[tails off]'

'...[laughs] for sure, back to the higher faster stronger, right a line was drawn in the sand once upon a time so that females had a chance to compete with the males...' '...just having a place where we can actually, where we have a place to compete...while some convergence is happening I don't believe that there will ever be a meeting point...the ultras where women are outright winning, and someone said very poignantly, its 'cos men that are equally as talented aren't racing, and I think that's true, my lungs are smaller, my muscles are smaller, my bones are smaller...I'm just smaller...'

'You got strength, speed, all of it, I mean look at a male's body, they're not, we're completely different sizes...where you... have smaller men, they're stronger they're faster, they jump higher, they can rotate more than us...' '...you got lots of sports like hockey you've got the women and the men they can both compete, but you're not gonna mix the two and say OK women you're gonna now play men's hockey, they're gonna get one hit to the boards and you're done...so much stronger, so much more powerful... this is so ridiculous that we have to talk about this...you're grown up and you know the difference and now we have to explain it [laughs]?''

'[Laughs], oh God, it's just so obvious [laughs], I mean these categories are there for a reason, like a biological male has higher testosterone levels, like I don't know all the exact science and I'm not going to pretend that I do, but it's as simple as growing up in a sport where the male soccer team and the female soccer team at the age of 12 would not play each other for many important reasons, we would get demolished by the boys...' '...all you need to do is look at the mixed relays this last summer, when they put the one woman in the [same] slot as the men and the men just eat her alive in that 400m, it's so *obvious* [sighs]. *I don't know what else to say...*' Re a particular event: 'not a little difference, that's a big difference [laughs]'

'...the difference is obvious...it's one of the benefits that we females have in that we always have great training partners 'cos we can take a male athlete who's just a basically either a low-level national team or not even national team level and have a male athlete who can push us and we can go into men's races and get pushed when we don't have local competition...so the difference is obvious.' '...obviously as a female athlete training day in day out with male athletes, with the top with some of the top in the world, some who were lesser...you know the difference...we wouldn't have any professional sport and sort of elite sport without having females separated from males in a sport category...' Re coaching and puberty: '...the boys at some point need to push each other and the girls need to push each other and the gap between them becomes, like blindingly obvious...'

4. Do you think eligibility for female sport categories should be based on sex or on gender identity?

All of these interviewees thought female sport categories should be based on sex, with one offering a potential qualification that machine learning might come up with a formula to create a level playing field, but then referred to Paralympic categories as a possible way forward. Again, there was some ironic/weary laughter involved in some of the responses. Comments include:

'Definitely on sex. The same reasons women finally got their places in Olympic sport or national sport. It's just that it is obvious that there is a difference...' '...you might be eroding so much of what women have, over generations have had to fight for in terms of equitable opportunities.'

'Sex...no question.'

'I think it should be based on sex.'

'Definitely I think it should be based on sex...' '...I guess it has been gender identity with some conditions like lowering testosterone but that has been, I think, pretty much thrown out the window from the science, that's not enough, I mean that's where I feel it's the flip side of doping coming in that, you know, someone can be very anti-dopers, anti-doping, and yet feel just lowering testosterone for a man to enter a women based on, a women's sport category based on identity is fair, so it's just really hard to understand that stance right now...'

'I don't know. I think in a perfect world we would use both. We can't ignore the biological differences between males and females, but I also don't think we can ignore that people have a right to identify...the part that makes me the most sad about this whole conversation is [it is] really focusing on transgender women, but there are transgender men who [in no way] is anybody paying attention...' '...can we learn something from other divisions of sport and look to the Paralympics where all of a sudden you have these categories for competing, and so if we brought both gender and sex in could we think of a way, maybe you use machine learning to figure out how you create these categories, with the amount of testosterone and oestrogen that one has and whether its endogenous or exogenous, to create a playing field for everybody to play in.'

'Sex.' 'It's like, why would I compete? It's not fair, it's not equal, we don't have an even playing field here at all. And then it's also gonna make females probably start cheating and you're gonna see that, you're gonna see injuries, all kinds of problems in females, mental, health issues, oh boy, it's just a slippery downward slope to me, dangerous, very dangerous...'

'Sex (laughs)'. 'It's tough because I do feel for individuals, transwomen and transmen who still want to participate in sports... but it opens a whole can of worms, for [countries] cheating...'
'...places where they really wanna make money, well I'm going to identify as a female next year...I can honestly see this happening... it's unfortunate but I can see that happening.'

'...[laughs] do I have to answer that? [laughs] I've seen nothing to suggest that gender identity has any impact...on sport performance, is not relevant at all, whereas sex is...' 'Bruce Jenner, Sandra Forgues, Phillipa York they are transwomen and they were Olympic Gold Medalists or professional athletes...there's nothing that I can see that shows me that transwomen are any different from male athletes, they can win Olympic gold medals in male sport, be professionals in male sport...' '...people say well they had surgery or changed their hormones so... that should allow them, however as an athlete who is post Ben Johnson era where it was like clean sport is driven into you...not taking drugs, and all of a sudden now we're being told that there's these males who alter their natural bodies, whereas sport was supposed to be about competing with our natural bodies, now they're altering their natural bodies, taking drugs, and that is now giving them access to this new category...' '...as an athlete who believes in drug free sport, I just don't even understand ...how this is a thing, how it's even acceptable...'

5. Should transwomen be eligible to compete in female sport categories?

Most of these interviewees do not think transwomen should compete in female sport categories at all, at elite level. Some said that theoretically this might be acceptable, if it were possible to eliminate all male advantage, but voiced doubts as to whether this could ever be achieved.

Competing in their own sex category and/or additional categories are the most popular category solutions discussed. One athlete talked about the possibility of females and transwomen and XY DSD athletes competing in the same events, but introducing separate results and prizes, but also discusses additional categories. Comments include:

'I don't think they should be in female categories...' 'If they've gone through puberty, or even not, and they're under the influence of testosterone, like, you have an advantage...' 'I don't think it's fair...' 'I just think it's kind of ridiculous to be honest...'

'I would say that would be unfair... I believe it should be based on biological sex...'

'...they could with the complete elimination of the puberty of male advantage...' '...I think for most sports though, it's, they have an advantage as a transwoman...'

'No. Absolutely not.' 'They need to have their own category.' 'If you were to take the strongest female and the weakest male and put them in a race, I mean, so what...' '...and then all of a sudden you have some guy that is on hormone therapy and now he's thrown into a woman's race, it doesn't make sense...' 'Cool...if anyone wanna compete... in sport, compete in sport...that group has to figure out where they need to be, and you can't just hop into something that already exists, develop your own category, just like the women have had to do, just like the disabled have had to do, the cerebral palsy has like, what 6 categories, the blind have numerous categories, the deaf, amputee, below knee, above the knee, below the hip, I mean why do they do that, to be fair...' 'It's totally unfair...the women have fought for their identity for so long, oh I could get passionate about this, for so long, and then it's like, well, well, you know, mother hen, she'll accept anybody, everybody just come on board in our group, no doggonit, have the XX, have the XY and then have this group...it's like the masters women, well we don't have enough for that category, that's what we've had to deal with, so

there's not enough in the female category, OK, we'll have separate prizes, everybody goes in the same group...' 'The bottom line, the bottom line for me is biological, no advantage, no advantage, that is the whole premise of the Paralympic movement.'

'I think it should be complete elimination of male advantage at puberty...' '...there is an advantage right now for transfemales who compete within the female category...' 'even with the rules in place I think the testosterone level has to be below 10 when really the average for women is below 1.5 or something like that. So even then, like, I don't see how it could be fair for everybody to include the transathletes into the female category...'

'Biologically, biologically, this is who we are...the expression of the XX category, no matter how you look at it, how much you dislike it, or how much you dislike being XY, or what your parents dressed you like...the fact of the matter is, I'm sorry about that and all the trouble you've gone through, but you are still an XY.'

'I'm curious if that's even possible, complete elimination of male puberty advantage, so I mean if that was to happen, even if it's possible, I mean it would have to happen very young which I think I have some struggles with, you know, the medical transitioning of children at a very young age when they are just trying to figure out who they are, and I guess I feel the contagion effect is pretty real right now, so even if that was possible I don't know if that's the best ethical answer...' '...I think if everyone can stay in their biological category, I guess when we look at the reverse right of transmen in the sport...' '...like a guess it would be like Lia Thomas saying I'm gonna live as a woman but I'm gonna respect sports rules and still compete as a man, so I think that's a tradeoff...' [Referencing Iszak Henig in NCAA Championships:] '...you know delay some medical transition if that's part of it, or if there no medical transition then you just stay in your...biological category, it would be as simple as that...'

'I'm really disappointed in the conversation around testosterone, it just doesn't do what people think it's gonna do ...we need to have a conversation again around the reduction of testosterone, because there is this idea that if we reduce testosterone then they're the same. They're not.' '...you cannot undo the biological advantages...' 'At the same time... I think back to Melissa Bishop coming 4th at the 800 at the 2016 Olympics against 3 endogenous women, different story they're not transgender but somebody else identified them as women, but asterix, Melissa Bishop should get a gold medal with Caster Semenya because of the way the rules were written, and maybe right now, the same way we do in masters athletics, there's two medals awarded...' '...so how do we keep people involved, we keep them in sport but we also recognize the differences, if we say yeah, Lia Thomas, she gets a gold medal for the NCAA...but so does the cisgender female, she also gets an NCAA gold medal and we put an asterix beside it and we celebrate both of them...' '...exclusion is not the way to do it.'

'I don't think a transwoman should compete in the women's event...' 'I just say no, like no, absolutely not, sorry, I'm speaking my truth right now, I say I don't care what you're gonna do to reduce your testosterone or whatever hormones, no, you were born a male, if you wanna be a female that's fine, but you compete in your own sport, your own event, what's wrong with that? And it's fair'. '...how is that even possible, to become a real female.' 'I'm hard no. If you're born a male, you wanna transition into a female, then you can compete in your own event. Leave the female sports alone.'

'I think they should have their own category...whatever shape or form that is...like Para, there's the different categories in Para, I believe transwomen and transmen should have their own category.'

'So we're talking about competitive sport where rankings, results...you know, it matters to people...anything that I would consider competitive sport, self-ID is completely out of the question, there's no physical reason why transwomen need to compete in female sport, they don't need it for safety, they don't need it for performance, they may feel uncomfortable in the men's category but that's a social thing and that's something that needs to be dealt with with anti-bullying, with strong leadership, and it's not the right way to solve the issue by telling them that they can compete in the women's category...' Re transwomen saying they feel more comfortable in female categories: '...toxic masculinity in the locker rooms and sport environment and saying they enjoyed the female sport much more from the social side, well that's not for females to have to move over...and allow an advantaged group, the males, ...who have the advantage of going through male puberty, whether that made them a super champion, or average male, or below average male, it doesn't matter...' 'And, of course, we know they don't have to deal with a lot of other female issues, they don't menstruate, they don't have to worry about pregnancy, they don't have to worry about menopause as masters athletes...it's not the same body at all.' '...the stories and the folklore based it on some of the athletes who probably weren't that necessarily that high level as males, and so when they lost that 5% they were still maybe fit into the upper echelons of female sport...' '...so I think until fairly recently, you know, I think female athletes in general are quite generous (laughs), maybe too generous and too easy to give away our sport category and welcome others in, the transwomen community, however, now it is fairly clear, and maybe the education needs to be ramped up so that females now understand this is the choice that's being made, you have fairness, or you have the inclusion of transwomen, they will always come at an advantage...' 'And as an athlete, obviously I competed against athletes who were doped, and I beat them a lot of times, you know I can beat transwomen and women beat transwomen a lot of times, it still means that they came in with this artificial advantage that wasn't available to anybody else, based on the rules, based on physiology, whatever...' 'If we are gonna have a female category, it has to be for females, and this accommodation can't be made and maintain fair sport, and depending on the level that you're at, we are already seeing females losing prize money, losing...ranking points... losing Olympic spots'. 'So, for these female athletes it's not just exercise, it's not just having fun with friends...it's a major life commitment to achieve these sorts of levels, and that somebody would be allowed to come into their category, the same advantage as the female category doping, and that females have to be OK with one but not OK with the other...it's not consistent.'

6. Have you ever trained with or competed against a transwoman or male non-binary athlete?

The younger athletes are more likely to have trained with and competed with or against transgender athletes. Those who have (5), discussed feeling that transwomen have an unfair advantage, but that sport is used to transmen in female categories and that this posed no problem unless they are supplementing with testosterone. The older athletes referenced the fight for equality in sport and for a separate female category together with the duty they felt to preserve the integrity of the female category for younger athletes. Interestingly, one athlete indicates that it is unfair for female athletes not to be told there are transwomen competing with/against them. Comments include:

'I have. There was a woman who I later found out was a trans athlete and she was on the development national team when I joined...She was like, pretty strong, I remember her cleaning up at races, and I was like pretty young at the time and I was like, oh well, she's really nice and stuff, it wasn't until later on that I heard that, no, no, she was like winning everything.' 'And then I recently competed... with a woman who is from the States who came up, and it [was] interesting because like looking at her I was like, oh she looks quite masculine, so I had no idea she was a trans athlete until after the competition, but I was like, oh this is weird, she's a lot bigger, she's got really broad shoulders, she looks feminine but, like, more so masculine, like, I couldn't like necessarily tell, but like very strong and was quite new to the sport, so she wasn't as dominant as maybe she could have been, but like she had just started training in the past year or so...' '...and then after I was like, oh that made sense...' '...and I really really liked getting to know her, but she's like winning a ton of races now because she's starting to train and physically she's way bigger than the pack, I was like, oh, I don't know how I feel about this cos I, I actually felt bad, like, filling out the survey, cos I was like I have very strong feelings on this...'

'...yes, for the transwoman...'

'...no, not in terms of being open about it, but I have competed with biological males and been the only female...' All the time training and competition as well and I would say there was never a chance that I could actually cross the line first, I think the highest place I ever had in a competition was fourth and 11th, 13th, but...not for lack of trying, but just physique, like just come down to sprints, most men are much more fast twitch and physical ability to beat most women.' 'In Canada the women's competitions were limited in terms of competitiveness, numbers and opportunities, there were not many, nearly as many, maybe one fifth of that competitions for women, so I was fortunate enough to be allowed to compete with males, which helped me prepare for the competitions at international level with women where there would be 80 or 100 females to compete with.'

'I've had both sides [transwoman and transman] but one of them was kinda pre-transition (the transman) and the other one is post-transition'

'I think in sports I don't know if it's fair for everybody, for you to keep it a secret. That's my personal opinion, I know people have other opinions, but if, if it affects other people'

'I have not, not to my knowledge...if I did, I wasn't aware of it.' 'Why I feel so strongly is, I can't imagine being back in NCAA...and all the steps I took ... to make different teams or provincial championships or get the scholarship and, yeah I feel like, oh those were the good old days now compared to what some of the women... and high school girls are having to deal with...and I know the attrition rate is already high enough in girls and females so there's like another ceiling imposed on them for...getting that scholarship or moving up to the next level in their sport...I just can't imagine how discouraged I would feel if I was back competing either as a teenager or adolescent or in the NCAA and having to manage competing against a transwoman, who...obviously, has all those advantages of male puberty... and not feeling like they can speak up about it, just, just tough'.

'Sure... I liked the training, and so B and I were on the same team for a year'. '...CBC published a tweet about Quinn...and Quinn was critical of those of us who wanted sex to become part of the conversation, and I got a little bit frustrated with her tweet, because if we ask Quinn to try out for the men's soccer team I don't think that she'd be able to qualify for the team, and I

think that she didn't recognize her place of privilege, for using, for using for lack of better words, woke culture terms, her place of privilege as a female to say that she's non-binary and that what we're saying is transphobic, and I think that she gets to do that because she stands on her pedestal as a female but doesn't recognize that, and I wonder if Quinn had actually thought about what it would be like to try out for the men's team...' '...based on the way that CBC framed it and Quinn posted her quote, I would be seen as transphobic, and so I think her comment was equally as toxic because it didn't allow for someone to ask a curious question or even ask a question about why she chose that quote, and I don't think that it is fair that if we ask the question that we get called transphobic because we wanted to discuss sex...'

'...it was within my sport but a different discipline, so it forced me to think but it didn't impact me and I think that's definitely something that I've seen...once the issue impacts the female athlete and they're pushed off the podium or they lose something of value, all of a sudden it changes, at first, I'm not sure, I'm welcoming, but the moment it impacts...we saw that obviously with the British women, you know there was a pretty imminent impact coming...all of a sudden it just sobers them up, wakes them up and they have to face the fact that, yeah, we need to decide whether this is fair or not'. 'I've never had any direct competitive experience I've... talked to some of these women who were affected by Austin Killips and...know of what they said in the period when Dumaresq was winning.'

7. Which sex category do you think transmen and female non-binary athletes should compete in?

A number of these athletes voiced the opinion that transmen had been overlooked in this policy discussion. All of them felt that transmen would have no chance of being competitive in male categories and some expressed concern and empathy for transmen competing in male categories from both a safety and fairness perspective. Most of the athletes had no problem whatsoever with transmen who were not taking exogenous testosterone remaining in female categories given this aligned with the same sex eligibility logic expressed by most of them. This indicates that the concerns of these female high-performance athletes relate to fairness and a level playing field rather than 'transphobia'. Many of these athletes felt that there should be additional categories for transwomen, particularly those supplementing with testosterone. Interestingly, one interviewee felt that transmen should have an additional category given they did not want to be viewed as female. In addition, a number of the interviewees felt transmen supplementing with testosterone was analogous with doping and one interviewee that the imperative for clean sport should disqualify transmen from male as well as female categories. Further, one interviewee felt the fact that transmen would not be competitive in male categories and so some chose to remain in female categories, revealed the advantage that males have over females. Comments include:

'...if they haven't undergone any changes, through hormone, I'm not familiar enough with all the possibilities, but if they haven't, but if they still have their full like female, what's the right word, hormone cycles like the levels and they haven't gone through anything to change that, I think it's fully fair for them to be in the woman's category even if they identify, 'cos then we're using a sex based like logic there...' 'If they've undergone therapy which puts them outside of the normal range of the women's then that's a more difficult one because I don't know if its fully fair to throw them into the men's category because I doubt the hormones would change you that much, like that you would be within level like the same playing field...'

contact sport, it could be still whether there is a safety issue in reverse for them to compete...'
'...as long as they haven't done any medical transition or like increased testosterone which
would basically be doping in any other case...' [Re: Iszak Henig] '...and he'd had top surgery?' 'I
mean that's like a minor thing but in swimming like that could even be an advantage...' 'I
mean I wouldn't really count that.'

'...if you're a transman, you're likely taking exogenous testosterone, we know what that does,
like, we've a state doping programme, we *know* what that does in sport, and so I think that
also gives an unfair advantage to those athletes'. 'I think this comes back to looking at other
sports, like the Paralympic sports where it's about identifying who you are and who you want
to be alongside your sex, so we don't ask you to not take your testosterone because that
makes you feel more like a man ...I guess in a sense the same way the age-graded equation
and algorithm could figure out, and for sure we can do the science...and figure out what the
effects of testosterone, exogenous testosterone are, like we *definitely* have that data...'
'...identify your gender and then we figure out...somewhere down the road, in the near future,
how those like mesh together, so that...is there an open, men's, women's, category...I don't
know what they all are in Para...I know there's a T and an S...so can we create categories like
that, that's a much more inclusive environment. Let's create fairness.' 'I think it's about
creating different categories...I don't actually wanna tell a transman where they have to
compete so I think it's about asking them where they would like to compete.'

'I can't see a transman, who's a woman, competing, being able to compete against men...you
can't be hypocritical, you can't say one can't and the other can. So, I would say no, create their
own events, they can have their own events, just like special Olympics... we've created their
sport for them and there's all kinds of levels in there...people might get offended with that
comparison but...you don't identify as a man or a woman, you're not who you were really
born as, so compete in that event.'

'...the female that identifies as a man but has had nothing done to her, I feel that's been there
forever, like they may just not have vocalized, I identify as a man, but there's been many
women in sports from track to you name it, like bobsled, hockey, who are female but they feel
more like a guy but they're still a woman...to me when you start doing the hormone stuff, the
surgeries and all this, that where I say it's a no.' 'I personally know a lot of female athletes that
literally are like, but they're lesbians usually, right, they look like, they shave their head short,
and I have no problem with this, but they are females but they are more like...and they would
say to you today, because that's the conversation, that they probably identify as a male, but
they've done nothing to themselves, right'.

'So a biological woman competing in men's sport?...they can try but I feel like it's dangerous in
sports like MMA or rugby or soccer...I feel like they'll be at high risk of injury, and also I can't
see them making a professional team...they would get demolished (laughs)...the reason, I
believe, we are trying to keep sport fair and I don't think they have any advantage in male
sport, so it's not as big of a deal...it hasn't become a big deal, but either way I think they
should have their own category, just as a transwoman should, there should be 4 categories,
biological female, transwoman, biological male, transmale.'

^...[laughs] well, well obviously for the non-binary female athletes...well we've already seen it,
well when they're given their choice, what are the transmen and non-binary female athletes
choosing? They're choosing to compete in the, so the female category has basically become
the where the gender identity goes...the impact on the male category has been very limited

'...with other athletes, depends on the athlete. If they're a retired athlete and they're female, easy, if they're active athletes and they're female, easy, if they're male athletes and they're retired, easier. If I'm already familiar with them and we're talking and we're friends and we know each other pretty well it's easier. Um active male athletes, I wouldn't even try, like too scared to even approach the subject.'

'Re masters '[a friend's] team mate was in the category of [a transwoman] [sighs]... oh yeah, totally betrayed...the person who was in the third place, the person who should be on the third place, should be there and D should be in the men's category, I mean, yeah, you could just tell by size, but it's not, see it's not about who makes the podium, if the weakest guy is in the race, the emphasis should be not be, he's grabbed my spot, if he's at the back of the race he still shouldn't be there, that's not the issue of him grabbing spots, that's unfortunate, but it's the principle. If the blind guy who has one eye as opposed to the person who has the peripheral vision, he shouldn't be there or he/she should be in his own category and... the Paralympic movement recognize the fairness of those categories and painstakingly go through tests upon tests upon tests...these athletes do not feel discriminated upon, they just know that they're gonna be in the right category, that's all I'm saying...don't go into our category, our category, XX'. 'Just have another category...just have a mixed category...you figure it out'. 'We have to be very clear and make those boundaries...'

'I know a lot of women athletes, or previous athletes like myself who are like older, mid-life, in their 40's, talk about this a lot, very, or even 30's...very openly and ... behind closed doors so to speak, I think the majority feel the same way, but it's different on social media, it's a whole different ball game...'

'So with athletes, I think most of us are pretty open minded and I've had some really wonderful conversations ...being able to see it from both sides are really important...really thinking about not just looking at biased information and biased research but really trying to read on both sides, so reading some of Joanna Harper's work, the other fabulous they/them person that was on...Katie something [Katie Barnes]...reading in different ways so that you can think about things in a much broader 360 perspective...'

'I have not run into one person, not one...is that...it should not even be a conversation, women are women and men are men, and women should have their sport to themselves, no trans this no trans that...I have no problem, if I run into a transfemale or male...I wouldn't hate them, I wouldn't judge them, I wouldn't criticize them, you do you, you do what you need to do, but leave the sports alone, that's just how I feel.' 'Oh yeah, I've not had one person say, well yeah think it's totally right, not one, not one...'

'You gotta read the room with other athletes...'

'I would say that there's way more support, like a few nasty comments on twitter, that's hardly anything compared to others and I've got way more private DMs on twitter, way more public comments on twitter...than I've had detractors, for sure...'

b. With coaches:

'...as a coach ...you know a lot of coaches are former athletes and they are really open to the conversation...'

'With my coach it's easy...'

'Coaches also, I've not tried, 'cos you would come off as jealous or transphobic or not accepting, it's not necessarily the case, well it's not the case for me, and also coaches don't really have power or anything. 'Cos, I understand everybody's following the rules, right, so like, I know you're following the rules, I know you can't do anything about it, but it doesn't change the fact that we have feelings about it. So, I didn't really see the point talking to the coaches about it...'

'I wouldn't feel safe to do that...'

c. With sports administrators

'I don't wanna risk my own athletic career by going to coaches or administrators and being seen as like transphobic and not inclusive and then speaking my own mind and having my own career jeopardized by doing that, so potentially after sport I'd wanna be a better advocate for sport but for now it like just amongst peers and family'. 'I mean I would never post on line about it, I've seen the lashback that people get' 'I'll just like direct message (athletes who speak out) 'cos I'm like, oh I'm supportive of this but I like can't show it online because people will then associate, oh well maybe she's transphobic...'

'I spoke my mind...there was big egos as there are today with selection committees' [talks about politics of selection and not being selected for the World Championships due to being outspoken despite being the top Canadian in the sport at the front end of her career and one of the selection panel subsequently apologising] 'for this issue, ...most definitely, if there's powers that be, they will enact whatever they want...would it happen [punishment by not selecting athletes that speak out], absolutely...'

'...as long as I worked in sport...there was no female athletes that were having to manage this or deal with this, but I can only imagine...you know you've trained your whole life to make the Olympics, you don't make a lot of money...and then if a transwoman was...'

'...sports administrator I wouldn't even know where to start...' '...this is actually the first time we are asked about our opinion, so we kind of jumped on the survey, we knew it was confidential. One of my team mates filled it out and decided not to send it in the end and she said "I chickened out cos I was too scared".'

'Oh, it's not a comfortable conversation at all, it's incredibly sensitive... I am absolutely ridiculed, gaslit, shamed, vilified.....so right now we're not free to express our concerns and our issues with protecting...female and male sports...I mean I am speaking out because I feel I have to but I'm getting ridiculed constantly'. 'This is so narcissistic...so is it only your community that gets to be offended by our feelings and our beliefs and our views and our concerns about this? I'm a mother, I've had two children and what it takes being a woman and actually getting pregnant, carrying that child, birthing it, and your gonna tell me that a man can do that now?' '...that's my point, they're allowed to be offended, but we're not...but if you defend your response to that, then they keep coming at you and they keep attacking you'.

'...my assumption would be based on the silence from coaching staff that it was deemed an off topic which is really common with [national sport association] ... [a member of the administrative staff] [said] all the open letters in sport right now for safe sport, that safe sports become a weapon against the organisations'.

'[Before retiring and after]...I was glad that I never had to give any sort of comment or get involved with that issue, it seemed definitely fraught...it was really the bullying that I was

seeing from D, and bullying Navratilova, bullying the other females and listening to a video that E did...she made some public comments about D and got just completely destroyed on social media, and she was doing this homemade video and her voice is shaking...I just couldn't believe the impact that this bullying was having on female athletes...that really really woke me up...' 'There was a little bit of reluctance but I just felt that what I was seeing was like, I needed to defend these women who were being bullied and I didn't think it was right and...we needed to have a discussion about this, this is not right what's happening'. '...once you decide to speak out, it just gave me the freedom...' '...just saying this movement that's supposed to be about, presented it's about anti-bullying, is like the biggest bullies of all'. '...I didn't understand like how did this happen, why is this happening, I don't get it at all, like why is this so powerful, why is it having all this impact?' '...well the reason for why do you not want to get involved, because I don't wanna face the backlash, well I think things would be different if I was working in the sport, if I was working at Sport Canada, if I was working in [a national sport association], potentially if I was still a youth coach I may have had other considerations...' '...you obviously wanna be respectful of people but we have to be clear too, and at the beginning is more difficult than it is now, I think there is a bit more freedom to call things as they are...'

'...it's the administration side that's really challenging...' 'I (OK, don't laugh don't laugh, deep breath, OK) so I just did the Canadian Women in Sport [course]. Week 1 was all about bias, unconscious bias, conscious bias and recognising our biases...then in week 4... F...very ironically, [referred to] the disappointing World Rugby position on transgendered athletes, ... and I took a deep breath and I said, I'd like to offer a different opinion, because I would probably be the only person in the room who had read, in depth, about that piece of research that World Rugby did, and how they came to the conclusions that they did. And I think it would have been very different if F had said nothing subjectively about World Rugby but to say World Rugby's position is to not permit transgendered women to play, but because she biased it, I felt that it was necessary to speak up, and I thought it was ironic and it was very frustrating.' 'Shortly thereafter CWS released a tweet ...maybe week 1 was about intersectionality and how intersectionality is about gender, sex, race, economic status...and I actually think it was against this research in particular... with no evidence in their tweet they said the place for transgender women to compete is in the, fe., women's category... and what was disappointing about it again, similar to Quinn's tweet, was the way it was framed was that if you asked any questions you would have been suggested to be transphobic, as opposed to saying, I'm curious as to why you came up with that, that, that comment/quote given what we just talked about in intersectionality and what's on your website about intersectionality...the quote to me very much ignored intersectionality in how sex and gender are part of intersectionality and so that was what I found most disappointing'. 'Every time you try to talk to the administrative people, they're the ones that call you transphobic and shut you down, and it's really disappointing...'. 'Part of me wants to ask F do you know the difference between sex and gender because if you don't then we have a problem, and I wonder if those administrators haven't had that training in sex and gender so they can't have that conversation.' '...and so CCES had this thing about like the sex spectrum, like the gender spectrum...but I'm not sure that I understand the sex spectrum and I'm not sure that the science they propose is evidenced when we know that sex comes down to chromosomes and there's, you know 23 pairs of chromosomes, one of them is XX or XY'. [Re: Canadian Women and Sport and CCES] '...they have a particular line and if you don't toe the party line you are called transphobic'. 'It also elicits a lot of fear, right, you don't want to go speak to these

people and ask questions in an objective way and fine I might come with some subjectivity and bias and feeling, we all do that, but it completely shuts down the conversation because you literally are just so afraid'. 'I think if you shut the conversation down in a way that is psychologically harmful to someone that they get afraid to ask the question and so how do we trust and respect in a psychologically safe way...I don't think that the administrators are willing to have a conversation in a psychologically safe space...if you don't toe the party line, they will not give you, you can give them trust and respects but if you don't toe the party line in no world will they give you trust and respect and psychological safety'.

'Obviously with sports administration they tried to shut your survey down so I'm gonna go with a no on that...I did pass your survey around by the way...I am emailing this survey to my competitors, I can't help that all feel the same way I do, they all feel the same way, we just are scared to speak out we're really scared to speak out because we're gonna be called homophobic and that we don't support transgendered people and all this stuff which is crap because...I have a lot of gay friends and lesbian friends, I don't know a lot of transpeople but I want them to be who they are but it's not about that anyways it's a very, we can't, we're very scared to speak out because of the backlash that will come, for sure.'

10. Have you discussed transgender eligibility in female sport categories with other athletes?

Responses to this question overlapped with those to the previous question. A number of the interviewees report that most/all female athletes think including transwomen via female categories is unfair, but that most, particularly those still competing, are too scared to say this for fear of being called transphobic and having their career 'cancelled'. One said it is easier to talk with male athletes about it but since it doesn't impact them, they don't speak up. A number of athletes talked about social media as an unsafe space to voice their views and one retired athlete talked of receiving messages from female athletes still competing who did not support transwomen competing in female categories but who were too scared to say so in public. One athlete talked of what she considered the hypocrisy of sports administrators advocating inclusion and diversity but shutting down open conversation on this issue. Comments include:

'...I'd say 95% of them [female athletes still competing] agree. We haven't really, or I don't recall, us talking about what would be the ideal scenario, like compete in an open category, compete in a separate category, I don't know their opinion on that, but everything else we agree on. We agree that it's not fair [transwomen competing in female categories], we agree that it's not fair for the same reasons.' 'So mostly, yeah, we share the same views. I haven't spoken to a female athlete that actually told me oh no its fine it's like no big deal like no female athletes has told me that.'

'It's honestly been my male team-mates who I've had really good conversations with, I have a couple team mates who've actually done a little bit more research that I have and they'll wanna share with me what they've heard or read or whatever, um, and they're very, they have very strong opinions on this and they're totally for, kind of preserving the female category, 'cos they're like yeah we see the advantage, and their category's not threatened by it, so they don't need to speak up about it, I mean it would be nice if they did, but, it's not their issue...' '...it's useful to be able to vent to them, talk to them about this...' 'I think with my own team mates they're all on the same page as me but they're less willing to vocalize their feelings because of fear of being labelled as transphobic or, yes, they just don't wanna risk their own opportunities'.

'I think the people that feel most comfortable discussing it are either independent enough financially that there are no repercussions or they're older and aren't fully dependent on their sport career for say a scholarship or sponsorship...' '...athletes who are still competing, and then some of them are, some of them are on the fence...might say it must be really difficult being born in the wrong body and so they're really sympathetic but they're not taking a hard line either in some of the discussions I've had for those that are still competing...' '...I don't know if it's just not wanting to take a stand or not, not really understanding it...'

'I think we're all, those people I've spoken to, it's a little bit of like I don't know but how do we keep them playing, and so...coming back to your categories in different ways of...including both sex and gender is definitely on the forefront of the discussions we have. No one wants to talk to the administrators, people about it, because again we it's terrifying, ...you know you get...I'm terrified of losing my ability to be a volunteer coach, it brings me so much joy to see people out competing and participating and not to win but putting themselves in a place of discomfort because it's a really important lesson to learn in life...' '...but it's not a safe place to bring these conversations up...I guess it's almost like cancel culture like they wanna cancel us right they wanna have an open and inclusive discussion but if we bring up something again that doesn't toe the party line its cancel culture from them back to us.' 'The ones I've spoken to, yes [can't speak on this issue with administrators]', 'We are focusing on this .2 and forgetting about the 100%.'

'Yes, I have, quite a bit...we've had some great conversations...I've discussed with many other female athletes and, we're all pretty much on the same page, we don't think that it's fair'. [Researcher: do they feel about to discuss this topic?] 'Not on social media, absolutely not...that's unfortunate because I feel like I'm a very outspoken individual...and it's important to me to speak out on things that I believe...but that one is one I've kept really quiet on because I really am scared, I don't want any of my friends that are gay to think that I don't support them or anything like...and I have really close friends and so to me I haven't talked to them about it but I feel it would be a conversation I'd really like to have with them, an open conversation with them, a little scared, so.'

'You know what, like I said I've been contacted by a few, at the beginning there [were] definitely more anonymous contacts, people with anonymous accounts, because I keep the DMs open, I assumed some of them definitely were female athletes, some said they were but they said they had to stay anonymous, so there started to become more female athletes with their own name accounts were messaging me...I get the sense there's a lot of inability that those female athletes feel to talk about it because when they started messaging me it was like a floodgate opened...and I couldn't believe how strong their views were, and actually how informed they were, but you wouldn't know it their social media, they don't say anything publicly, but privately it was pretty amazing how clear they were...' '...some of them are working in sport, some of them are coaching, they don't feel comfortable speaking in public but in private...if you could tape all these private conversations and have them out there as the real views of female...the more impactful ones have been some of the younger athletes who are being affected by this... we have the examples in our sport that are happening in real time...that really changed for me my motivation, really impacted my motivation...you know when you're putting so much time and effort and it like wow, it's not impacting me personally...I think as a female athlete...we really didn't have the same events as the men, we didn't have the same professional opportunities...' '...women now... seeing more parity, more events...more growth, more prize money and more sponsorship, they're kind of excited and

see this...they are advocates for their sport but they didn't face the same level of discrepancy disparity as we did as female athletes compared to our male counterparts at that time, so as a female athlete you always had to be defending female sport, you always had to defend your right to be there, your right to...not even equal funding but reasonable funding and prize money whether it was not even equal sometimes even anything, so I've come from a place where women had to fight...' '...I still always came from this kind of place of having to fight, of seeing the inequality and having to work, you know on a daily basis to promote my sport, like the men just get to do their sport'.

11. Do you think it is important that female athletes as well as transgender athletes are asked for their views regarding transgender eligibility criteria for female sport categories?

There was a fair amount of incredulity and sadness/anger in the voices of these interviewees when answering this question. All of them thought that *of course* female athletes should be asked their views, and were sad/angry that they have not been, given it is their category. A number said that a minority group is being prioritized over the majority and that individual transwomen are loud, whereas female voices are not heard. Several interviewees said that only including some stakeholders would not result in the best or fairest solution and referenced attempts to shut down this policy discussion either through contesting language, or, for example, attempting to shut down this survey. Sports administrators were again singled out for criticism and AthleteCan (for sending an email to national team athletes saying this survey is transphobic), the CCES (for only asking 2 female athletes their views about transgender inclusion policies) and Sport Canada (for not reaching out to female athletes, and leaving policy to national sport organisations) were mentioned specifically.

'...everyone should have the chance to give their views... if you don't get everyone's views then you're not gonna come up with a solution that fits best, there's never a solution that makes everyone happy but, so in saying that I do know that the trans community is very loud, um so I recognise the difficulties, I mean you start with this survey, um in just getting that kind of honest feedback and not a bunch of, um I use the word hate, but like, you know false, you probably had even stuff in the survey where the answers are gonna be obviously like somebody is just upset that these questions are being asked and is going to, so I think it wouldn't happen without that but I do still think it's important to get everyone's point of view.' '...asking those questions could very easily be turned into a why are you asking these questions it should be inclusion that's pretty much the basis of their argument...'

'Yeah, like 100%, I mean like they're wanting to be included in the female category. That should honestly be our say and it should be...I feel like cismales and trans males could offer opinions but they should have no say in that. It should be purely a cis and trans female decision. And like 50/50 you know, like you can't leave out half of the voices, or more than half because cisfemales make up the majority of the category. It's the top few transfemales who are louder...it seems like they are making it a big deal because they're now ones who are taking opportunities away from cisfemales.'

'Yes, and in a very broad spectrum so I think from um parents, family members, peers...all people, all diversity presenting their views, but I guess providing the information ahead of time with the definitions and the research, that, the science that shows er fairness. I think many parents have spoken up and are concerned but again...I think...it's not fair that when people give a view that their seen as a bigot or harassed as transphobic. I think by doing that it just shows that some people aren't being listened to.'

'I just hope...that people come to their senses...' '...now these decisions are made...where women wanna be women and wanna be inclusive and all that stuff, but you know I mean we're being robbed, we are just being robbed...' '...and then a guy wants to jump into my category...I'm thinking Bruce Jenner, why in heavens name do you want to become a mid-life woman, well because he's not going through menopause, it's OK, he can just sail through that, but its hard work, there has been times that I've bled so heavy...when I was on the track and I had white [kit]...'

'I don't even know how I, when I first started, to get angry about this topic for women' 'I remember thinking [re pronouns] ...this is so progressive and inclusive...and I didn't really see beyond that...it's no big deal and people can live how they wanna live...it wasn't a thing then... that's where I get sort of angry now thinking about it... I remember coming out of the bathroom and seeing the back of [a male] ...and I'm like I'm not comfortable with this...' '...the bathroom is a safe place, whether it's at a university, whether it's at a sport event where women can go talk be safe...' '...I feel like the tide is turning...' 'Having grown up in a church and a religion...I do have a strong reaction of someone telling me what to think...' '...whenever something resembles a religion or a dogma that's what I'm reacting to as well...and that's what seems to be happening...' '...there are transgender...folks...to use the word, that are very based in reality and biological reality and fairness and agree that sport should be fair...but unfortunately the ones that are not in that position...I think it's causing this resentment, so it's not really helping the acceptance of it...that's really too bad...'

'...one of the things I think we are up against in sport, and I don't think this is just in Canada, is culture, there's a lot coming out about how terrible the culture is across most high-performance sports and NSOs, I think the PSOs... because they are more at the grass roots level are hopefully not as toxic, but I think there really is some toxicity going on in high performance sport in Canada right now. I don't blame Own the Podium, but I blame Own the Podium. To continue to get funding you have to have a perfectly linear progression, the only way you can do that is to dope...we're human, we have bad seasons... you lose your funding when you have a bad season. We still call pregnancy an injury right, we have a problem...we have a major problem with culture in high-performance sport, and I think that is part of untangling this issue as well and addressing how to make it much more inclusive...I would love to know across the agencies and the national sports organisations across Canada, how many women and non-binary people are at the top, and I suspect, it's pretty low, same with people of colour. My hypothesis is its run by a whole bunch of old white men. Not to be critical of that, but that's a biased lens if you've only got white men at the top.' 'So, the CCES doping control form...asked me my gender which is fine, but then it asked me if I was male or female and all of a sudden, I got very concerned that the CCES didn't know what it was doing. Or worse, is manipulating the form so that people that are transmen, or transwomen or non-binary don't have a place where they can identify safely. I think that form needs to include both gender and sex, for a variety of reasons. One, you can't tell people how they can identify, but two, from a doping perspective, certain tests are done whether you're male or female and so it's important to know which one you are'. 'But it was just really disappointing that CCES, they're making a mistake there, where else are they making a mistake'. 'Because they confused the two, because they asked about gender and then gave me the sex terms...the question didn't line up...it was a misalignment'

'...you think you're a male or you think you're a female and you wanna identify as that, it's that sports should be, like, female and male and if you're changing your sexes, you know, with

the whole hormones and the surgeries and whatever then you create your own event...'
'...they can say they identify as a woman, like, OK, but doesn't mean you should be able to compete against women...'

'Hopefully that's helpful and hopefully your survey can help preserve women's sport...you know it's getting really scary I just saw...that surfer in Australia, won the men's and then came back and won the women's...and especially in the NCAA...the transgender women are breaking all the records and...people are saying well there's only one or two, and it's like, for now, for now...I feel like if I was in the... national championships and I was beat by a transgender female I'd be very very upset and it would have been, it would have taken money out of my pocket that I feel like was mine and...I feel fortunate that this hasn't affected me yet, but I think that it will, you know, eventually, so we gotta do something about it'. 'Thank you so much'.

'My hope is that we can have one day soon, an open national debate on this, open discussion, within the Canadian sport world, whether it be within the individual national associations, whether it be female athletes, being involved in these sort of expert working groups...where we don't feel it's a one sided discussion because, in Canada, in Canadian sport, basically only one side is allowed any air time right now and that is really not conducive to any sort of durable solution...if basically you win your argument by silencing any, people with different opinion and I've just been horrified that the academic leaders in sport in Canada, being Kidd, being Demers, Kerr, you know the organisations like CCES, CWS, AthleteCAN, that they have taken such an unneutral position on this and that they not only do they not wanna listen, they actively work against anyone trying to bring any other position' '...the idea that diversity and inclusion is the most uninclusive discussion environment, like *the irony*, it's incredible, these are the most closed minded...they don't allow any diversity in views and they don't include anybody in the discussion that they don't wanna hear from and that's totally wrong, and I've never ever experienced that with any other issue in sport and this is not any sort of way forward and I'm really really disappointed in so many so-called leaders in Canadian sport that they've basically taken a bullying behaviour as opposed to an open neutral, giving anybody a platform regarding this issue, it's wrong, and it's just my hope that...we can...at some point...I think basically Canada's basically gonna be one of the last countries that starts to have any sort of openness, we can't even talk about it.' '...but the genie's out of the bottle, people are discussing it, there's no more policy by stealth, it's not gonna happen internationally and, you know it'd be nice if we could have this discussion in Canada with Canadian leaders, but it may have to come to the point where Canada's the only country that's allowing everybody to self ID into every category and it starts creating trouble with the international sport, with the national teams. Because all the international regulations have come to their senses.'

8. Discussion

Over the last few years, the dominant narrative for the inclusion of transwomen in sport has assumed that inclusion should be in female sport categories. This research reveals that the majority of these current and former high-performance female athletes do not support this framing of inclusion, and instead support the inclusion of transwomen athletes in sport via additional categories, same sex categories or open categories. This reflects the biological, legal and conceptual differences between biological sex and gender identity which are clearly set out in both the scientific literature and the Canadian and international legal and human rights framework. The large majority of these respondents are clear that for sport, it is biological sex that should determine eligibility for

single sex categories. Interestingly, many of these respondents note the asymmetric impact on female sport categories of eligibility via gender identity rather than sex, which permit biological males with retained male advantage to compete in female categories. This is because the inclusion of transmen, which has received far less public and policy development attention, is often already in biological sex categories, since transmen and female non-binary athletes often chose to remain in female categories in order to retain a competitive career.

The majority are also clear that the science shows that transwomen have retained puberty-related male advantage and therefore there should be a presumption of advantage for transwomen. As a consequence, the majority have views which are directly opposed to both the IOC Framework which advocates 'no presumption of advantage' and the Canadian CCES transgender guidelines which promote the inclusion of transwomen (biological males) in female categories based on gender identity alone. Further, given that Canadian Women in Sport, E-Alliance, AthleteCAN and some national sport organisation policies align with the CCES transgender guidelines, the majority of these respondents do not support the stated position of these national organisations either. Only one respondent thought that transwomen athletes should be included in female categories with no requirement for mitigation of male advantage.

Although the survey was designed to be exploratory rather than representative, and has a small sample size (albeit significantly larger than the two females who contributed to the CCES transgender guidelines), the responses received reflect the results of larger-scale more representative surveys (World Rugby¹⁷, FINA¹⁸, CPA). The World Rugby elite female survey found only a minority believed that transgender women should be allowed to play in elite female categories (Women's Sevens World Series: 16 of 86, 19%; Women's Six Nations: 6 of 65, 9%; and other elite players: 10 of 29, 34%). The FINA online survey found that only 8% thought 'transgender women and others who have experienced male puberty' should be eligible to compete in women's events, and 84% thought that eligibility for women's events should 'be based solely on birth sex'. The Cyclistes Professionnels Associés (CPA) Survey³⁷ found that over 92% of female cyclists did not agree with trans athletes racing in the women's peloton.

The respondents to this survey can be categorised into two distinct groups with diametrically opposed views. The large majority, Cluster 1 (22 respondents), are clear that biological sex is more important than gender identity in relation to female sport categories and the small minority, Cluster 2 (3 respondents) think the reverse. As compared with previous surveys, this exploratory survey might even be an over-representation of current and former high-performance female athletes who believe gender identity is more important than biological sex (12%). This may be because respondents whose views align with Cluster 2 feel able to discuss this issue freely, and consequently may be disproportionately represented.

Major Themes

- 1. Biological sex is more important than gender identity in high-performance sport. Eligibility for female sport categories should be based on sex not gender identity. The majority do not object to minimally invasive sex testing..**

A large majority of respondents think everyone has a sex and biological sex is more important than gender identity in high-performance sport. Also, that female athletes should have a right to equal opportunities in high-performance sport. The majority think that this

³⁷ <https://www.thetimes.co.uk/article/nine-tenths-of-female-cyclists-dont-want-to-race-against-trans-women-according-to-survey-d2nhxkn9v>

means female athletes should have a right to compete in single sex female sport categories. The majority are firmly of the view that female sport categories should be based on sex, not gender identity, with interviewees commenting, for example, 'definitely on sex', 'sex...no question', 'sex (laughs)', '(laughs) do I have to answer that?' and 'I think it should be based on sex.' Interestingly, although it is often claimed, with little or no evidence, that female athletes do not support sex testing, the majority of these respondents do not object to minimally invasive sex testing. Although female athletes are rarely asked for their views on sex testing, this finding aligns with the results of a questionnaire given to all female athletes at the 1996 Atlanta Games asking 'whether in their view testing of females should be continued in future Olympics and whether or not they were made anxious by the testing procedure'. This found that 'of the 928 athletes who responded, 82% thought that testing should be continued and 94% indicated that they were not made anxious by the procedure'³⁸.

2. Female high-performance athletes feel silenced.

The majority of these respondents feel unable to voice their views because of a fear of being called 'transphobic' or 'bigoted' and so are silenced in this policy debate. Their fears include repercussions for their sporting career and earning capacity. They feel silenced primarily by the Canadian sport infrastructure and sports administrators rather than coaches and athletes. They are unable to communicate with their national and international sport organisations and have views which are likely to be in opposition to the stated position of their governing bodies of sport and the CCES, CWS, AthleteCAN and E-Alliance. Several interviewees expressed the view that administrators adopt the position of 'one side' which shuts down discussion, whereas they should be providing a neutral space in which respectful discussion can take place in order that fair solutions can be achieved. It is likely that the wider Canadian female athlete population feels similarly silenced, and their views are likely to be significantly under-represented in this policy debate even by the organisations claiming to represent them. The research team heard that following the Open Letter from Athlete Ally at least one current athlete had been too scared to complete the survey even though she had wanted to do so. Anonymous surveys conducted by trusted research teams using clear and accessible terminology are the only way to elicit the views of current and former female high-performance athletes. Otherwise, there is likely to be a hidden majority whose views are unrepresented.

Conversely, those whose views align with their national and international sport organisations, think gender identity is more important than biological sex, and that transgender athletes should compete in opposite sex categories, do not feel silenced. They are therefore likely to be over-represented in this policy discussion which may then skew public debate and the direction of policy development.

In a policy area where a majority stakeholder group (Cluster 1) does not feel safe to contribute to policy discussion for fear of exposing themselves to significant harms, there is considerable scope for silencing, bullying and harassment. This was unfortunately directly witnessed in relation to this research, in the leaking of the survey of current and former female high-performance athletes to the activist/lobbying group Athlete Ally. This group then attempted to close the survey down via an Open Letter to Sport Canada based on a

³⁸ Elsas, Louis, Ljungqvist, Arne, Ferguson-Smith, Malcolm, et al. 2000. 'Gender verification of female athletes.' *Genetics in Medicine* 2: pp. 249–254. <https://doi.org/10.1097/00125817-200007000-00008>

perception that the survey was 'anti-trans' and 'discriminatory', and one of the research team 'bigoted'. Following this, some of these athletes reported that they had received an email from AthleteCAN informing them that this survey was 'transphobic' and that they should not participate in the research. It is likely, unfortunately, that this email will have compounded the fear that female athletes feel in contributing to this policy discussion, and contributed to silencing them.

The silencing of female athletes is a serious ethical, legal, and human rights problem for sport internationally, including it seems, in Canada. It contravenes fundamental freedom 2a of the Canadian Charter of Rights and Freedoms, the 'freedom of thought, belief, opinion and expression' which is 'guaranteed equally to both sexes' and 'guaranteed equally to male and female persons'. However, Canadian female athletes are silenced because the legally protected characteristic of sex, and the scientific technical language of biological sex, are not permitted by the Canadian sport infrastructure in relation to transgender athletes. This is despite the fact that the Canadian human rights framework protects the right of females to freedom of expression on the basis of sex, and that this language is necessary to articulate their human right to equality of opportunity and non-discrimination on the basis of sex. Neither can suppressing the views of a female majority stakeholder group be considered to align with the overarching policy values of the 2012 Canadian Sport Policy³⁹ including 'Inclusion and Accessibility' and 'Respect, Fair Play and Ethical Behaviour'. Further, it does not align with the stated Canadian Sport Policy Principles which are:

'Values-based: All sport programs are values-based, designed to increase ethical conduct and reduce unethical behaviour.

Inclusive: Sport programs are accessible and equitable and reflect the full breadth of interests, motivations, objectives, abilities, and the diversity of Canadian society.'

The feedback from respondents to this survey in relation to fear, stress, frustration, anger, silencing and discrimination appears to mirror the experience of a large group of current and former elite Canadian gymnasts. Earlier this year more than 70 elite Canadian gymnasts, which grew to a group of around 450, wrote an Open Letter to the Director General of Sport Canada copied to the Minister of Sport^{40,41} to explain that,

'For almost a decade, the fear of retribution has prevented us and scores of other athletes from speaking out. However, we can no longer sit in silence. We are coming forward with our experiences of abuse, neglect, and discrimination in hopes of forcing change.'

Further that,

³⁹ Canadian Sport Policy. 2012.

https://sirc.ca/wpcontent/uploads/files/content/docs/Document/csp2012_en.pdf

⁴⁰ Support Athletes' call for Independent Review of GymCan Leadership + Sport Culture.

https://docs.google.com/forms/d/e/1FAIpQLScK_cMTyQqaliViZo1vrNUyGeE7n5_o1M3Q-KvYwdM4hhH8kQ/viewform

⁴¹ Gymnasts say they're dismayed by Sport Canada's call for a third-party investigation. April 2022.

<https://panow.com/2022/04/27/gymnasts-say-theyre-dismayed-by-sport-canadas-call-for-a-third-party-investigation/>

'An independent investigation must incorporate the experiences of both current and retired athletes and include a public release of recommendations and findings – all while protecting athlete anonymity. The selection of any hearing body appointees or independent investigators must be agreed to by the athletes.'

The feedback from female athletes in these two policy areas, suggests that the reality of female athletes' experiences is directly counter to the aims of the 2019 Canadian High-Performance Sport Strategy⁴² which outlines:

'Values-based and principle-driven sport is to be paramount in Canada's pursuit of excellence.'

And further aspires to,

'A culture of high performance...where integrity, trust and inclusivity foster collaboration across the system.'

If female high-performance athletes are silenced, these aspirations are unlikely to be achieved. Further, the fundamental human right of female high-performance athletes to freedom of thought, belief, opinion, and expression are contravened.

3. Silencing female athletes has repercussions for athlete welfare, safe sport standards and safeguarding policy.

The lack of recognition of the human right to freedom of thought, belief, opinion, and expression for female athletes underpins a range of associated, *institutionally legitimated*, athlete welfare and safeguarding issues with respect to female athletes. Many of the athletes refer to not feeling safe, and one, for example, explains, 'I don't think that the administrators are willing to have a conversation in a psychologically safe space'.

The Universal Code of Conduct to Prevent and Address Maltreatment in Sport (UCCMS)⁴³ sets out that,

'The Canadian sport sector is committed to advancing a respectful sport culture that delivers quality, inclusive, accessible, welcoming and safe sport experiences.'

'Individuals should have the reasonable expectation when they participate in sport in Canada that it will be in an environment that is accessible, inclusive, respects their personal goals and is free from all forms of Maltreatment.'

And that,

'Sport organizations that have adopted the present Universal Code to Prevent and Address Maltreatment in Sport (the "UCCMS") are committed to creating a sport

⁴² Government of Canada. 2019 Canadian High Performance Sport Strategy. <https://www.canada.ca/en/canadian-heritage/services/sport-policies-acts-regulations/high-performance-strategy.html>

⁴³ Office of the Sport Integrity Commissioner. THE UCCMS. <https://sportintegritycommissioner.ca/uccms/>

environment that is free from all forms of Maltreatment and that treats all Participants with dignity and respect.’

Further, the UCCSM conforms to Canadian law given it disaggregates ‘sex’ and ‘gender identity or expression’ so that:

‘All Participants recognize that Maltreatment can occur regardless of age, sex, sexual orientation, gender identity or expression, race, ethnicity, Indigenous status, or level of physical and intellectual disability and their intersections. Moreover, it is recognized that those from traditionally marginalized groups have increased vulnerability to experiences of Maltreatment.’

The UCCMS recognises the importance of treating athletes with dignity and respect, and recognises that those from marginalised groups have increased vulnerability to experiences of maltreatment, and that ‘maltreatment violates the integrity of individual(s)’. The UCCMS defines a vulnerable participant as, ‘Persons at increased risk of Maltreatment and/or coercion, often due to age, gender [it is not clear if this means sex, gender identity, or a conflation of both], ...and their intersections. Vulnerable Participants include persons who are not able to provide informed Consent.’

However, the CCES transgender guidelines⁴⁴ state that ‘No information should be given out concerning someone’s gender identity or stage of transition status, without the individual’s express consent’ and that ‘Nor should there be any requirement for disclosure of trans status.’ Further, that ‘Trans athletes generally should be assigned to share hotel rooms based on their gender identity, with a recognition that any athlete who needs extra privacy (presumably referring to transgender rather than female athletes) should be accommodated whenever possible (and at no extra cost to them).’ As a consequence, the information that *female* athletes require in order to consent (defined by the UCCMS as communicated voluntary agreement to engage in the activity in question, by a person who has the legal capacity to consent), or otherwise, to, for example, room sharing with somebody who is biologically male, is withheld *as a matter of institutional policy*. This is despite the likelihood that athletes will accurately recognise a transwoman’s biological sex, but be required as a matter of institutional policy, to ignore this, and are therefore effectively silenced in relation to their own dignity and respect needs. This remains the case if the transwoman concerned has undertaken no medical or surgical transition and consequently remains an intact biological male.

The CCES transgender guidelines appear therefore to enshrine and facilitate coercion, rather than consent. Although not detailed in the UCCMS, it is widely recognised that female athletes are disproportionately subject to experiences of maltreatment in sport^{44,45,46,47} and consequently are likely to disproportionately ‘experience a range of effects that may emerge

⁴⁴ The Whyte Review. June 2022. <https://www.whytoreview.org/assets/downloads/The-Whyte-Review-Final-Report-of-Anne-Whyte-QC.pdf>

⁴⁵ Willson et al. 2021. Prevalence of Maltreatment Among Canadian National Team Athletes. *Journal of Interpersonal Violence*. <https://journals.sagepub.com/doi/full/10.1177/08862605211045096>

⁴⁶ Fischer and Dzikus. 2017. Bullying in Sport and Performance Psychology. Oxford Research Encyclopaedias <https://oxfordre.com/view/10.1093/acrefore/9780190236557.001.0001/acrefore-9780190236557-e-169>

⁴⁷ Kerr et al. 2020. ‘It Was the Worst Time in My Life’: The Effects of Emotionally Abusive Coaching on Female Canadian National Team Athletes. *Women in Sport and Physical Activity Journal* 28(1):81-89. <https://journals.humankinetics.com/view/journals/wspaj/28/1/article-p81.xml>

at different times and that can profoundly affect their lives'. For example, the recently published Whyte Review⁴⁴ in the UK outlines that,

'The vast majority of reports about physically and emotionally abusive behaviour related to female gymnasts. The behaviour seems to have been more prevalent at the elite end of the sport'.

Boundary transgressions are defined in the UCCMS as 'interactions or communications that breach objectively reasonable boundaries of an individual' and which can occur because of the existence of power imbalances relating to age, sex, physical size and ability. These neglect and boundary transgressions may actually be facilitated *or even required* by the CCES transgender guidelines rather than recognised and mitigated. The UCCMS explains that, 'A Power Imbalance may arise in a peer-to-peer relationship, including but not limited to teammate-teammate, athlete-athlete...', and that power may be represented by 'age differential, ability, physical size, gender identity or expression', but interestingly not sex. This is despite the extensive evidence base for the disproportionate maltreatment reported by female athletes, although the UCCMS does recognize 'that those from marginalized groups have experienced positions of lesser power.'

Because most transgender adults are biological males who identify as women⁴⁸, and because of the puberty-related male advantage in most sports which means older males can compete on an equal basis or at an advantage with younger females, most transgender athletes will be transwomen, who are often older than high-performance female athletes. This was the case, for example, with transwoman weightlifter Laurel Hubbard who competed in the women's category at the age of 43 at the 2020 (delayed until 2021) Tokyo Olympics with female athletes in their 20's and early 30's. This sets up a power imbalance in relation to age, sex, physical size (due to male sex), and ability (as a result of retained male advantage) which, because of the CCES transgender guidelines, *cannot be named*, despite the legal protection of females against discrimination on the basis of sex as outlined in the Canadian Human Rights Act.

The CCES transgender guidelines remove the autonomy of female athletes to decide for themselves, and consent or otherwise, to the situations in which they feel comfortable and safe, including the sharing of rooms. This breaches fundamental safe sport, privacy and autonomy requirements for *female* athletes and contravenes institutional responsibilities, with consequent effects on the dignity of, and respect for, female high-performance athletes and safe sport standards. These significant concerns, relate to a duty of care for female athletes from the Canadian sport infrastructure and associated coaches and administrators. This duty of care is 'hidden' from institutional view because of the CCES transgender guidelines, which asymmetrically privilege a particular, not necessarily legally accurate, interpretation of non-discrimination on the grounds of gender identity and expression (inclusion in opposite sex categories) and associated privacy protections (for transgender athletes), over non-discrimination against female athletes on the grounds of sex (inclusion in same sex categories) with associated privacy protections (for female athletes).

Further, the conflation of biological sex, with gender identity and expression, may also result in comparisons being made by coaches between biologically female and biologically male

⁴⁸ Collin et al. 2016. Prevalence of Transgender Depends on the "Case" Definition: A Systematic Review. *J Sex Med.* Apr;13(4):613-26. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4823815/>

athletes competing in female categories, which female athletes may experience as belittling, humiliating and insulting. This links to body-shaming and has the potential to lead to unhealthy practices such as over-training, and training through illness and injury in an attempt to close a performance gap which in reality relates to biological sex rather than talent or training. Further, in the context of selection for national squads or teams, these comparisons may well be perceived as threatening the selection prospects and careers of female athletes, and indeed transwoman athletes may be preferentially selected over biologically female athletes given their retained puberty-related male advantage.

4. The scientific terminology of biological sex is essential to this policy discussion.

The large majority of these respondents (Cluster 1) and all interviewees are very clear that it is important to talk about both biological sex (in particular), and gender identity, when discussing the fair inclusion of transgender athletes in sport. The large majority use and need the language of biological sex to express their views, and are clear that sex relates to biology. This is because they need to be able to distinguish between biological sex and gender identity when discussing transgender inclusion policies and eligibility for female categories. Further, some interviewees were rather exasperated at being asked to explain what sex means, and the reasons for separate female and male categories since they considered this to be 'obvious'. One interviewee, for example, responded, 'oh God, it's just so obvious [laughs]'. In contrast, although the minority Cluster 2 did sometimes use the terminology of biological sex themselves, they were strongly opposed to the use of sex-based language in relation to transgender athletes. Therefore, the terminology used *and required* by the majority to discuss this difficult policy area is contested by the minority. Contesting the language required by a stakeholder group to express their views can be considered to be part of the attempt to silence their views altogether. This is particularly problematic when the language contested is that of biological sex, which is widely used through the scientific literature, outlined in the Canadian Charter and the Canadian Human Rights Act, and the very basis for single sex categories in sport as outlined by World Rugby and FINA. Contesting the distinction between biological sex and gender identity does not align with the science, the law, or the Canadian Government, all of which make such a distinction and separately protect both characteristics in the Canadian Human Rights Act.

5. Conflating 'sex' with 'gender identity' throughout the sporting policy and practice infrastructure in Canada renders invisible any competing rights between females with the legally protected characteristic of 'sex', and transgender athletes with the legally protected characteristic of 'gender identity or expression'.

The Universal Code of Conduct to Prevent and Address Maltreatment in Sport (UCCMS) accurately lists 'sex' and 'gender identity or expression' as separate and distinct protected characteristics, and defines discrimination as,

'Behaviour, policies, and/or practices that contribute to differential, inequitable, adverse or otherwise inappropriate treatment of or impact on an individual or class of individuals based on one or more prohibited grounds, which include race, national or ethnic origin, colour, Indigeneity, religion, age, sex, sexual orientation, gender identity or expression, pregnancy, marital status, family status, language, genetic characteristics or disability, and analogous grounds.'

However, this is qualified by setting out that,

'Behaviour, policies, and/or practices specifically benefitting members of marginalized groups shall not be considered Discrimination. Discrimination does not include behaviour, policies and/or practices rationally connected to legitimate sport objectives with the honest and good faith belief that they are reasonably necessary to accomplish the relevant objectives...'

Therefore, whilst the Canadian Human Rights Act protects females from discrimination on the basis of sex, and, separately and distinctly, transgender athletes from discrimination on the basis of gender identity or expression, the UCCMS set out that in some circumstances, policies and practices that at face value appear to discriminate against one legally protected group, might not be considered discriminatory if 'rationally connected to a legitimate sport objective'. This would presumably require a consideration of the conflicting rights of female athletes with the protected characteristic of 'sex' (as compared with male athletes), and transgender athletes with the protected characteristic of 'gender identity or expression' (as compared with athletes with different or presumably no gender identities).

It is important to stress that given that the standard for determination of discrimination against females is in comparison with the treatment of males, and that sex is defined as biological throughout Canadian government guidance and policy, biological sex is clearly of fundamental importance to any consideration of whether there is any discrimination on the basis of sex. Likewise, the appropriate comparator for discrimination against people on the basis of gender identity or expression, is then in relation to people who identify with a range of different gender identities, or indeed do not consider that they have a gender identity at all. This means that males who are not gender-conforming should not be discriminated against *as compared with other males*. Similarly, females who are non-gender-conforming should not be discriminated against *as compared with other females*. A clear example exists in sport, in that, transmen who are not supplementing with testosterone, appear to be welcomed into female categories by female athletes, regardless of their gender identity or expression.

However, conflicts of rights arise when the protected characteristics in law are placed in a hierarchical relationship rather than being treated within their own relevant categories of wrongful discrimination, and conflated to mean that 'gender identity and expression' should overwrite 'sex' in eligibility criteria. This is then interpreted as authorising inclusion in sport via opposite sex categories for transgender athletes. In high-performance sport, this interpretation of inclusion asymmetrically benefits transwomen (biological males) and disbenefits *all* female athletes, given transmen cannot compete on a level playing field with males in opposite sex categories. Transmen and female non-binary athletes, therefore, often remain in female categories, whilst transwomen transition into female categories as well, despite retained puberty-related male advantage.

The 2016 CCES transgender guidelines upon which the policy of a range of Canadian national sports organisations is based, recommends the inclusion of transwomen in sport via opposite sex, female categories, based on gender identity or expression alone. The CCES transgender guidelines do not address the competing rights of female athletes to fair and equal competitive opportunities (with biological males) in high-performance sport, or the impact on female athletes of including transwomen (biological males) in female sport categories based on gender identity alone. This sets up an (invisible) rights conflict from the outset, where female athletes are arguably discriminated against on the basis of sex. As the CCES transgender guidelines acknowledge, 'It is also possible that...cisgender (sic) female

athletes may challenge the organization on fair access to opportunities and fair competition'. The CCES transgender guideline development involved no apparent input from sport scientists and consequently lacks credibility with these female athletes and the majority Cluster 1 athletes in the survey. Further, it lacks credibility with the wider sporting community, given the consensus of scientific evidence regards the performance gap between the (two) sexes as settled science, and that testosterone suppression in transwomen results in minimal mitigation of male advantage. The CCES transgender guidelines contest the scientific consensus concerning male/female differences in athletic performance, taking issue with what they characterise as,

'a persistent, ingrained assumption in sport, based on comparison of athletic achievement, that individuals whose biology and physiology are at the male end of the sex spectrum have a competitive advantage over individuals whose biology and physiology are at the female end of the sex spectrum (that is, that men are generally faster, stronger and better at sport than women).'

As a consequence, the CCES guidelines do not offer a solution that can be considered to be 'rationally connected to legitimate sport objectives' on a number of counts. Firstly, they do not accurately reflect the science in this policy area which means the guidelines cannot be considered to be either 'rational' or 'legitimate'. Secondly, 'legitimate sport objectives' can be considered to be social objectives and/or sport objectives. Not only do the CCES guidelines fail to correctly assess the location and scope of rights conflicts in this area and therefore fail to adhere to legitimate social objectives, but they also fail to adhere to legitimate sport objectives. Sport is not only an agent of social change but a specific practice of structured competitive activity that should produce a reliable assessment of athletic ability over *comparable* groups of participants, and to do that accurately it must also do it *fairly*. This is an internal coherence requirement that is independent of external benefits accruing from participation. If a particular policy of either inclusion or exclusion makes that practice unreliable then it fails to be 'rationally connected to legitimate sport objectives'.

This results in the significant costs and harms accruing to the wider female athlete population, which are usefully and comprehensively detailed by Doriane Coleman, Professor of Law at Duke University, in relation to anti-discrimination law in the United States . Professor Coleman explains that,

'the argument that switching out sex for identity does no cognizable harm erases exactly the harm that matters for many, if not most, females. That is, it threatens the movement to ensure equality for women who have been subjugated across millennia and cultures precisely because they are physically different from men. The goals of this movement are not primarily about identity; rather, they are about equal opportunity despite these physical differences which are, in the realm and dialect of sport, relative handicaps.'

The CCES transgender guidelines advocating eligibility for female categories by way of self-identified gender identity, which is echoed throughout the Canadian sport infrastructure, might therefore be considered to constitute institutional discrimination against female athletes on the basis of sex. This may then facilitate resultant harms in relation to equal opportunities for females in high-performance sport, which are rendered invisible given the lack of acknowledgement, or assessment, of the conflicting rights involved in this policy.

transwomen. A number of these respondents have extensive lived experience of training with males, and some of the older respondents used to compete against males in the absence of female categories. As a consequence, some of the respondents and interviewees express the view that the scientific evidence is not actually necessary to document the differences between females and males, given that this is 'obvious'. Further, that it is clear that testosterone suppression cannot undo the advantages of male puberty. The majority agree that transwomen should not be able to compete in female sport categories unless there is sport-by-sport research which demonstrates no competitive advantage. Further, that any rules for inclusion of transwomen in female sport categories should require complete elimination of male advantage. As a consequence, the majority think transwomen, who they consider to be biological males, do not have a (human) right to compete in female sport categories. On the contrary, they think female athletes do have a (human) right to equal competitive opportunities with males (including transwomen) via single sex female categories. It is clear that this majority view is based on the performance-related biological differences between the sexes, and the scientific evidence that puberty-related male advantage is only minimally affected by testosterone suppression in transwomen. The majority of these respondents would not, therefore, accept the replacement of the principle of 'fair competition' with that of 'meaningful competition' in eligibility criteria for female sport categories.

8. Inclusion of transwomen athletes does not have to be in female categories.

The majority of these respondents and interviewees do not think transwomen should compete in female sport categories at all, at elite level. They do support the inclusion of transgender athletes in high-performance sport, but do not agree that the appropriate category for the inclusion of transwomen, given their retained male advantage, is in female categories, since they think this discriminates against female athletes. Instead, they support the inclusion of transwomen in either additional categories designed for transgender athletes, or in same sex categories which should be made more welcoming for gender non-conforming athletes, or in open categories which replace male categories. Incidentally, some sports, such as Major League Baseball, already operate open categories, and these categories result in male rather than female inclusion since there have been no female MLB players.

One respondent points out that female categories have historically been welcoming of a range of gender non-conforming females including transmen and female non-binary athletes, and that male categories, which have classically been an arena for performing hegemonic masculinity,⁴⁹ could develop along these lines.

A number of the survey respondents and interviewees talk about the development of a wide range of Paralympic categories as a way of providing a level playing field, and suggest that additional categories for transgender athletes in a similar fashion would be a fair policy solution. Some of the respondents and interviewees talk about the struggle by female athletes to develop female categories which were separate from the men's, so that female athletes have a level playing field in which to compete, and express sadness that this pioneering work is being undone. They suggest that transgender athletes could learn from this struggle and create, and/or advocate for, their own additional categories. One

⁴⁹Stick M. Conflicts in Sporting Masculinity: The Beliefs and Behaviours of Canadian Male Athletes. *The Journal of Men's Studies*. 2021;29(3):315-334. <https://journals.sagepub.com/doi/full/10.1177/10608265211004579>

interviewee suggests there could be a system of parallel competitions in the same event with parallel podium places and prizes, for example, three gold medals allocated, one each to the first female, first XY DSD athlete, and first transwoman.

The views then of the large majority of respondents in Cluster 1, and all of the interviewees, align with the transgender policies of World Rugby, FINA and International Rugby League, which all operate inclusion policies via same sex categories and/or additional transgender/open categories.

It is important once again to note that some Cluster 1 respondents and interviewees voiced ethical opposition to rules which require medication of transwomen athletes via testosterone suppression, for eligibility into opposite sex categories, and indeed to bodily modification at all, in both sex categories. Several respondents compare male competitive advantage in female categories to doping, and highlight the contrast in the attitudes and policy solutions to the two issues. One interviewee describes athletes who manipulate their hormones as undergoing practices which are 'antithetical to the values of drug free sport'. She links this to the post Ben Johnson era, clean sport, drug free sport, and competing with natural bodies, and comments, 'I don't think it's fair to athletes who we demand so much...especially at the top level, to be a clean athlete, to promote clean sport, to do all this testing, sometimes beaten by dopers, not be able to do anything about it...it's an incredible thing to ask athletes to do really'. The category solutions preferred by Cluster 1 and the interviewees do not necessitate or even permit medical intervention, given they do not involve eligibility in opposite sex categories. These category solutions would be maximally inclusive of transgender athletes given most transgender people do not undergo any form of medical or surgical transition.⁴⁸

A number of respondents and interviewees pointed out that gender identity eligibility criteria for opposite sex categories, in reality, relate asymmetrically and primarily to the inclusion of transwomen (biological males) and male non-binary athletes in female categories, rather than transmen (biological females) and female non-binary athletes in male categories. This is because they did not think transmen and female non-binary athletes would be able to compete on a level playing field in male categories. As three interviewees put it, 'they're not gonna win, they don't have the physiological advantage', 'they would get demolished' and [speaking as if she was a transman] 'they're gonna chew me up man'. This is borne out by the evidence that transmen and female non-binary athletes usually remain in female categories if they want to retain a competitive career. Given this, two of the interviewees felt that Canadian athlete Quinn and other female non-binary athletes who compete in female categories, may be using their non-binary status as a marketing gimmick. It confers upon them a high-profile special status, whilst they owe and retain their high-performance status to the existence of female categories. A number of respondents and interviewees queried how being a gender non-conforming female, for example, a female with short hair competing in female categories like athlete Quinn, was any different from what has happened for decades in female sport.

One respondent suggests that there should be two approaches to policy in this area. Eligibility policies should address fairness, which necessitates single sex categories to ensure equal competitive opportunities, and diversity and inclusion policies should address bullying, in particular in male sport categories, of gender non-conforming males, including gay and transwomen athletes competing in male categories.

9. The IOC 2021 guidelines are not fit for purpose.

The large majority of these respondents do not regard the IOC 2021 Framework as fit for purpose or as being based on scientific evidence and are opposed to the 'no presumption of advantage' principle. They think the framework will impact on female athletes, is open to exploitation by some countries and should be put on hold until further scientific research is carried out and female athletes have been consulted. If the wider global female high-performance athlete population and indeed the wider male high-performance athlete population do not consent either, and indeed are opposed to the IOC Framework as seems likely, this is a missed opportunity for the IOC to show leadership in this difficult policy area. Unfortunately, the IOC Framework includes no literature review citing the underpinning scientific research, was developed in conjunction with a self-appointed human rights organisation which does not appear to have explored the international human rights framework as it pertains to equality between the sexes⁵⁰, and the IOC does not appear to have consulted widely, if at all, with female athletes regarding eligibility for female categories.

In this absence of leadership from the IOC, many international governing bodies of sport either have already, or are now in the process of, reviewing their transgender guidelines.

10. The CCES transgender guidelines recommending eligibility in opposite sex categories via gender identity in high-performance sport are not supported by the large majority of these female high-performance athletes.

Given the large majority of these respondents do not support eligibility for transgender athletes by way of gender identity alone, they do not consent to, or support, the CCES transgender guidelines. These represent Canada's de facto national transgender policy and have been adopted by Canadian Women in Sport, E-Alliance and AthleteCAN. The majority view of respondents and interviewees is that the CCES transgender guidance is not scientifically based. This is demonstrated by the large majority who did not agree with the CCES claim that 'while we can observe that participants in men's sport, on average, out-perform participants in women's sport, current science is unable to isolate why this is the case'. One respondent encapsulates these views commenting that the

'CCES might have confounded these two ideas (sex and gender identity) or used biased research to support their data. There are transwomen and transmen not trans females...I think CCES confounded the terms, which leads others to be confused. They need to do better as experts in their fields.'

A different respondent is blunter and comments that the 'CCES position is absurd!' Two interviewees are extremely critical of the CCES and CWS and regard these organisations as adopting 'unneutral', 'uninclusive' 'biased' and 'bullying' tactics in the name of diversity and inclusion.

Unlike the robust and transparent transgender guidelines policy development processes undertaken by World Rugby, the UK Sports Council Equality Group and FINA, the CCES Expert Working Group consisted primarily of sport administrators, with no apparent input from any scientists specialising in either the performance related biological differences between the sexes or the effect of testosterone suppression on sports performance. Instead, the Expert Working Group included just one medic specialising in queer and LGBTQ youth, the Director of a specialist 2SLGBTQI human rights advocacy organisation and one sports

⁵⁰ Shift. Sports and Human Rights. <https://shiftproject.org/what-we-do/sports/>

lawyer. It is perhaps understandable then that the science in this Guidance is inaccurate and that the law and human rights as it relates to equal human rights and non-discrimination on the basis of sex, is almost entirely absent. Finally, in keeping with the evident disregard for the equal human rights of female athletes on the basis of sex as set out in law, the Guidance was produced following telephone calls with just two female high-performance athletes rather than a wide-ranging and representative survey.

This is problematic, since the Canadian sport infrastructure including CWS, E-Alliance, AthleteCAN and, understandably, some Canadian national sport organisations, all follow the CCES transgender guidelines in the absence of any national policy emanating from Sport Canada or the Canadian Government. These organisations in turn, have adopted policies which permit eligibility into opposite sex sport categories on the basis of gender identity alone^{51,52,53,54,55,56}. This tends to include the national sport organisations of minority sports rather than the bigger sports which are more likely to look to their international federation for guidance.

The CCES transgender guidelines asymmetrically privilege a particular interpretation of non-discrimination against athletes with the protected characteristic of 'gender identity and expression', which arguably involves discrimination against female athletes with the protected characteristic of 'sex', without any acknowledgement of a conflict of rights. Therefore, it appears that the CCES and any organisation adopting these guidelines do not recognise their institutional systemic bias, unconscious bias, and associated discriminatory practices in relation to female high-performance athletes. As a consequence, these organisations cannot be considered to uphold the autonomy of female high-performance athletes, or to treat female high-performance athletes with dignity and respect, since the over-arching policies appear to constitute a violation of the right to safe sport and privacy for female high-performance athletes.

11. There are two distinct groups with diametrically opposed views: a large majority who think biological sex is more important than gender identity in high-performance sport, and a small minority who take the opposite view.

The large majority of respondents (Cluster 1) have views which align with the science and the legal distinction between biological sex and gender identity, and think that support for transgender people does not necessitate eligibility for opposite sex categories. In complete contrast, the small minority (Cluster 2) believe that support for transgender people must necessarily equate to eligibility for opposite sex categories.

⁵¹ Gender Inclusion Policy Badminton Canada. <https://www.badminton.ca/file/868248/?dl=1>

⁵² Football Canada. Transgender inclusion policy. <https://footballcanada.com/wp-content/uploads/2022/03/TRANSGENDER-INCLUSION-POLICY.pdf>

⁵³ Viasport. Trans Athlete Inclusion Guidelines https://www.viasport.ca/sites/default/files/LGBTQI2S_Trans_Athlete_Inclusion_Guidelines.pdf

⁵⁴ USports 2018. U Sports approves inclusive new policy for transgender student athletes. https://usports.ca/uploads/hq/Media_Releases/Members_Info/2018-19/Press_Release_-_Transgender_Policy.pdf

⁵⁵ OVA. 2015 Transgender Athlete Policy. https://www.transathlete.com/files/ugd/2bc3fc_ce091b61c91d4c3c920f4ef808047f87.pdf

⁵⁶ Archery Canada. 2018. Archery Canada – Trans Inclusion Policy. <https://archerycanada.ca/wp-content/uploads/2019/07/Trans-Inclusion-Policy.pdf>

This difference in interpretation of what follows from the recognition of gender identities is central to the diametrically opposed views demonstrated. For the majority (Cluster 1), recognition of gender identities does not mean that gender identities are more important than biological sex. For the small minority (Cluster 2), recognition of gender identities necessarily means that gender identities are more important than biological sex. Cluster 1 views align more closely with the scientific distinctions between biological sex and sociocultural gender identity, and the law, in that the Canadian Human Rights Act protects separately and distinctly both 'sex' and 'gender identity/gender expression'. Further, the Ontario Human Rights Commission sets out that there is no hierarchy of rights, acknowledges competing rights claims, and outlines a process for resolving these.

Why do three athletes think the survey is 'transphobic' or 'biased'?

1. Distinguishing between biological sex and gender identity.

For the three Cluster 2 respondents the distinction between biological sex and gender identity, instead of reflecting scientific, legal and conceptual reality, is considered pejorative, 'transphobic' or 'bigoted'.

For example, one of these respondents thought 'these questions are very obviously biased based on equating transwomen with "biological males".' But then qualified this by saying 'I don't see how someone who is on androgen suppression is still a typical biological male.' It appears that this respondent may understand transwomen as biological males but not 'typical' biological males. The athlete also appeared to take issue with 'distinguishing that females and transwomen are not the same'. The respondent elaborates 'Do I think males should be included in the female category? No. Do I think transwomen are male? NO. So my answer is based on the female athletes including transwomen, which obviously you do not consider "female" '.

This, illustrates the extreme reluctance of Cluster 2 respondents to distinguish between biological sex (and female and male) and gender identity, and a rejection of any language that can distinguish between biological females and transwomen. However, the same respondent strongly disagreed with the statement 'The rules for inclusion of transwomen (biological males) in female sport categories should require no elimination of male competitive advantage.' Further, this athlete chose the 'don't know/no opinion' option for both the statement 'The rules for inclusion of transwomen (biological males) in female sport categories should require partial elimination of male competitive advantage' and the statement 'The rules for inclusion of transwomen (biological males) in female sport categories should require complete elimination of male competitive advantage.' It appears this athlete, despite the objection to the distinction between biological sex and gender identity, may not agree with eligibility criteria for transwomen in female sport categories without some form of mitigation of male performance advantage.

A second respondent felt 'the use of the phrases "biological males" and "biological females" is NOT respectful and isn't accurate' but then also that 'I'm not saying that sex doesn't exist, because it obviously does. I'm also not saying that there aren't differences between sexes, because there are.' Further, that 'Sure, someone who went through puberty as a male may have more muscle mass'. This apparent contradiction appears to relate to 'physicality' being 'only one element of the equation', which is, of course, the case for female as well as transgender athletes. Further, this respondent continues 'I'm saying that it cannot be as

neatly categorized'. This viewpoint appears to conflate transgender athletes with athletes with DSDs/VSDs as illustrated by further comments from this respondent.

2. Conflating athletes with DSDs/VSDs and transgender athletes.

This second respondent believed that 'binary categories are outdated and oversimplified' and asked 'how are you defining "biological males/females"???' and 'did we learn nothing from Caster Semenya's case??'

This reflects an understandable confusion between athletes with disorders of sexual development (DSDs) and transgender athletes. It should be noted that DSD is the scientific terminology whereas people with these developmental conditions often prefer 'differences of sexual development', 'variations of sexual development' or CCSD (congenital conditions of sexual development). Some campaigning organisations and people with these conditions use the term 'intersex', but others reject this term since they consider themselves to be either female or male rather than somewhere between the two. This is understandable given these conditions are disorders/differences/variations of either female or male sexual development, rather than relating to people who are not male or female⁵⁷. Most DSDs/VSDs are sex specific and most people with DSDs, despite atypical sex development, are unproblematically classified as female or male. The diagnosis (often prenatal in rich countries) and sex classification of the remaining 0.02% continues to improve, and in many cases, this is medically important⁵⁸.

In contrast, the vast majority of transgender people undergo typical sex development as female or male with no DSD, so that transgender and DSD/VSD populations have minimal overlap^{59,60,61}.

The athlete referred to by this respondent, Caster Semenya, is not a transgender athlete at all, but rather an athlete with a 46 XY DSD. These DSDs are described by the Court of Arbitration for Sport (CAS)⁶² as,

'conditions where the affected individual has XY chromosomes'.

As the CAS outlines,

⁵⁷ Bhargava, Aditi, Arnold, Arthur, Bangasser, Debra, et al. 2021. 'Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement', *Endocrine Reviews* 42 (3): pp. 219-258. <https://doi.org/10.1210/endrev/bnaa034>

⁵⁸ Lee, PA., Nordenström, A., Houk, CP., et al. and the Global DSD Update Consortium. 2016. Consensus Statement: Global Disorders of Sex Development Update since 2006: Perceptions, Approach and Care *Hormone Research Paediatrics* 85:158-180

⁵⁹ Carmichael, P., G. Butler, U. Masic, TJ. Cole, BL. De Stavola, S. Davidson et al. 2021. Short-term outcomes of pubertal suppression in a selected cohort of 12- to 15-year-old young people with persistent gender dysphoria in the UK. *PLoS ONE* 16(2): e0243894.

⁶⁰ García-Acero M, O. Moreno, F. Suárez and A. Rojas 2020. Disorders of Sexual Development: Current Status and Progress in the Diagnostic Approach. *Current Urology* 13(4): 169-178.

⁶¹ Kreukels, BPC., B. Köhler, A. Nordenström, et al. 2018. Gender Dysphoria and Gender Change in Disorders of Sex Development/Intersex Conditions. *Journal of Sexual Medicine* 15: 777-785.

⁶² Court of Arbitration for Sport. 2019b. 'Cas Arbitration: Caster Semenya, Athletics South Africa (Asa) and International Association of Athletics Federations (IAAF): Decision.' https://www.tas-cas.org/fileadmin/user_upload/Media_Release_Semenya_ASA_IAAF_decision.pdf

height for height and weight for weight, male performance advantage is retained. This is due, for example, to the different body composition of females and males so that when matched for height or weight, males retain a higher strength to height or weight ratio. Matching for performance effectively means, because of the puberty-related performance gap between the sexes, that males lower down the male performance hierarchy will be matched with females higher up the female performance hierarchy. This is why 14 years old boys can outrun elite female sprint athletes and transwomen athletes in their 40's can outperform elite female athletes in their 20's. For example,

'in 2019, the fastest woman in the world, Shelly-Anne Fraser-Pryce, ran 100 m in 10.71 s, 2160 adult males and 107 boys (under 18) are listed as running faster (IAAF, n.d.) and 10,000 males have faster personal bests'⁶⁴.

Case-by-case eligibility does not therefore match like with like, since if it did, transwomen would carry forward the same ranking whilst competing as a male to their ranking on transition to female categories. If this were the case, Lia Thomas in the US, Laurel Hubbard at the Tokyo Olympics and Rachel McKinnon/Veronica Ivy in Masters cycling would not be outcompeting the female athletes in their respective sports of swimming, weightlifting and masters cycling. As sports scientist Dr. Ross Tucker explains⁶⁶:

'Even at the same mass, for instance, males are 30% stronger than females. Plus, it creates disincentives to train, because once "matched" and granted inclusion, the transgender woman would have to avoid getting stronger, lest they exceed some threshold and be excluded again.'

'This method would also end up achieving competition between exceptional females, who possess attributes at the 99th percentile, and relatively mediocre males, at the 80th percentile, which is the very definition of unfairness.'

In addition, to be thorough, a case-by-case procedure would need to consider a very wide range of different biological factors that could impact even simple, isolatable movements in any given individual sport, which would make it a highly cumbersome and unreliable process for determining eligibility for inclusion. Applying this to inclusion in team sports, especially where there is dynamic interaction between all competitors, presents a significant degree of impracticality.

9. Conclusions

It is of significant concern that a range of discrimination, safe sport and maltreatment issues relating primarily to a failure of policy development and implementation are raised by respondents to the survey and in the interviews. This appears to be primarily because the Canadian sport infrastructure has not recognised the rights of female high-performance athletes to equal opportunities, non-discrimination and safe sport, as based in law on sex, in comparison with biological males. The lack of equal opportunities for Canadian female athletes was demonstrated at the 2020 (delayed until 2021) Tokyo Olympic Games where Canada was represented in both the men's and women's

⁶⁶ <https://www.dailymaverick.co.za/article/2021-06-27-transgender-weightlifter-in-new-zealands-olympic-team-highlights-the-inclusion-fairness-balancing-act/>

archery events by biologically male athletes⁶⁷. The human rights of female high-performance archers to equal competitive opportunities at the highest level, on the basis of sex, were therefore denied. The CCES transgender guidelines which are widely adopted by Canadian national sport organisations do not appear to be 'athlete centred', or rather, not 'female athlete centred'. Further, there has been a cultural disregard for the 'athlete voice', or rather, more accurately, the 'female athlete voice'.

It is well documented that female athletes in sport, in particular, are disproportionately affected by discrimination, bullying, emotional and other abuse, lack of decision-making power and lack of athlete voice. In a policy arena that removes from female athletes the conceptual, legal and scientific framework and language necessary to address equal opportunities, non-discrimination, safeguarding and safe sport in relation to sex, a culture of silencing and fear is compounded. Further, conflating the legally and conceptually distinct protected characteristics of 'sex' and 'gender identity and expression', rather than disaggregating them as the distinct legally protected characteristics of biological 'sex', and 'gender identity and expression', makes discrimination against female athletes on the basis of sex, and any associated discrimination, bullying and emotional and other abuse, invisible and unsayable.

The CCES transgender guidelines demonstrate insufficient consideration of female athletes, and therefore institutionalises and normalises discrimination against, and maltreatment of, female athletes. This appears to be primarily because the CCES transgender guidelines do not recognise the legally protected human rights of female athletes as based on their biological sex. The survey completions and testimony of these female high-performance athletes reveal an unacceptable culture of silencing and fear for female high-performance athletes in Canada. Further, it appears that female athlete wellbeing and welfare has not even been considered by the CCES transgender guidelines.

It is therefore necessary to withdraw the CCES transgender guidelines, and for Sport Canada to adopt a robust policy process to draw up guidelines which acknowledge the competing rights involved in this policy area and the breadth of stakeholders involved. The CCES transgender guidelines appear to have contributed to a problematic sport culture in Canada in relation to this difficult policy area. This policy process must adopt the conceptually, legally and scientifically accurate technical terminology of both biological sex, and gender identity and expression, in order to accurately reveal the competing rights involved, and enter into a transparent process to achieve the best possible inclusion solutions for all athletes. Consequently, the policy process should not be framed narrowly, as inclusion via opposite sex sport categories for transgender athletes, given this asymmetrically discriminates against all female athletes. There are a range of different inclusion policy options, which are increasingly adopted by international and national sport organisations, which would uphold equal opportunities for, and non-discrimination against, female athletes, as well as transgender athletes.

10. Recommendations

It is important that the Canadian sport infrastructure follows developments in this fast-moving policy area closely. If Canada retains the de facto national CCES policy recommending transgender inclusion in opposite sex categories, regardless of any mitigation of male advantage for transwomen,

⁶⁷ <https://www.economist.com/the-economist-explains/2021/07/16/why-are-transgender-olympians-proving-so-controversial>

following no meaningful consultation with female high-performance athletes, it is likely to become further out of step with the international sport policy framework. This will inevitably be problematic when Canadian high-performance transwomen athletes become national champions in opposite sex categories, with no mitigation of male advantage, but may then be ineligible for international competition.

This is likely to be more of a problem in minority sports with less breadth and depth and which do not have the resources to conduct sport-by-sport research or withstand potential litigation. In Canada, some minority sports have a policy of eligibility into opposite sex categories by way of gender identity with no requirement for mitigation of male advantage. Larger sports including Aquatics Canada are likely to be able to rely on their International Federation to develop transgender guidelines and can therefore follow these.

Recommendation 1: Develop Sport Canada Transgender Inclusion Guidelines.

There is an urgent imperative to develop new, up to date, Sport Canada transgender inclusion guidelines. This policy area should not be left to national sport organisations or CWS, E-Alliance and AthleteCAN to determine, in the context of the CCES transgender guidelines, which should be withdrawn. The CCES transgender guidelines do not align with the consensus of the scientific evidence, do not include the two definitive 2021 scientific reviews of the evidence, appear to have been developed in the absence of any expertise from the biological sciences, and have minimal reference to the scientific literature. The guidance almost totally disregards the international and national human rights infrastructure which protects the rights of females to equal opportunities on the basis of sex. They are also significantly out of date, given they reference as an example of good practice, the UK Transgender Guidelines of 2013. These were developed in conjunction with 5 transgender interest organisations and no female athlete input, and advocated inclusion of transwomen in female categories based on testosterone suppression or gonadectomy⁶⁸. These UK Guidelines have now been superseded by the 2021 UK SCEG Guidelines, developed following a robust policy development process, and arriving at a very different conclusion. This is that inclusion of transwomen in female categories cannot be balanced with fairness for female athletes. Further, there is confusion about the status of the CCES transgender guidelines which are, in the absence of anything else, assumed to constitute de facto Sport Canada guidelines. This means Sport Canada may be exposed to reputational damage given the CCES transgender guidelines are out of step with the science, human rights law and the direction of travel in this policy area.

Best practice and a fully inclusive, transparent, robust, policy development could model either World Rugby, FINA or the UK SCEG processes. The recent FINA model based around the equal human rights of female and male athletes on the basis of sex, the consensus of the scientific evidence, and a wide-ranging survey of, in particular female athletes, is recommended. Following the FINA policy process would involve three working groups comprising:

- i. An Athlete Group (including extensive consultation with both female athletes and transgender athletes rather than AthleteCAN which does not appear to represent the views of female athletes in this policy area)

⁶⁸ Sports Council Equality Group. 2013. Transsexual people and competitive sport.
<https://equalityinsport.org/wp-content/uploads/2013/08/Transsexual-people-and-competitive-sport-guidance-for-national-governing-bodies-of-sport.pdf>

- ii. A Scientific and Medical Group
- iii. A Legal and Human Rights Group (including specialists in sex discrimination) which addresses the rights of females to equal opportunities on the basis of sex, as well as the rights of transgender athletes, and acknowledges the competing rights issues involved)

Recommendation 2: Address the duty of care, safe sport and maltreatment recommendations highlighted by the confidential report provided separately to Sport Canada.

This should be an integral part of the development of the Sport Canada transgender guidelines to supersede the CCES transgender guidelines. It should align with implementation of the new Independent Safe Sport Mechanism, responsible for administering the implementation of the Universal Code of Conduct to Prevent and Address Maltreatment in Sport (UCCMS) for federally funded sport organisations. The dignity, privacy and respect of female athletes should be centred in any transgender inclusion guidelines which involve the inclusion of transwomen in opposite sex categories.

Recommendation 3: Conduct a representative athlete consultation with high-performance female athletes via national sport organisation databases.

There is an ethical imperative to integrate female high-performance athlete consultation into decision making processes at all levels. Transgender inclusion strategies have the potential to asymmetrically affect female categories and all female athletes (including transmen and non-binary female athletes). Female athletes are stakeholders and Canadian human rights law protects both the human rights of females to equality with males on the basis of sex, and transgender people to equality with people who do not identify as transgender, on the basis of gender identity/gender expression. Following this exploratory survey, Sport Canada should consider the roll out of a survey of all high-performance female athletes via national sport organisations. Terminology should refer to both biological sex and gender identity and distinguish between these two distinct and separately protected characteristics in law.

Recommendation 4: The science of biological sex and associated performance related consequences should be communicated accurately and clearly.

It is important that the science in this policy area is communicated accurately and clearly. At present, the science as outlined in the CCES transgender guidance, does not reflect the consensus of scientific opinion. In contrast, although survey respondents demonstrate some confusion, in the main they understand the science correctly. Areas of confusion include: whether or not it is possible to change biological sex (some Cluster 2 respondents), the differences between transgender athletes and athletes with DSDs (primarily Cluster 2 respondents), and the related question of whether or not sex is a spectrum rather than binary (respondents from both Clusters).

Recommendation 5: Use scientifically accurate terminology and language. Explain clearly the scientifically and legally distinct concepts of biological sex and gender identity. Avoid the terms 'gender' 'cisgender', 'transfemale' and 'transmale' which all have no legal definition.

Some Canadian sport organisations conflate biological sex and gender identity by using concepts such as 'gender equity' 'gender equality' 'transfemale' and 'transmale'. In high-performance sport in particular, this language is unhelpful, and hinders the development of transgender inclusion

guidelines which must necessarily address both biological sex and gender identity as distinct and separately protected characteristics. Therefore, sport policy development, particularly at high-performance levels should clearly disaggregate the language of biological sex (including the terms 'female' and 'male') from gender identity. The World Rugby, FINA and the UK Sports Council Equality Group transgender inclusion policies demonstrate how important this is and how this can be achieved whilst retaining respect for the gender identities of transgender athletes. The terms 'transwoman' and 'transman', or 'transgender woman' or 'transgender man' avoid this direct conflation of the language of biological sex and that of gender identity.

The majority of all respondents either strongly object (8) or object (5) to being called 'a cisgender athlete', while 5 don't know or have no opinion and 6 do not object. There are only 3/22 Cluster 1 participants who do not object. This is likely to be the case for the wider female athlete population and neither the UK SCEG or the FINA Policies use this term. As a consequence, any stakeholder consultation process using the term 'cisgender' may alienate female high-performance athletes from the start. This term should be avoided and replaced by the terms 'female' or 'biologically female'.

Recommendation 6: Communicate the international and Canadian human rights framework accurately and clearly.

The human rights of females to equality with males is widely protected in international and national human rights instruments, including in Canada. The Canadian Charter outlines the fundamental freedom of 'thought, belief, opinion and expression' which is 'guaranteed equally to both sexes' and 'guaranteed equally to male and female persons'. Both the Canadian Charter of Rights and Freedoms and the Canadian Human Rights Act outline that the Canadian Government should not discriminate against girls and women on the basis of sex in relation to laws, programs, employment and services. This means that females should have the right to equal opportunities with males. Including, presumably, in sport. The Ontario Human Rights Commission has a policy for reconciling and competing human rights and makes clear that there is no hierarchy of human rights.

The FINA Policy On Eligibility for the Men's and Women's Competition Categories is developed around a legal human rights framework and acknowledges that females and males should be entitled to equal opportunities, including in sport, on the basis of sex. The FINA Policy is explicit about FINA's core commitment to equality of opportunity for both male and female athletes. It commits to

'ensuring equal opportunity for both male and female athletes to participate and succeed in the sport, including through the equal representation in its programs and competitions of athletes of both biological sexes.'

FINA's explains the 'effort not to discriminate against female athletes and thus to ensure a sex-based women's category itself has exclusionary effects.'

Recommendation 7: Address the fear and silencing of female athletes.

The survey has revealed the development of transgender inclusion guidelines as another area of Canadian sport policy where female high-performance athletes have expressed significant fear of speaking out, and do not feel they have a safe space within their national sport organisations and Canadian sport in which to contribute to this policy discussion. They are, as a consequence, effectively silenced. This is a contravention of their fundamental human right to freedom of thought, belief, opinion and expression. It is also a significant failure to uphold the stated underpinning principles of promoting ethical and values-based sport, which is inclusive equitable and diverse, as

outlined in the 2012 Canadian Sport Policy. As the 2021 Evaluation of the Canadian Sport Policy 2012 Report⁶⁹ outlines,

'There is a strong consensus that good values and ethics are critically important to a healthy and successful sport system. There also is a consensus about the importance of the public seeing sport in Canada as ethical, fair and safe.'

And that,

'Ethical principles in sport are very important to Canadians, with "respect others" and "play fair" being the most highly rated principles for participation in sport.'

Sport Canada should do everything in its power to address this contravention of the human rights of females in sport. It is of deep concern that some of the respondents to this survey disclosed information that is too sensitive to even include in this main report. Sport Canada and the Canadian national sport organisations have a duty of care for current Canadian female high-performance athletes, many of whom are teenagers or very young female adults. Interventions should include recommendations 1-5 outlined above together with the development and implementation of anti-bullying policies within national sport organisations to address silencing of female athletes who contribute to this and other policy discussions. It may also be that the silencing of female high-performance athletes in this policy area is addressed in conjunction with the newly appointed Sports Integrity Commissioner and the Office of the Sport Integrity Commissioner⁷⁰.

I. Appendix A: Survey questionnaire



Survey Monkey
Questionnaire Downl

II. Appendix B: Interview guide

Semi-Structured Interview Guide

1. Introduction

Hi x I am Cathy Devine and as you know I am a Researcher on the Canadian Female High-Performance Athlete Survey.

The interview is semi-structured and so may feel a bit formal and scripted as I need to make sure I ask everyone the same questions.

This interview is about your views and I hope you feel able to speak freely given all responses will be confidential.

⁶⁹ <https://sirc.ca/wp-content/uploads/2021/09/CSP-2012-evaluation-Summary-Report-Final-Feb12-21.pdf>

⁷⁰ <https://sportintegritycommissioner.ca/about>

Thanks for completing the on-line Survey and agreeing to participate in this interview. This is your opportunity to develop and expand on the responses you have given in the on-line Survey.

The research will be written up as a report for Sport Canada to inform and balance policy insight in this area. It may also be written up in an academic journal article.

The interview should take approximately 30 minutes depending on how much information you would like to share.

With your permission, I'd like to record the interview because I don't want to miss any of your comments. All responses will be kept confidential. This means that I will ensure that any information I include in the report for Sport Canada and in any academic article published does not identify you as the respondent. You can decline to answer any question or stop the interview at any time and for any reason.

Are there any questions about what I have just explained?

May I turn on the recorder?

Before we begin, it would be nice if you could tell me a bit about yourself, such as whether you are currently active in sport as a competitor, coach or administrator.

Thanks, so onto the interview proper.

1. I'd like to start by asking about your understanding of the term's 'sex', 'gender' and 'gender identity'?
 - a. So first, what is your understanding of the term 'sex'?
 - b. And now 'gender'?
 - c. And now 'gender identity'?
 - d. Do you think it is important to talk about both biological sex and gender identity when thinking about the fair inclusion of transgender athletes in sport?
2. Now, can you tell me about your understanding of the term's 'transwoman' 'transman' and 'non-binary'?
3. Can you explain to me your understanding of the reasons for separate female and male categories in most sports?
4. So, thinking about the answers you have given, do you think eligibility for female sport categories should be based on sex or on gender identity?
5. Now can you elaborate on whether you feel transwomen should be eligible to compete in female sport categories?
 - a. Based on gender identity alone,
 - b. Partial reduction of testosterone levels,
 - c. Complete elimination of puberty-related male advantage?
6. Have you ever trained with or competed against a transwoman or male non-binary athlete, and if so, can you tell me about this?

7. Turning to consider transmen and female non-binary athletes, which sex category do you think these athletes should compete in?
 - a. And can you explain why?
8. Have you ever trained with or competed against a transman or female non-binary athlete, and if so, can you tell me about this?
9. How easy do you find it to discuss the question of transgender eligibility in female sport categories?
 - a. With other athletes
 - b. With coaches
 - c. With sports administrators
10. Have you discussed transgender eligibility in female sport categories with other athletes? If so, can you summarize their views?
 - a. Do they feel able to discuss, ask questions and speak freely on this topic?
11. Do you think it is important that female athletes as well as transgender athletes are asked for their views regarding transgender eligibility criteria for female sport categories?
12. Finally, have you anything else you wish to add?

Thank you so much for your time and the information you shared today.