



All women athletes are equal, but some are more equal than others. Balancing fairness and inclusion in cisgender sports - where do trans women athletes sit? Analyzing beliefs of collegiate and professional women's soccer players.

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All women athletes are equal, but some are more equal than others.

Balancing fairness and inclusion in cisgender sports - where do trans women athletes sit? Analyzing beliefs of collegiate and professional women's soccer players.

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A Thesis in the Field of Psychology

for the Degree of Master of Liberal Arts in Extension Studies

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Abstract

Sport should be for everyone. As asserted by the Olympic charter, “The practice of sport is a human right. Every individual must have the possibility of practicing sport” (International Olympic Committee, 2021, p. 8). However, sport is made up of two categories: women’s and men’s. Often, those assigned female at birth are placed in women’s sport, and those assigned male at birth are placed in men’s sport. These binary categories exist under the assumption that sex assignment coincides with the gender category arrangement in sport, creating a cisgendered system. So, what happens when an athlete assigned ‘male’ at birth, identifies as a woman? Where do they fit in sport?

Sport has been traditionally structured under gender essentialist principles, which creates challenges for trans women athletes to participate in women’s competitions. Elite athletes are stakeholders in the formation of inclusion policies surrounding these issues on trans women competitors. Earning perspectives from athletes of all gender identities are crucial. To explore factors related to trans-exclusionary or trans-inclusionary belief sets within an elite athlete population, in this research I qualitatively analyzed perspectives of collegiate and professional cis women soccer athletes in the United States on the participation of trans women in professional women's sport using open-ended survey questions. I hypothesized that I would find patterns analogous to that of previous research based on five theoretical domains: Athletic Identity, Fairness, Gender, Inclusion, and Trans Women Athletes. Using NVIVO, qualitative analysis of the survey data uncovered a multitude of coded themes under these domains. Results suggested that

factors relevant to gender, such as conservative gender perception and sex-defined physiological advantages (advantages described as male physiology compared to female physiology), were the most frequent factors associated with trans-exclusionary attitudes. Other reasonably strong associations with these exclusionary attitudes surrounded aspects of athletic identity such as hypercompetitive states (excessive need to win) and 'enemy' contesting orientations (when faced with competition). Most athletes who held trans-inclusionary attitudes did so only if there was a contingency to regulate their testosterone, or if trans women athletes undergo transition before puberty. Elements found under domains of Gender (progressive gender perspectives), Inclusion (an accommodating understanding of inclusion) and Trans Women Athletes (a desire for more research into trans women athletes) were associated with this contingency-based trans-inclusionary attitude. A very small minority of the sample had non-contingent inclusionary attitudes towards trans women athlete inclusion in women's sport, most of whom had an awareness of or were associated with trans women athletes in their lives. Overall, findings suggest that elite cis women athletes are resistant to the inclusion of trans women athletes in elite women's sport. Attitudes associated with this resistance are predominantly related to either rigid and conservative perceptions of gender or the definition of physiological equivalence classes, along with athletic identity and the structures surrounding competitiveness and winning.

Dedication

I dedicate this thesis to my late grandparents, Nan and Graham Trapski, for providing the support I needed to pursue my education at the highest level, and at Harvard University. I also dedicate this thesis to my parents, Karen and Simon Wilkinson, for their unrelenting support, encouragement, and guidance throughout.

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Chapter I.

Introduction

Growing recognition of transgender identities has shed light on the exclusionary nature of sport as a cisgendered system – specifically, “a biocentric and binary classification system” (Posbergh, 2022, p. 4) that reinforces essentialist ideas of gender; that one’s gender is a fixed, immutable fact of ‘nature’ based on biological difference between sexes, and this defines human athleticism (Atwood et al., 2023). Essentialist arguments play a large role in justifying the exclusion of trans women from women’s sport for the sake of ‘fairness’ (Atwood et al., 2023). Objections to include trans women athletes in women’s professional sport fixate on this issue of fairness – a principal constituent of contemporary sport, driven by physical comparative tests and physiological equivalency that revolves around the essentialist binary conceptualization of biological sex (Gleaves & Lehrbach, 2016; Love, 2014; Pike, 2021). These objections come from elite cis women athletes themselves. Devine (2021) assessed the perspectives of 19 Olympic cis women athletes, earning their opinions on participation of trans women in the women’s category of Olympic sports. The cis women athletes collectively agreed that while they respect the necessity of inclusion, they prioritized ‘fairness’ as the fundamental purpose and ideology of sport. The trans-exclusionary attitudes of the cis women athletes were driven by their perception of physical differences between individuals assigned male and female at birth, while some acknowledged the need for specific research on trans women athletes and whether their performance does mirror that of athletes who are cis men (Devine, 2021).

Overall, existing research indicates that athletes follow a rigid definition of fairness, defined by sex in an elite competition-based structure. To understand cis women athlete's trans-exclusionary attitudes like these, I utilize literature on sport, fairness, inclusion, gender, and other psychological theories and frameworks behind human perception, that can redefine the meaning of sport, and shed some light onto elite cis women athletes' resistant or accepting attitudes towards trans women athletes' participation in women's sports.

Athletic Identity and Hypercompetitive States

Athletic identity, defined as the extent to which someone "identifies within the athlete role" (Brewer et al., 1993, p. 237), has been shown to produce both beneficial and adverse self-regulatory and moral processes in athletes. High athletic identity assists in enhanced motivation, positive self-concept and team-oriented focus, all of which are indicative of self-transcendence values – values associated with higher moral ideas of concern for the welfare of others, such as benevolence and sportsmanship, along with personal achievement values (Albouza et al., 2022; Cranswick et al., 2023). However, excessively high athletic identity can often be detrimental to the development of a holistic self-concept and can negatively impact moral processing, such as degradation of other social roles, lower moral reasoning and in particular, unhealthy fixation on winning at all costs. As high athletic identity drives this excessive need to win, failure can be a major threat to this deeply embedded identity (Albouza et al., 2022; Cranswick et al., 2023).

As sport centers on competition – a structured arrangement, where one athlete's victory requires the loss of another (Shields et al., 2016), this is the center of an athletes' world. Winning is not only a goal, but pertinent in the process self-regulation. As

described earlier, those with high athletic identity place a high degree of importance on winning; a ‘winning at all costs’ mindset. This is known as functioning in a hypercompetitive state, which is known to be driven by high athletic identity (Albouza, et al., 2022). Hypercompetitiveness is primarily fostered by self-interest specific values in the context of competition, such as outperforming others, public image and winning. By contrast, higher moral values such as sportsmanship and concern for others are less associated with hyper competitiveness (Albouza, et al., 2022).

These identity elements of the athlete could assist in understanding processes behind attitudes toward trans women athlete’s participation in women’s sport. In fact, athletic identity has been shown to be a factor associated with exclusionary attitudes towards trans athletes. Tanimoto and Miwa (2021) surveyed university athletes to identify factors that influenced trans athlete acceptance in sport. The authors found that cis women athletes with higher degrees of athletic identity were less likely to feel accepting towards trans women participation (Tanimoto and Miwa, 2021). The idea of trans women participating in sport may pose as a threat for cis women athletes with higher athletic identity, especially those who operate in hypercompetitive states.

Contesting Orientations and Moral Foundations

As competition drives every athlete’s quest to win, theorists have uncovered the various ways in which competition is experienced, and the moral processes associated with those experiences. Understanding moral processes of competition could paint a clearer picture of why fairness, as a key factor in providing equal setting for winning in competition, is highly regarded by athletes, and even more so, why it could drive

exclusionary attitudes towards trans women in sport. Shields et al. (2016) identified two ‘contesting orientations’ of competition:

1. Competition is experienced as a metaphorical partnership – the quest for excellence is both mutually beneficial and exhilarating, and opponents are viewed as partners
2. Competition is experienced as a metaphorical war – athletes symbolically render their opponents into enemies.

Each contesting orientation has been linked to different moral foundations – that is, the inherent but adaptable intuitions discerning right from wrong, along with identification of social obligations and moral infringement (Graham et al., 2011; Shields et al., 2016). Shields et al. (2016) identified a correlation between the experience of competition as a partnership and higher levels of active moral reasoning. In the same vein, athletes aligned with the competition-is-war orientation were linked to having limited moral processing (Shields et al., 2016). Here, the authors suggest that moral processes, when competing against opponents as a ‘war’, tend to be prioritized for competition-specific elements such as coaches or officials, and enhancement of personal or team interest results in disregard of opponents and their interests (Shields et al., 2016). Furthermore, competitors experiencing sport as a ‘war’ against opponents fosters an in-group versus out-group mentality that dismantles moral judgement, and stimulates self-interest at the cost of others (Shields et al., 2016)

This theoretical framework can offer insight into why elite cis women athletes carry trans-exclusionary attitudes. The contesting theories suggest that cis women athletes who compete under the competition-is-war orientation are less likely to consider

the interests of trans women athletes, who are characterized as out-group members in the context of sport, due to its organization along a binary conceptualization of sex and assumption that participants are cisgender. Furthermore, athletes competing under the competition-is-war orientation set aside most, if not all moral value on competition-related elements, perhaps including fairness. Since trans women's athlete participation in women's sport is considered a threat to fairness, cis women athletes with this particular orientation of competing may be more likely to exhibit exclusionary attitudes towards trans women athletes. In contrast, cis women athletes who experience sport under the competition-is-partnership dynamic could be more likely to express inclusive attitudes towards trans women – with higher moral reasoning, less moral affinity for competition-specific rules and an increase in the value of out-group members.

Benevolent Sexism and TERF's

Resistance to trans-inclusion in sport can also be explained by benevolent sexism, where women are framed in a seemingly positive and affectionate stance, but with covert underpinnings of masculine dominance and stereotyping of women (Glick & Fiske, 1996). This stereotyping involves the placement of women in restricted, domesticated roles, allowing men (as a dominant group) to rationalize that women are 'the weaker sex', to justify the need for women to be protected (Glick & Fiske, 1996; McClearen, 2023).

In the same vein, gender segregation in sport is also traditionally driven by patriarchal convictions of 'protecting' girls and women, operating under the assumption that cisgender men are physiologically superior in comparison to cisgender women, and that as a result of this, absence of a cisgender women's category could abolish

opportunities in competitive sport for (allegedly physiologically inferior) cisgender women (Gleaves & Lehrbach, 2016; McClearen, 2023; Posbergh, 2022).

Historically, sport was established and defined as a male-only practice, until human rights and feminist groups challenged such exclusion as part of the equity movements of the 1960's and 1970's (Kidd & Donnelly, 2000). The extremist end of the spectrum of this feminist ideology sits a specifically trans-exclusionary presumption that trans women are not and never will be women, as they are 'biologically' male (Harper, 2022). Colloquially labelled a "TERF" (Trans-Exclusionary Radical Feminist) argument, this notion becomes more vexed when it suggests trans women athletes will dominate the women's category of sport and impede opportunities for cis women athletes (McClearen, 2023). This anti-trans rhetoric is mostly reinforced at the political level. In 2021, 144 anti-transgender bills, many of which targeted younger trans groups and collegiate athletes, were filed in U.S. state legislature (McClearen, 2023). Eighteen of the bills passed in 2021, and a further 174 were introduced in 2022, 26 which passed. In 2023, the number of bills that have been filed has extended to 589, and so far, 84 have been passed into law (ACLU, 2023; Trans Legislation Tracker, 2023). Lawmakers responsible for this alarming increase in anti-trans legislation facilitate a trans-panic culture, hiding transmisogyny and sexism behind language characteristic of feminism, citing the protection of women's rights and supporting equal opportunities for women in sport (McClearen, 2023).

Gender Schemas

Another area to investigate the basis for trans-exclusionary attitudes is to explore how individuals perceive gender. Classical theories underpinning perceptions of gender

argue that such perceptions are organized by cognitive structures made up of sex-linked association networks, a mechanism known as gender-based schematic processing (Bem, 1981). The anticipatory nature of these schemas means individuals are ready to assimilate any arriving information into schema-associated terminology, resulting in sex typing of cis men and cis women (masculinity and femininity). The schematic split follows essentialist ideas of gender, reinforcing the notion that humankind is split into only two cisgender equivalence classes; cis men and cis women (Atwood et al., 2023; Bem, 1981). Development of gender understanding is also known to be cis-biased, as the binary classification of sex is taught to be congruent (or the same as) gender, rather than two separate concepts; gender as a social role and sex as genes, gonads and genitals (Jackson et al., 2023; Joel, 2012).

The gender schematic mechanism fosters perceptions and attitudes of gender in sport, perhaps even reinforcing ideas that trans women are not truly women, and therefore do not align with the gender-equivalence categories. The gender schema theory also suggests that cisgender women athletes perceive trans women athletes as a threat by disrupting a self-concept aspect of their gender-schema – where social gender constructs learned during childhood (such as the division of sex in sport based on physiological equivalency) are connected with their own sex assignment (Bem, 1981). Knowing this, educating individuals to adopt an aschematic sense of sport, along with novel guidance surrounding the separate constructs of sex and gender is crucial to combat exclusion and discrimination of transgender individuals (Jackson et al., 2023).

Physiological Sex Differences and Need for Further Research on TWA (Trans Women Athletes)

Average serum testosterone concentrations between individuals assigned male vs female is the ‘biomarker’ for trans women athletes’ eligibility in women’s divisions of sport (Hamilton et al., 2021). The fairness premise underpinning sex-segregation policies in sport is fortified by this accentuation of endogenous hormonal difference when it comes to physical ability, driving the requirement of a separate women’s category – where women have rights to compete without being overshadowed by cis men, under the assumption of cis male physical superiority (Posbergh, 2022).

Policies reinforced by sports organizations typically require trans women to suppress their testosterone level before and during competition as a condition of entering women’s sports categories. However, these policies have been refuted by research, revealing minimal effects of testosterone suppression in trans women who are not athletes (Hilton & Lundberg, 2021). These longitudinal studies showed there was lasting retention of lean body mass, muscle area and strength from male-puberty development, alluding to the idea that despite any gender affirming procedures, these aspects will generate a large performance gap between cis women athletes and trans women athletes. The authors stress that these performance advantages are specific to sports dependent on explosive strength and muscle mass, uniquely in the upper body region – for example, baseball and field hockey that involve specific upper extremity movements (Hilton & Lundberg (2021). The research also leans on assumptions that trans women athletes will carry “male performance advantages” (p. 211) despite gender affirming treatment (Hilton & Lundberg, 2021). These claims also assume human physiology is sexually dimorphic, when really there is considerable overlap in sex differences between assigned females and assigned males (Joel, 2012).

Comprehensive studies of elite trans women athletes are yet to be done, particularly to investigate their athletic performance after lengthy gender-affirming surgical procedures and hormone replacement therapy (HRT; Hamilton et al., 2021). Harper et al. (2021) reviewed the long-term effects of HRT on trans women, finding that HRT has been shown to decrease muscle surface area, strength, lean body mass, and hemoglobin levels, to levels that are closer to those typical of cisgender women. The authors also point out the lack of research that investigates testosterone suppression on muscle strength and many other performance related aspects in transgender individuals (Hilton & Lundberg, 2021). Specific research on an elite athlete population in measuring performance effects is required to establish a complete sense of just how close elite trans women athletes can get to elite cis women athletes.

Currently, elite athletic organizations follow research that has presumed trans women are the same as cis men. Sports categories that highly regard physical characteristics of strength and explosive power in athletes are the institutions that abide closely to the fairness interpretation of sport and uphold the separation of cisgender women from cisgender men. In some cases, prioritizing fairness in women's sport is portrayed for the purpose of player safety. A BBC Sport article by Coleman-Phillips (2019) drives the trans women-aren't-women narrative by describing how Kelly Morgan, a trans woman rugby player from Wales, earned the nickname "beast" by her cis women teammates. Morgan is tall, at a height of 6 feet, and teammates describe to BBC how Morgan's extraordinary ability allowed her to once fold an opposition player "like a deckchair" (Coleman-Phillips, 2019). The article drives an essentialist narrative using language such as 'towering over her teammates' and 'folding opposition players' to

provoke trans exclusionary attitudes, even though many cis women rugby players are 6 foot and likely earn titles similar to ‘beast’.

Following research like Hilton and Lundberg (2021) that presumes trans women are physiologically equivalent to cis men, World Rugby enforced regulations that completely exclude trans women from competition. The policy indicated that the physical advantages trans women athletes may carry relevant to size, force and power-production precipitated during puberty and adolescence threaten the welfare and safety of other players in the women’s game (World Rugby, 2020). These regulations pose an issue – cis women athletes who may have similar physical advantages are still able to be included. One could argue that World Rugby holds exclusionary beliefs against trans women and are using player safety as a cover to justify this exclusion.

In the context of a ‘combat sport’ like rugby, cisgender women are glaringly flagged as disadvantaged in terms of size, strength and power, and the essentialist principle to separate the sexes is strongly reinforced. Narratives that fixate on the assumption that trans women are biologically male reinforce this trans-exclusion in sport and neglect the reality that most trans women may not carry the same physiological advantages after undergoing prolonged gender-affirming procedures. Additional research in this area is required to explore true athletic performances of elite trans women athletes upon completion of gender-affirming treatments, to question the assumption that elite trans women athletes have physiological advantages like those of cisgender men.

Fairness

Despite fixation on sex-differences between athletes, both cis and trans, more room can be made for trans-inclusivity by dismantling the rigidity of the gender-

essentialist ‘fairness’ cornerstone of sport. By nature, sport is perforated with unfairness and inequity on the basis of individual variability, not only due to physiological superiority within cisgender women, but also due to social and economic differences which ultimately bestow advantages (Knox, et al., 2019). Social and economic privileges have been shown to provide substantial competitive advantage – the greater the allocation of resources for investment in human ability, the more likely success is earned at the elite level (Bernard & Busse, 2004; Knox et al., 2019).

Karkazis et al. (2012) also argues that ‘natural advantage’ (e.g. those assigned female at birth with naturally higher testosterone or larger muscle mass) does little to disturb fairness and equal conditions in sport and therefore, in the same vein, the author asks how the minority participation of trans women athletes exists as anything different. Karkazis et al. (2012) also goes onto emphasize that all elite women athletes effectively begin their career success by challenging themselves among the physiological best, under these ‘unfair’ conditions of physical variability, in order to become the most prestigious in their sport. Deconstruction of fairness is not only useful to consider when re-thinking the fundamental values of sport but is also valuable in obtaining an inherent psychological basis for cis women athlete’s perspectives on trans women’s participation in women’s sport.

The Importance of Inclusion

The fairness premise and comparative test ideology of sport reinforces cisgendering and sex-segregation and is a large contributor for the exclusion of trans women athletes. Excluding individuals from sport is discriminatory and unfair in and of itself and damaging to the institution of sport (Gleaves & Lehrbach, 2016). Gleaves and

Lehrbach (2016) highlight the privilege cisgender athletes have as they fit into the essentialist categories of men's and women's sport, and that trans athletes are discarded, left to prove they can be included. Love (2014) supports this premise, arguing that such exclusion based on gender identity ultimately causes sport itself to be transphobic.

The significance of inclusion in sport is highlighted by perspectives of trans women athletes and their negative experiences of exclusion. While oppression of individuals who are lesbian, gay and bisexual (LGB) has diminished over time, trans prejudice has not followed the same rate of social progression (Cunningham & Pickett, 2018). When it comes to sport-specific spaces, Hargie et al. (2017) found that trans individuals felt anxious, alienated and intimidated. The authors also highlight how feeling 'alienated' was enhanced by the cisgender organization of sport, where individuals felt out of place. The fact that sport is only arranged to accept people that identify with the gender they were assigned at birth results in complete disregard for other gender identities, further compounding these feelings of exclusion (Love, 2014).

Explicit and Implicit Attitudes

As mentioned above, trans prejudice has a lasting presence in society despite social progression of LGB acceptance. Research on explicit attitudes (consciously experienced feelings) toward transgender individuals supports this, finding that attitudes are less warm toward transgender people in comparison to attitudes toward lesbian or gay individuals (Norton & Herek, 2013). Understanding these explicit attitudes is useful in policy formation and relevant to universal beliefs concerning gender, particularly on the "endorsement of the gender 'binary', or the belief that only two genders exist" (p. 258), essentialist beliefs that subsequently result in attitudes that are negative towards trans

individuals (Axt et al. 2021). Understanding these attitudes is useful to identify trans-exclusion within the rigid gender binary system of sport.

Axt et al. (2021) also found that these openly stated, explicit attitudes toward transgender people may be further explained by implicit transgender attitudes (unconsciously activated associations). Utilizing a variety of Implicit Association Tests (IAT), authors identified strong implicit preferences for cisgender people over transgender people. These implicit findings were not only moderated by sexual orientation and gender, but also prior contact with trans individuals and gender-specific belief sets surrounding sexism and gender essentialism – specifically, assessment on the belief concerning fundamental differences between genders, where such differences define the availability of roles and opportunities for each gender (Axt et al. 2021). The gender binary of sport is structured under this very belief of gender essentialism and therefore understanding the implicit associations around it is useful in research on trans-exclusionary attitudes in sport.

Research on implicit gender attitudes provides insight into trans-exclusion and the gender-essentialist rigidity of sport. Dunham et al. (2016) conducted a cross-sectional study on 441 children and 111 adults in the US evaluating attitudes of gender, both implicit (meaning how they automatically assess categories of gender based on positive-negative association) and explicit (self-reported attitudes toward the gender category they belonged to). Results showed that own-gender preference was higher in women than men, with men's own-gender preference declining significantly with age. Dunham et al., (2016) identified these gender attitudes deviate from usual social evaluations as they tend to detach from hierarchical social status. This is likely due to their developmental nature,

formed under exposure to maternal influences and early childhood experiences of gender (Dunham et al., 2016).

These findings therefore suggest that attitudes around gender are mostly socially influenced and domain-specific, rather than inherent, such as a women's ability in a professional domain (Dunham et al., 2016). These findings are useful in determining sex-based biases in the domain of elite women's sport, with specific regard to ideations on physiological advantages that trans women may have. These findings on implicit gender attitudes suggest that social and political 'gendered' structures of sport play a role in the formation of negative attitudes about out-group members, such as trans women in the women's category of sport. This study will provide a theoretical starting point for these underlying factors for future research within the elite athlete population.

Study Aims and Hypotheses

This study aims to identify factors underlying elite women's soccer players' attitudes towards the inclusion of trans women athletes in women's professional sport. This will be done by focusing on the following aims:

Aim 1

This study aims to determine what aspects of athletic identity are associated with exclusionary and inclusionary attitudes towards trans women athlete's participation in professional women's sport. In alignment with previous literature, I hypothesized that high athletic identity, hypercompetitive states, and an 'enemy' contesting orientation will be the factors associated with trans-exclusionary attitudes. I also hypothesized that a

‘partner/fellow’ contesting orientation will be most associated with trans-inclusionary attitudes in athletes.

Aim 2

This study aims to determine what aspects of gender are associated with exclusionary and inclusionary attitudes towards trans women athlete’s participation in professional women’s sport. In accordance with previous literature, I predicted that rigid gender schemas, trans-exclusionary radical feminist (TERF) ideas and benevolent sexism will be the main factors associated with athletes who express trans-exclusionary attitudes. I also hypothesize that an aschematic or flexible perception of gender will be the main factor associated with trans-inclusionary attitudes among the participants.

Aim 3

This study aims to determine what aspects of fairness are associated with exclusionary and inclusionary attitudes towards trans women athlete’s participation in professional women’s sport. I hypothesized that a fixed and traditional definition of fairness (seated in sport’s physiological equivalence male/female binary) will be the main factor associated with participants who express trans-exclusionary attitudes. I also hypothesize that those with trans-inclusionary attitudes will identify the inherent inequality within the structures of sport, regardless of physiological equivalence categories, such as economic advantages or variations in cis-women athlete’s physiology.

Aim 4

This study aims to determine what aspects of inclusion are associated with exclusionary and inclusionary attitudes towards trans women athlete's participation in professional women's sport. I hypothesized that those who define inclusion in sport as accommodating athletes of all gender identities, sexual orientations, race/ethnicities, cultures and backgrounds would all be associated with the expression of trans-inclusionary attitudes.

Aim 5

This study aims to determine what aspects of familiarity with trans women athletes are associated with exclusionary and inclusionary attitudes towards trans women's athlete participation in professional women's sport. I hypothesized that participants who express trans-inclusionary attitudes will also have some awareness of, association with, or experience with trans women athletes. I also hypothesized that there would be a desire for more research into trans women athletes among those who express trans-inclusionary attitudes, than in those with trans-exclusionary attitudes.

Significance of Study

There is a gap in the literature concerning voices of the elite athlete population, particularly on the issue of including trans women athletes in professional women's sport. This has been highlighted by Devine (2021), who mentioned the alarming misrepresentation of key stakeholder voices in policy making and research on athlete perspectives. Earning these perspectives is important to obtain true and meaningful policies within sport. For example, Outsports.com reported that World Rugby's trans-

exclusionary policy for women's rugby has been sternly opposed by rugby players globally, and with USA Rugby and Rugby Canada collectively stating their disagreement (Reimer, 2020).

Investigating where these key stakeholders stand (under an analysis of their beliefs) on trans women athlete's inclusion in women's sport is critical for policy making and could make a difference for trans women athletes and their right to compete in sport. One athlete population in particular is women's professional soccer. This population is under-researched when it comes to transgender inclusion, and the only policies that exist under the universal governing body of soccer, FIFA, are Gender Verification Regulations which subject transgender players to intrusive sex-testing procedures (FIFA, 2011). The practice is considered discriminatory for trans women in sport (Australian Human Rights Commission, 2021). Transphobia also exists at the amateur level of soccer, but only according to resources within the journalistic sphere, describing exclusionary attitudes based on threat of physical advantages of trans players (Smith, 2021). Anti-trans rhetoric and trans-panic is also being extensively perpetuated at the political level, with anti-transgender bills targeting young collegiate athletes, including collegiate women's soccer athletes (McClearen, 2023). Exploring factors linked to player attitudes on trans women athlete's inclusion in women's sport is a necessary starting point to combat this exclusionary culture towards trans women athletes.

In light of critically analyzing elite women's sport and what it means to be an elite woman athlete, in this study I explored whether fairness and inclusion can coexist, according to competitor beliefs. I analyzed underlying psychological processes such as athletic identity, definitions of fairness and inclusion, gender schematic processing,

gender ideologies and moral frameworks surrounding competition to understand elite cis women athletes' beliefs on the inclusion of trans women athletes in women's professional sport.

Chapter II.

Methods

The study was conducted using online, using open-ended survey questions via Qualtrics. Consistent with exploratory research on elite cis women athletes by Devine (2021), the online aspect of the methods sought to accommodate the anonymity of subjects considered to be high profile in elite women's professional soccer. Devine (2021) expressed the challenge of reaching a 'hidden' demographic of high-profile Olympians who are considered to be household names and social elites as a rationale for using online-only methods. On top of this, Devine (2021) mentions how elite cis women athletes who are open to speak on contentious issues of trans inclusions were "doubly difficult to access" (p. 342) and that establishing trust with such unique participants is crucial. For the same reasons, the online-only approach sought to earn genuine perspectives from participants in a private online setting.

The survey contained 8 demographic multichoice questions and 22 open-ended questions developed under theoretical frameworks that were consistent in the literature to play a role in the formation of attitudes on trans women athlete inclusion in women's sport (Appendix 1). Allowing theory to deductively guide meaning and patterns in the data facilitated my reflexivity as a researcher in this study (Braun & Clarke, 2006). The survey was distributed by a recruitment letter sent out to contacts in the US associated with women's soccer, instigating a snowball sample cascade to collect elite women's

soccer players in the US. The snowball sampling method has been shown to be effective in collecting information on ‘hidden populations’ like social elites (Noy, 2008).

The aim was to obtain responses from 24-25 collegiate and professional NSWL (National Women’s Soccer League) players. Original methodology was to arrange and conduct semi-structured interviews using the ‘chat’ feature on the online Zoom application, and the goal was to sample a target population of professional women’s soccer athletes only. Due to difficulty of obtaining participants for interviews, particularly professional players in the NWSL, I adopted the survey approach and expanded recruitment efforts to collegiate players.

Measures

The survey began with 8 demographic questions – sex assigned at birth, gender identity, whether they were a collegiate or professional player, number of years played (in college or professional career), age, sexual orientation, nationality, and race/ethnicity. The next portion of the survey involved open-ended survey questions created under specific domains of enquiry. The domains reflected the following themes: Athletic Identity, Fairness, Gender, Inclusion, and Attitudes on trans women athletes. Each domain was subdivided into categories assembled from the review of literature, which framed the questions in the survey. These themes were the framework to deductively analyze underlying psychological influences associated with attitudes concerning trans women athlete’s participation in professional women’s sport.

Athletic Identity (AI)

Athletic identity themes were captured by self-reported degrees of AI, hypercompetitive attitudes, and contesting orientations. Each is described here in turn.

Self-Reported Degrees of AI. Questions under this theme looked to obtain self-reported descriptions from participants on the extent to which their identity related to the role of an ‘athlete’ (Brewer et al., 1993). Athletes who have a higher degree of athletic identity have been found to feel less supportive of trans women athlete’s participation in women’s sport (Tanimoto & Miwa, 2021).

Hypercompetitive Attitudes. Competitors with high athletic identity tend to place extreme emphasis on winning; an attitude recognized as ‘hypercompetitive’. This hypercompetitiveness operates as a self-regulatory process in athletes, such as formation of self-worth and defining status, and predicting high or low moral value (Albouza et al., 2022). Questions under this category of AI sought to determine how much emphasis participants placed on winning, and whether their own descriptions reflect aspects of hypercompetitive attitudes, as it relates to degrees of AI.

Contesting Orientations. As part of athlete experience and identity, questions here looked to explore what contesting orientations participants experience when faced with opposition. Competition can be experienced as a metaphorical partnership (opponents are fellows) where moral reasoning remains active, or it is experienced as a metaphorical war (opponents are enemies), where moral reasoning can be limited in the pursuit of victory (Shields et al., 2016). The opponents-are-enemies orientation also aligns with hypercompetitive attitudes, in the sense that winning is maintained as the highest priority. Exploring contesting orientations looked to earn qualitative insight into whether these

views of opponents influence attitudes on including trans women athletes in women's sport.

Fairness

Themes relevant to fairness included player definitions of fairness and interpretations of physiological advantage. Each is described below.

Player Definition of Fairness. As highlighted earlier by Devine (2019), a large portion of elite cis women's athletes have argued to exclude trans women athletes from women's sport on the basis that 'it's not fair'. This area of inquiry looked to understand player interpretations of 'fairness' in sport (what it means for sport to be 'fair'). Outside the confines of a rigid and traditional definition, sport is effectively riddled with inequity; from economical advantage to physical differences within set cisgender categories (Gleaves & Lehrbach, 2016; Karkazis et al. 2012). In other words, sport may never be entirely fair, and fairness can be subjectively defined. Analyzing participants' interpretations of fairness in this study sought to assist in explaining resistant or inclusive attitudes towards trans women athletes.

Physiological Advantage. Players were asked to define what 'physiological advantage' meant to them. The idea here was to identify the specificity of what physical advantage meant to players when it comes to their experience in women's sport. Cisgender women's athletes represent a wide range of physiological variation on a multitude of dimensions, that, depending on the sport, can offer certain advantages (Karkazis et al. 2012; Tidmas et al., 2023).

Gender

Themes relevant to gender included gender perception and TERF arguments / benevolent sexism. Each is described below.

Gender Perception. Participants were asked to describe their perception of gender, how they think it was formed growing up, and whether it has changed since childhood. Gender perceptions are influenced greatly by gender schemas – cognitively constructed, sex-linked association networks that are predetermined to make sense of incoming gender-specific information, commonly organized schematically into male and female equivalence classes (Bem, 1981). This idea suggests trans women may be seen as a threat by cis women athletes due to the disruption of their gender-schematic self-concept – where social gender constructs learned during childhood are linked their own cis women gender identity (Bem, 1981). Earning descriptions of gender perception from participants may highlight consistencies in whether players with traditional perceptions of gender are resistant to the inclusion of trans women athletes in women's sport, and whether cis women players with aschematic or less rigid ideas of gender are more inclusive to the idea of trans women's inclusion in women's sport.

TERF Argument/Benevolent Sexism. Participants were asked a broad question of whether they thought trans women were women. The intention here was to gain insight into TERF or benevolent sexism related language – that is, radical trans-exclusionary ideas that presume trans women are not women, are 'biologically' male, and will impede sport participation opportunities for cis women (Harper, 2022; McClearen, 2023). Participant answers indicative of TERF attitudes can offer insight into cis women athlete's resistance to trans women athlete's inclusion in women's sport.

Inclusion

Themes of inclusion were captured by player definitions of inclusion and player thoughts on the IOC's inclusion policy. Each is described below.

Player Definition of Inclusion. This aspect of the survey looked to gain athlete interpretations of what inclusion in sport meant for them. The aim here was to identify what versions of inclusion participants believed in and obtain insight into whether participants viewed sport as a field offered only to people who identify as the gender they were assigned at birth (cis women and cis men), or whether being 'inclusive' extends to other gender identities such as trans individuals (Gleaves & Lehrbach, 2016). Trans prejudice and exclusion has not followed the same rate of social progression as LGB (lesbian, gay and bisexual) identities (Cunningham & Pickett, 2018). Participant answers on what it means for sport to be inclusive were anticipated to offer information on whether ideas of inclusion are specifically trans exclusionary or not.

IOC Inclusion Policy. Participants were asked directly whether they agreed with the IOC's current policy on trans women athlete's participation, which specifies that trans women athletes are not required to limit their serum testosterone. The process on how to monitor this are decided by each nation's respective sport association or federation and is not governed by the Olympic body (International Olympic Committee, 2021). This policy means that there is differential treatment of trans women athletes across different nations, from outright bans such as World Rugby and World Athletics (World Athletics, 2023; World Rugby, 2020) to policies that seek to regulate testosterone, such as International Surfing Association and International Tennis Federation ([ISA Surf], 2023; [ITA], 2023). Despite widespread resistance at the national association level of sport, the IOC, as the

global body of sport, has a stance on trans women's athlete participation that leans more towards inclusion, and opinions from participants surrounding this ruling were key to understand in this research.

Trans Women Athletes (TWA)

Themes relevant to the topic of trans women athletes included explicit attitudes on trans women athletes and player experiences with trans women athletes. These are described below.

Explicit Attitudes. As the dependent (non-numerical) variable of the research, questions here were more direct in order to earn a clear, explicit answer on whether or not participants believed trans women athletes should be allowed to participate in the women's category of professional sport. Participants were also asked if they had any desire for more research into trans women athletes. Any extra salient features in the written answers that reflected any other themes detailed above were coded accordingly.

Player Experience with TWA. Research has found that athletes with more awareness of or association with trans women athletes tended to hold more inclusive attitudes on their participation in women's sport (Tanimoto & Miwa, 2021). Participants were asked about their experience with trans women athletes; whether they knew of any athletes, competed against the athletes, or played alongside them.

Details on the domains of inquiry with subsequent categories, specific questions, and references for category formation can be found in Appendix 1.

Thematic Analysis

Demographic data was the first to be calculated using NVIVO. Following this, Braun and Clarke's (2006) six phases of thematic analysis were used as an approximate guide for analyzing data from the open-ended questions:

Phase 1: Familiarization. Firstly, the data was cleaned and read through several times to achieve a level of familiarization before being submitted to NVIVO for coding.

Phases 2 & 3: Code generation under themes. Next, salient aspects of the data were methodically labelled as initial codes, which were then collated into themes and sub-themes under the five theoretically driven domains. Since questions in the survey were very specific to each category within each theme, participant answers were organically narrowed to provide an explicit answer relevant to the category. Therefore, coding was predominantly done at the semantic level – the surface meanings of the data were taken, and no latent ideas beyond any explicit meaning were investigated (Braun & Clarke, 2006).

Phase 4 & 5: Code organization and reviewing/defining themes. Coded extracts were then reviewed across the data set, and thematically mapped. Specifics of each theme and category were revised, and operationally defined in the context of the research (Tables 1, 2, 3, 4 & 5). Codes were predominantly organized by presence (whether at least one theme was coded or not at all), and some were also organized by frequency (number of codes overall, as some codes under certain themes were recurrent). Themes were graphed

and organized into tables to allow for identification of any correlations, and to present distribution.

Phase 6: Reporting data. Compelling examples of data extracts were selected, and analysis was written up.

Table 1. Athletic Identity – Coding Process

Athletic Identity	Coded Theme	Operational Definition of Coded Theme	Text Examples
Self-reported degree To what extent would you consider ‘athlete’ as your identity? If you lose or fail, how does that impact your identity as an athlete? Does your success in sport help to define this identity?	High Athletic Identity	A large extent to which the players identity relates to the role of an ‘athlete’, and the extent to which failure impacts this identity.	<i>“Eighty percent”</i> <i>“Most of my identity”</i> <i>“A large part of my identity”</i> <i>“A big part of me”</i> <i>“It upsets me and messes with me mentally”</i> <i>“Frustrated”</i> <i>“I feel lost”</i> <i>When we lose it changes my mood, when we win I am happy”</i>
Hypercompetitive attitudes For you, how important is it to win?	High importance on winning	Emphasis on the importance of winning	<i>“Everything”</i> <i>“Very important”</i> <i>“Winning is very important to me”</i> <i>“Extremely”</i> <i>“I’d do whatever it takes to win. Even two foot them from behind. They are not my partner during ninety mins”</i>
Contesting orientations How do you view opponents in competition? Could you ever view your opponent as a partner/fellow competitor?	Enemy	Opponents are viewed as nothing but someone to defeat; identified as an enemy	<i>“As someone you want to beat”</i> <i>“Breakfast”</i> <i>“As enemies you’re fighting to win”</i> <i>“They are my enemies”</i>
	Fellow	Capacity is there to identify opponents with respect, as fellows or partners, as well as the opposition.	<i>“Yes”</i> <i>“I view them as us but another team”</i> <i>“They are someone else trying to do the same thing as me”</i> <i>“We are all working towards the goal of winning and are prepared in similar ways”</i>

Table 2. Fairness – Coding Process

Fairness	Coded Theme	Operational Definition of Coded Theme	Text Example
Player definition In your opinion, what does it mean for sport to be fair? Are there elements in sport that can create unfairness?	Equality/Rule Driven	For sport to be fair it must be equal for all (the term 'equality', or a comparable term is used) along with references to adhering to rules of the sport.	<i>"Both sides of the opposition are treated the same and are held to the same standards/rules"</i> <i>"Everyone is treated the same"</i> <i>"Everyone has an equal opportunity to succeed"</i> <i>"To follow the rules"</i>
	Other factors	Fairness in sport is present without influence of performance-enhancing drugs, politics (e.g. bias/corruption in coaching, refereeing, higher management)	<i>"Yes, politics"</i> <i>"Yes. Cheating such as use of steroids or performance enhancing drugs"</i> <i>"Yes if the ref is favoriting a team"</i> <i>"Yes, coaches create unfairness"</i>
Physiological Advantage From your perspective, what does it mean for an athlete to have physiological advantages?	Sex-based description	Description of advantage is gendered, specific reference to biological males as being physically superior and having those traits provide a physiological advantage in sport	<i>"I believe this would be a man playing a woman(s) game"</i> <i>"If it were a biologically born male playing against (a) biologically born female"</i> <i>"If they are not born a female"</i> <i>"If biological male is in a women's sports competition"</i>
	Physical attributes description	Description of physiological advantage references performance-enhancing drugs, or just references aspects of advantaged speed, size, power, but makes no mention of gender	<i>"Someone with a physiological advantage may be taller or stronger than me"</i> <i>"People who take supplements to make them better/give them an advantage"</i> <i>"Be more fit, strong, but it's something that everyone could work on. Maybe height and over genetics could be advantageous"</i> <i>"Some people just have genes that make them stronger, more athletic, faster etc"</i>

Table 3. Gender – Coding Process

Gender	Coded Theme	Operational Definition of Coded Theme	Text Example
Gender Perception How do you perceive gender? How do you think you developed that perception? Does this differ from how you perceived gender during childhood? Do you think the separation of women's sport and men's sport has helped you understand meanings of gender?	Conservative gender perception	Description of gender as a rigid binary/only two genders; male and female. Gender and sex are seen as the same construct. Ideas surrounding gender are also the same as childhood.	<i>"There are only two genders male and female"</i> <i>"From the Bible and Science"</i> <i>"That is how we are made"</i> <i>"I just have very feminine traits"</i> <i>"I grew up in a conservative family"</i> <i>"I have always thought this way before the world became corrupt"</i>
	Progressive gender perception	Description of gender as a spectrum/separates sex from gender identity, and lists gender identities outside of the man/woman binary. Ideas surrounding gender have changed over time, and are different from childhood.	<i>"Gender is fluid"</i> <i>"Gender is a social construct"</i> <i>"I didn't understand gender when I was a child. I just knew boy and girl."</i> <i>"My sociology class taught us the difference between gender and sex"</i> <i>"I am friends with and know a lot of Queer people with diverse identities that have exposed me to all of these different ideas."</i>
	Sport helped to define gender (Also coded as conservative gender perception)	Answer of 'yes', and reference to separation of gender in sport/biological difference.	<i>"Yes. There is a clear different between biological male and female sports. That's why there HAS to be separate categories"</i>
	Trans women are women	Answer of yes, trans women are women, no mention of being biologically male, progressive gender perception also coded here	<i>"I believe trans women are women"</i> <i>"Yes, if someone says they're a woman, who am I to disagree? Gender is a spectrum everyone has to find where they lie on it"</i>
TERF argument/Benevolent Sexism Do you consider trans women to be women? Why/why not?	Trans women are not women	Answer of no, trans women are not women, and mention of being biologically male. These are also coded as trans-exclusionary language	<i>"No they are biologically male"</i> <i>"No matter how many hormones you pump in a man, there is nothing changing how tall or strong their capabilities are"</i>
	Protect women's sport	Description/reference of needing to protect women's sport or that trans women are a threat to women's sport	<i>"We've come so far to create powerful woman sports moments, letting trans-woman compete against biological females is something that may halt progression"</i>

Table 4. Inclusion – Coding Process

Inclusion	Coded Theme	Operational Definition of Coded Theme	Text Example
Player definition In your opinion, what does it mean for professional sport to be inclusive?	Wide understanding of inclusion	Description of inclusion that references equality, that everyone is to be included regardless of gender, sexual orientation, race/ethnicity, culture and background	<i>"Inclusive of everyone, regardless of sexual preference or who they are"</i> <i>"To allow all people of shapes and sizes of the same category to compete in a sport"</i> <i>"To give everyone an opportunity".</i> <i>"Appreciate all races, genders, ethnicity, religion etc"</i>
	Cisgender-only inclusion (also coded as contingency-based trans-inclusionary attitudes)	Description of inclusion involves references to include all regardless of sexual orientation, race/ethnicity, culture and background but upholding separation of biological sex	<i>"Everyone has the chance to play sports there just needs to be separation in order to be fair"</i> <i>"Include people of all shapes in sizes, but still keep the same category and demands"</i>
IOC Policy What are your thoughts on the IOC's Policy to include trans women athletes without fixed regulation of testosterone?	IOC Policy is unfair	Expression of disagreement with the IOC's inclusion policy for TWA in the women's category of sport in the Olympics	<i>"I think it's a horrible idea and will ruin women's sports"</i> <i>"Insane"</i> <i>"No I think this is nonsense"</i> <i>"I do not agree with that. I think having a boost of testosterone is unfair for the women who if using boost of testosterone, would be called a cheater."</i>

Table 5. Trans Women Athletes – Coding Process

Trans Women Athletes	Coded Theme	Operational Definition of Coded Theme	Text Example
Explicit Attitudes What is your overall belief on the participation of trans women athletes in women's professional sport? Do you think trans women, as women, have a right to compete in the women's category of women's professional sport?	Trans-Exclusionary	Expression of disagreement to inclusion of TWA in women's sport, and trans-exclusionary language is present; such as referring to TWA as biological men, and using this as a justification for exclusion from women's sport. 'Trans women are not women' codes are included here.	<i>"It shouldn't happen"</i> <i>"They (trans women athletes) take away the fairness and availability of sports from biological females"</i> <i>"I don't agree with it"</i>
	Trans-Inclusionary	Expression of agreement to inclusion of TWA in women's sport, and trans-inclusionary language is present; such as expression of necessity to include anyone regardless of gender identity.	<i>"They should be allowed there shouldn't be discrimination"</i> <i>"I think there is a space for trans women in professional sport, as long as they are good enough to play there, of course!"</i>
	Trans-Inclusionary with contingencies	Expression of agreement to inclusion of TWA in women's sport so long as there is a form of regulation involved. Trans-inclusionary language is predominantly present. Cis-gender only inclusion codes are included here.	<i>"I think as long as they find a way to regulate any unfair biological advantages, there should be no issue with it"</i>
	Unsure	Expression of uncertainty when it comes to inclusion of TWA in women's sport. This includes uncertainty on IOC Policy	<i>"I don't know it really is a hard situation"</i> <i>"I am not sure"</i>
Desire for more research	Player desires more research into TWA	Expression of agreement for more research into TWA	<i>"Yes, the more research in any field the more knowledge everyone has. The more knowledge the better we can improve. I do think that there needs to be more education on trans women athletes to woman athletes. We eventually will be competing alongside and competing against these athletes and to be able to welcome into a comfortable space is important."</i>
Awareness of/association with trans women athletes	Awareness/Association with TWA	Answer of yes as to whether participant is aware of or is associated with TWA	<i>"I've played against a trans athlete"</i> <i>"Yes, I know of one but never played with any"</i>

Chapter III.

Results

Participants

Overall, 32 women's soccer athletes ($n=32$) completed the survey. Of the total, 27 were NCAA Division I college players (84.4%), and 5 were professional NWSL (National Women's Soccer League) players (15.6%). All participants identified as cisgender women. Many participants did not report number of years played, so that aspect of the demographic data was removed from the research. Table 6. shows the demographic data of the final sample.

Table 6. Demographic Data

Variable	Total	Percent
Sample Size	32	100%
Assigned female at birth	32	100%
Gender Identity - Woman	32	100%
Collegiate Players	27	84.4%
NWSL Players	5	15.6%
Age		
18-25	28	87.5%
26-30	4	12.5%
Sexuality		
LGBTQI+	6	18.8%
Straight	26	81.3%
Nationality		
American	25	78.1%
Other (Canadian, Japanese, New Zealand, Russian, Scottish)	5	15.6%

Not Specified	2	6.3%
Race/Ethnicity		
White	25	78.1%
Black	3	9.4%
Hispanic/Latina	3	9.4%
Asian/Asian American	1	3.1%

Thematic Analysis – Code Frequency and Code Presence

Participant answers were shorter than anticipated, however, they were still coded accordingly, and salient text features were coded and operationally defined.

Athletic Identity (AI)

Analysis of themes relevant to athletic identity (self-reported degrees of athletic identity, hypercompetitive attitudes, and contesting orientations) is described below.

Self-Reported Degrees of AI. The majority of the sample (75%) had presence of language indicative of high athletic identity (‘presence’ meaning that high athletic identity was coded at least once in their responses) when asked to report to what extent their identity aligned with the athlete role. Just over half of the sample (53.1%) additionally had presence referencing that failure in their sport impacted their athletic identity.

Hypercompetitive Attitudes. Similar to the above, 78.1% of the sample had presence of language indicative of high importance on winning, suggestive of hypercompetitive athlete state.

Contesting Orientations. The sample contained language of both contesting orientations in this section of the survey. Twenty four of the 32 participants (75%) indicated at least once that they viewed their opponents as enemies. Twenty one of the 32 participants

(65.6%) mentioned at least once that they could view their opponents as fellows. Thirteen participants (40.6%) in total indicated that they could view their opponents as both enemies and fellows. Eleven participants (34.4%) were coded to view their opponents as enemies only, and 8 participants (8%) were coded to view their opponents as fellows only.

Fairness

Analysis of themes relevant to fairness (player definition of fairness and physiological advantage) is described below.

Player Definition of Fairness. In this section of the survey, two themes emerged that reflected two interpretations of fairness. The majority of the sample (84.4%) indicated that fairness in sport related only to ‘equality’, and ensures sport is ‘rule-driven.’ In addition, 40.6% of the sample had at least one code that featured other factors that influenced fairness (as a way to define fairness), factors such as performance enhancing drugs, politics, and financial resources.

Physiological Advantage. Two themes emerged from answers under this survey question. Almost half the sample (43.8%) had at least one code that used sex differences to define physiological advantage. Approximately 34.4% of the sample had at least one code that specified physiological features (e.g. size, speed, strength etc) contributed to physiological advantage, without the specific mention of sex.

Gender

Analysis of themes relevant to gender (gender perception and TERF/benevolent sexism) is described below.

Gender Perception. Three themes surrounding gender perception emerged in this section.

A strong majority of the sample (87.5%) had at least one code that highlighted language indicative of conservative gender perceptions (meaning that gender is seen as a binary and organized as traditional schemas). Of the 28 participants who had this code, 17 had at least 4 or more of the same code reference. Not only did this indicate presence, but also a high frequency of language reflecting conservative gender perceptions across the sample.

The same portion (87.5%) claimed that sport helped to define gender, as a binary.

The other coded theme that emerged in this section was a progressive perception of gender (recognition of identities outside gender binary, and separation of sex and gender identity). Just over half the sample (56.3 %) had presence of this code.

TERF Argument. Nineteen out of the 32 participants (59.4%) had presence of codes that they believed trans women to be women, whereas the remaining 13 (40.6%) displayed presence of codes that stated trans women were not women. Only 9 of the 32 participants (28.1%) had presence of a code referencing the need to protect of women's sport as an argument against trans inclusion.

Inclusion

Analysis of themes relevant to inclusion (player definition of inclusion and thoughts on the IOC's inclusion policy) is described below.

Player Definition of Inclusion. Most participants (62.5%) had presence of a 'general understanding of inclusion' code, which described that everyone deserves the right to be included in sport, regardless of sexual orientation, background, and sexual orientation. Eight of the 32 participants (25%) described a contingency-based inclusion as involving only biological females and upholding the separation of sexes in sport. As these codes

referenced contingency-based inclusion ideas, they matched language (and the operational definition, as described in Table 5) indicating contingency-based trans-inclusionary attitudes and were coded accordingly.

IOC Inclusion. Almost all participants (27 out of 32, 84.4%) had presence of a code that deemed the IOC's current trans women athlete inclusion policy (which specifies that trans women athletes are not required to limit their serum testosterone) as unfair.

Trans Women Athletes (TWA)

Analysis of themes relevant to the topic of trans women athletes (beliefs on including trans women athletes in women's professional sport and player experience with trans women athletes) is described below.

Including TWA in Women's Professional Sport. Explicit language surrounding whether or not participants believed trans women athletes should be allowed to participate in the women's category of professional sport were coded into four emergent sub-themes:

Trans-exclusionary, trans-inclusionary, trans-inclusionary with contingencies, and unsure. Twenty one of the 32 participants (65.6% of the sample) had presence of trans-exclusionary codes (17 of the 21 participants here had at least 2 code references, indicating higher frequency as well as presence). Only 21.9% had presence of trans-inclusionary codes, whereas 68.8% had presence of contingency-based inclusionary codes (11 of the 22 participants here had at least 2 codes). It is also key to note that 12 of the 21 participants who had trans-exclusionary codes also contained contingency-based trans-inclusionary codes. About 15.6% had presence of 'unsure' codes. Lastly, 22 of the 32 participants (68.8%) responded with a simple 'yes' to whether they desired more research into trans women athletes.

Player Experience With Trans Women Athletes. Only 11 out of the 32 participants (34.4%) were coded to have experience, awareness, or an association to trans women athletes.

Coded Themes Comparison: Explicit Attitudes on TWA

The data revealed high frequencies of certain codes across the sample. Codes that appeared across different sections of the survey tended to have higher frequency than those that only appeared under a targeted question. For example, language that was coded according to attitudes surrounding trans women athlete's inclusion in women's sport (whether explicitly exclusionary, or explicitly inclusionary/contingency-based inclusionary) was high in frequency across many sections of the survey (rather than just in sections where a direct question was asked). Higher frequency codes were graphed for visual demonstration of relationships between these recurrent themes, as shown in Figures 1, 2 and 3. Other notable relationships between codes that were just present (at least one instance code, likely present under targeted section) were also graphed to demonstrate commonalities with explicit attitudes, as shown in Figures 4 and 5.

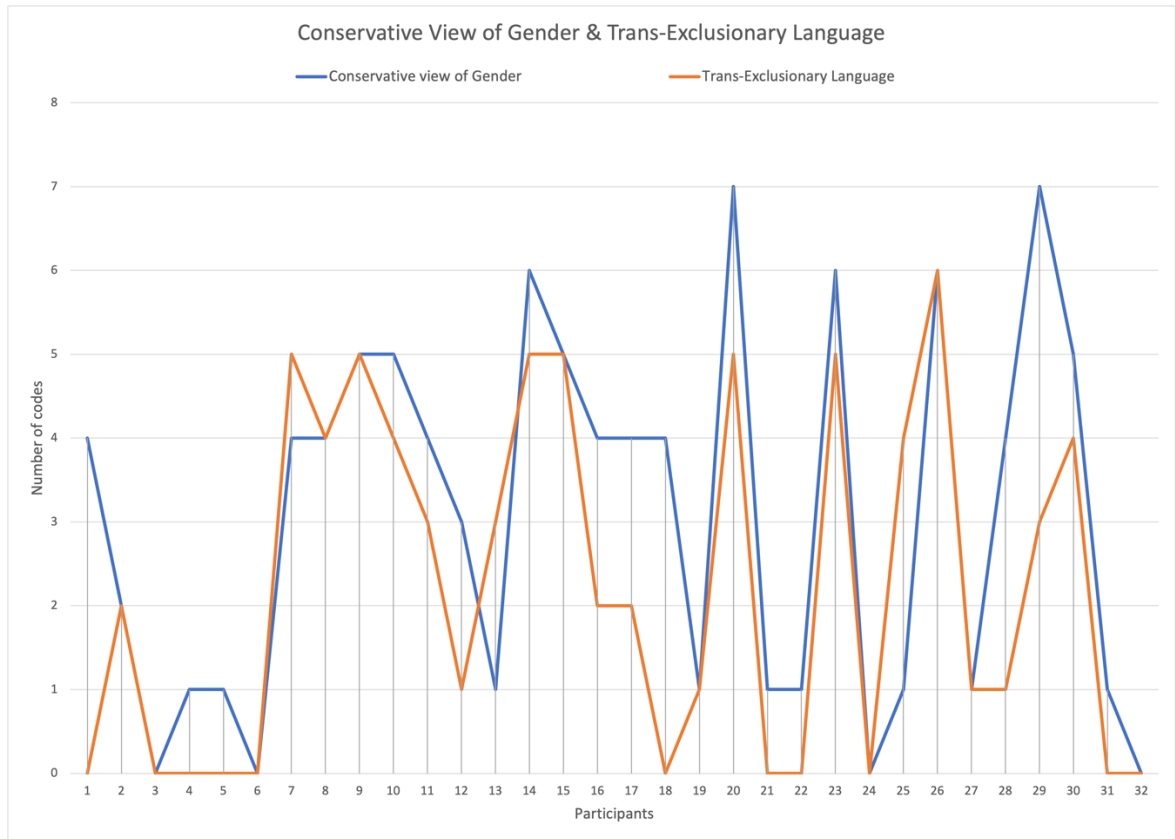


Figure 1. Conservative View of Gender and Trans-Exclusionary Language

Line graph of code frequency comparing language indicative of conservative gender perception & trans-exclusionary language.

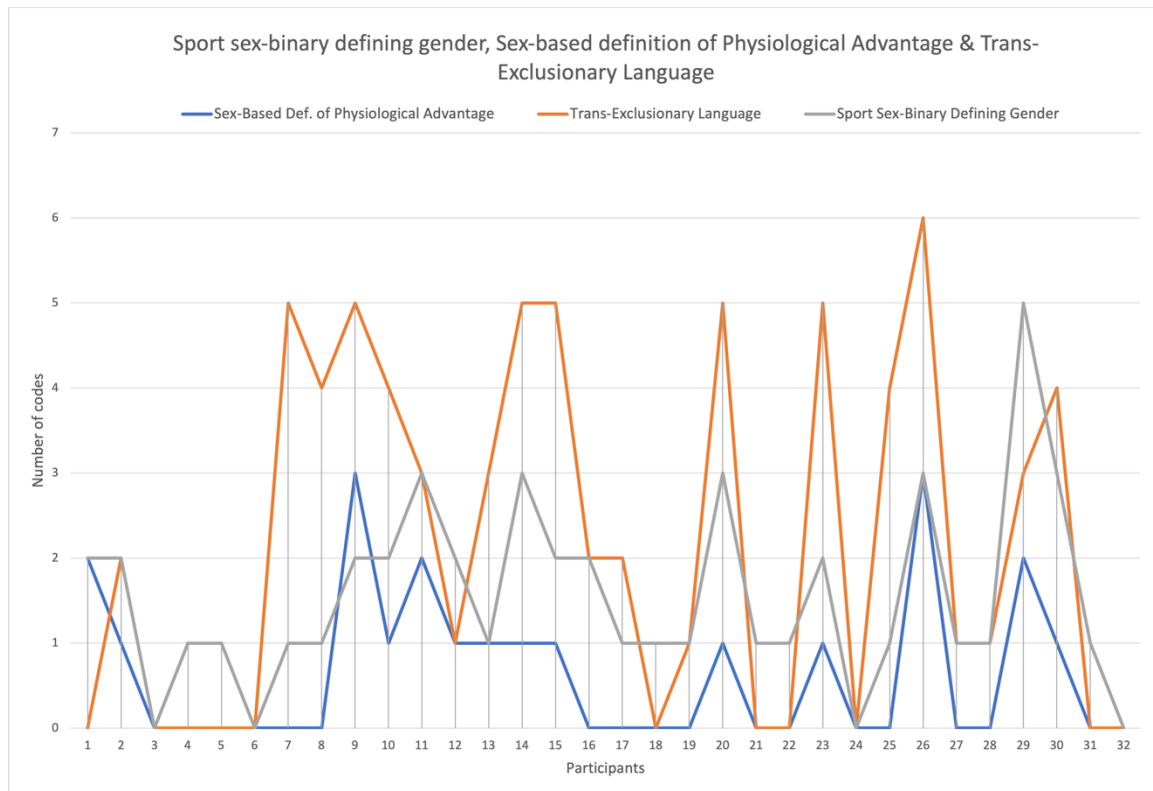


Figure 2. Sport Sex-Binary Defining Gender, Sex-Based Definition of Physiological Advantage and Trans-Exclusionary Language

Line graph of code frequency comparing language indicative of the sport sex-binary facilitating gender perception, sex-based definitions of physiological advantage & trans-exclusionary language.

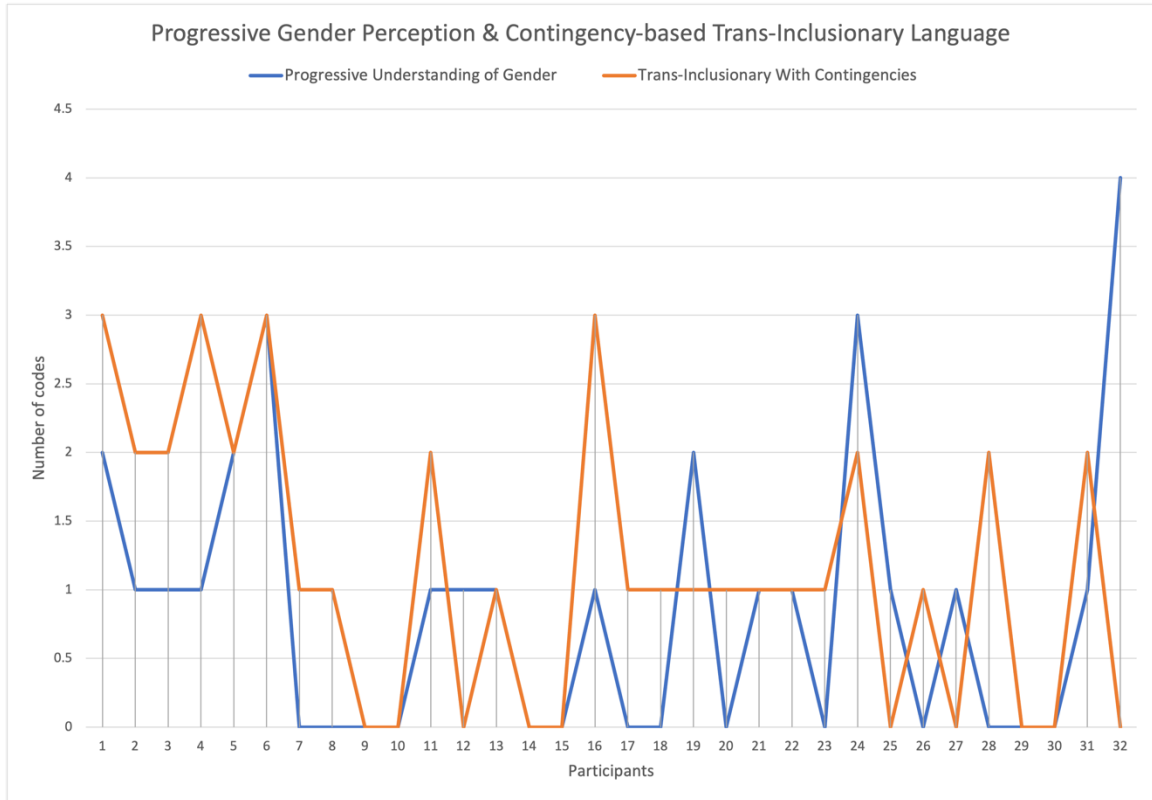


Figure 3. Progressive Gender Perception and Contingency-Based Trans-Inclusionary Language

Line graph of code frequency comparing codes indicating a progressive understanding of gender and codes indicating contingency-based trans-inclusionary attitudes.

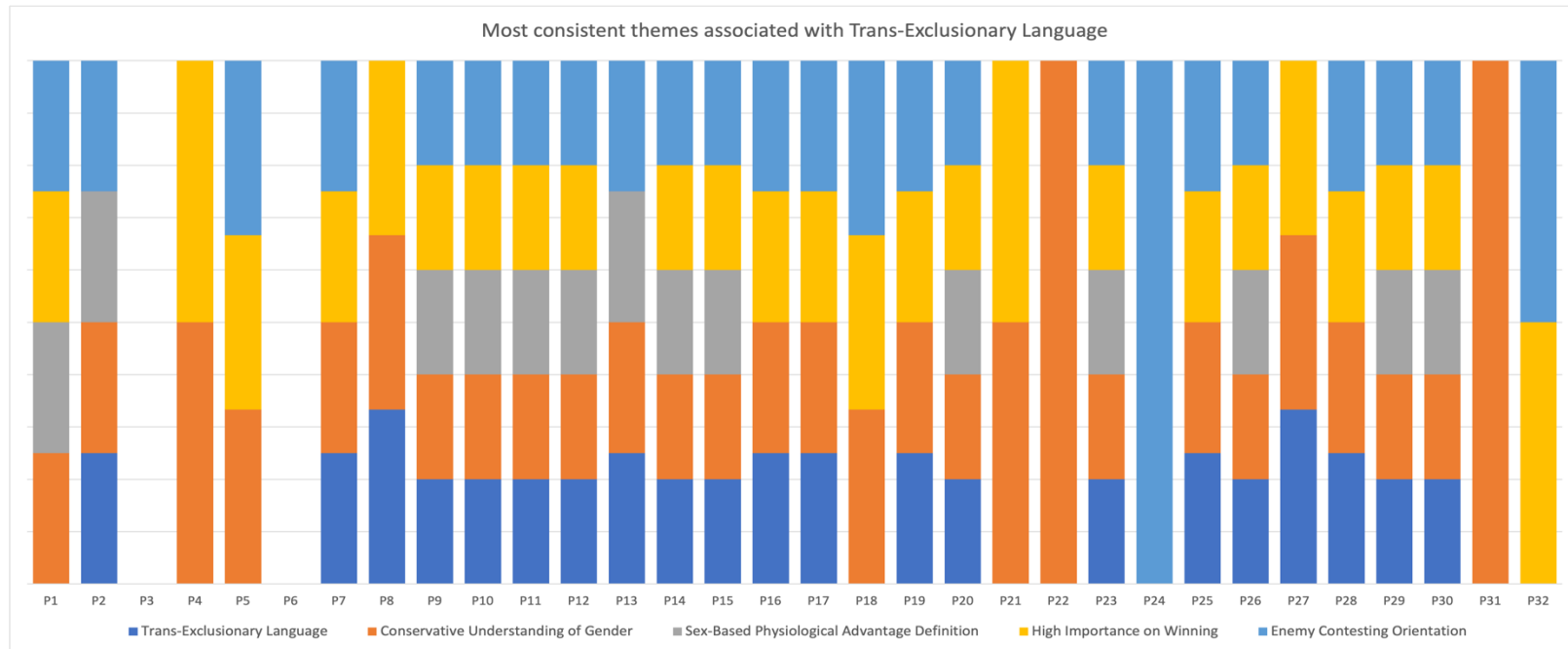


Figure 4. Most Consistent Themes Associated With Trans-Exclusionary Language

Stacked bar graph of code presence across the sample comparing consistent themes associated with language indicative of trans-exclusionary attitudes.

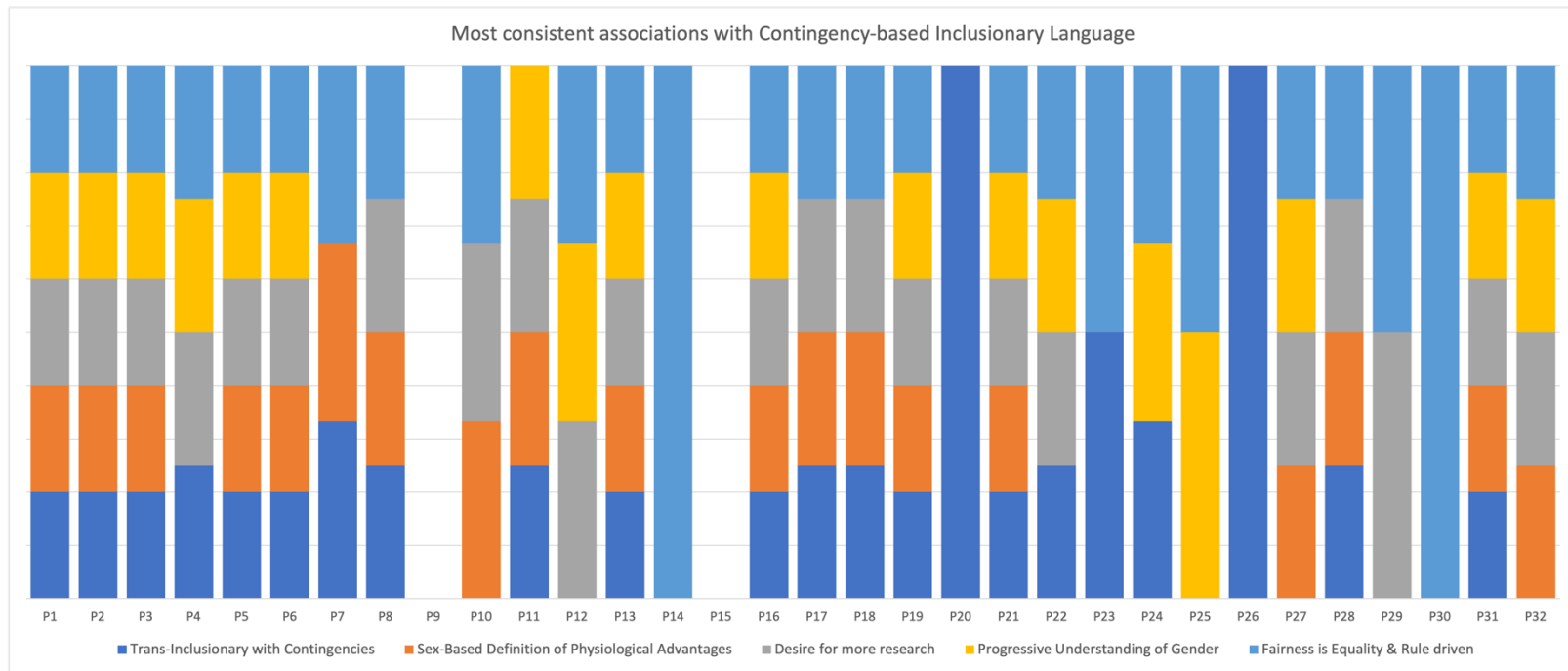


Figure 5. Most Consistent Associations With Contingency-Based Inclusionary Language

Stacked bar graph of code presence across the sample comparing consistent themes associated with language indicative of contingency-based trans-inclusionary attitudes.

Table 7. Presence of Code Themes With Explicit Attitudes

Coded Themes	Trans-Exclusionary codes (21 of 32 participants; 65.6% of the sample)	Trans-Inclusionary with contingencies codes (22 of 32 participants; 68.8% of the sample)	Trans-Inclusionary codes (7 of 32 participants; 21.9% of the sample)	Unsure codes (5 of 32 participants; 21.9% of the sample)
High athletic identity	15 (71.4%)	15 (68.2%)	5 (71.4%)	5 (100%)
High importance on winning	19 (90.5%)	15 (68.2%)	7 (100%)	2 (40%)
Enemy contesting orientation	19 (90.5%)	15 (68.2%)	6 (85.7%)	2 (40%)
Fellow contesting orientation	12 (57.1%)	16 (72.7%)	2 (28.6%)	5 (100%)
Fairness is equality and rule-driven	16 (76.2%)	19 (86.4%)	6 (85.7%)	5 (100%)
Gendered definition of physiological advantage	13 (61.9%)	7 (31.8%)	4 (57.1%)	0 (0%)
Non-gendered definition of physiological advantage	11 (52.4%)	16 (72.7%)	4 (57.1%)	3 (60%)
Conservative gender perception	21 (100%)	19 (86.4%)	6 (85.7%)	4 (80%)
Progressive gender perception	8 (38.1%)	14 (63.6%)	5 (71.4%)	4 (80%)
TERF argument: Protect women's sport	9 (42.9%)	5 (22.7%)	1 (14.3%)	1 (20%)
Trans women are not women	13 (61.9%)	6 (27.3%)	3 (42.9%)	0 (0%)
Trans women are women	8 (38.1%)	16 (72.7%)	4 (57.1%)	5 (100%)
Wide understanding of inclusion	10 (47.6%)	14 (63.6%)	3 (42.9%)	5 (100%)
IOC Inclusion Policy is unfair	19 (90.5%)	19 (86.4%)	3 (42.9%)	5 (100%)
Trans-Exclusionary Attitude	21 (100%)	12 (54.5%)	3 (42.9%)	1 (20%)
Trans-Inclusionary Attitude	3 (14.3%)	3 (13.6%)	7 (100%)	0 (0%)
Contingency-based trans-inclusionary attitude	12 (57.1%)	22 (100%)	3 (42.9%)	4 (80%)
Awareness/Association with trans women athletes	8 (38.1%)	6 (27.3%)	5 (71.4%)	1(20%)
Desire for more research into trans women athletes	12 (57.1%)	17 (77.3%)	5 (71.4%)	4 (80%)

Chapter IV.

Discussion

The purpose of this study was to identify what psychological factors are associated with the attitudes of elite cis women's soccer players surrounding the inclusion of trans women athletes in professional women's sport. This study utilized a series of theoretical frameworks to form a basis in exploring certain aspects associated with these trans-inclusionary or trans-exclusionary attitudes, qualitatively analyzing responses from professional women's soccer players. Thematic analysis revealed associations between five domains and the nature of language that reflected varying types of player-attitudes on trans women athlete's inclusion in women's sport. These code-associations were more noteworthy when the codes were of higher frequency across the sample, rather than just presence of at least one code.

The study yielded four types of attitudes that participants had toward the inclusion of trans women athletes: trans-exclusionary, trans-inclusionary, trans-inclusionary with contingencies, and unsure. The first three attitude types listed will be discussed, as the 'unsure' category did not contain enough participants to draw conclusions. There were several findings that were consistent with initial predictions, guided by previous theoretical findings. A breakdown of what domains and themes were most common within the explicit attitude categories are as follows:

Factors Associated With Trans-Exclusionary Attitudes

Overall, more than half of the participants expressed explicit trans-exclusionary language across the survey. The responses were often emphatic and firm in their conviction, mostly citing concern over fairness. An example is as follows:

“Overall belief is I personally disagree with trans women participating in women's professional sports because it is the same thing as a normal men (man) competing with women. The reason why all the sports is separated by gender is there is a physiological difference between men and women and based off of that it doesn't seem fair to have trans women in women's competition.”

The factors most associated with trans-exclusionary attitudes were central to the domain of gender. Consistent with the hypothesis detailed in Aim 2, there was an overwhelming code presence (100%) and consistent code-frequency pattern of conservative gender perception and trans-exclusionary attitudes (Table 7/Figure 1). Participants who had a conservative view on gender typically harnessed an unchanged view on gender from childhood, and perceived gender as a rigid binary (man/woman) rooted in sex assigned at birth. Participants here also agreed that the binary organization of sport assisted in the formation of their perception surrounding gender. Consistent with an aspect of the same hypothesis, over half (61.9%) of those with trans-exclusionary attitudes on trans women athlete's participation did not consider trans women to be women, as they were not assigned female at birth, reflecting an aspect of the TERF argument. Lastly, consistent with the hypothesis in Aim 3, of those who held trans-exclusionary attitudes, over half (61.9%) were coded for an emergent theme that consisted of sex-based definitions of physiological advantage (Table 7/Figure 4). This theme was identified in patterns in language where participants tended to link physiological advantage directly to aspects of biology on which men typically rank higher than women, such as speed, power and strength.

Overall, the above findings are consistent with classical theories on gender schemas. Athletes in the sample consistently described gender as fixed, with little indication of knowledge that sex and gender are separate constructs, for example “*There are only two genders, male and female.*” This finding offers insight into the idea that rigid, cis-only gender cognizance not only perpetuates rejection of trans women athletes in sport but rejects the very notion of trans existence. This was evident in explicit responses that reflected TERF attitudes. When asked whether they believed trans women are women, exclusionary TERF answers were as follows: “*No, they are biologically male*” and “*No matter how many hormones you pump in a man, there is nothing changing how tall or strong their capabilities are.*” It is clear how the gender schematic mechanism has likely fostered perceptions of gender in participants with these attitudes, and how the confines of the sport cis-binary equivalence classes reinforce cis-ideas, and discount trans identities.

Schematic processes of gender are also strong enough to cognitively link physiological advantages in the context of sport with sex-based equivalence classes. When asked what physiological advantage meant to them, sex-based definitions included: “*If they are a man they should not be playing in a women's game because that would be an extreme advantage. Men are naturally more physically gifted than women.*” Here, athletes are assimilating arriving sport-relevant information into schema-associated terms; masculinity and femininity, and therefore assuming superiority and inferiority (Bem, 1981). This finding reinforces the idea that the strong development of gender-schemas plays a role in exclusionary attitudes toward trans women athletes.

Participants also displayed answers that reflected gender schematic-structured self-concept. When asked ‘how do you perceive gender’, reference to the self was frequently used, such as “*I just have very feminine traits*” and “*That is how we are made.*” The use of possessive language here suggests that elements of the participants’ perception of gender is driven by self-concept; that is, their own subjective ‘cis-woman’ experience of gender (Bem, 1981). This indicates that perhaps trans-exclusionary attitudes are the result of viewing trans women (who are not aligned with the sex they were assigned at birth) as a threat to this self-concept, therefore do not belong in cis-dominant spaces such as women’s sport.

Contrary to the rest of the hypothesis in Aim 2, only 42.9% of the sample held the TERF-based argument that ciswomen needing ‘protecting’ from trans women athletes, fearing trans women athletes would limit sport opportunities for cis women athletes. The suggestion here is that exclusionary attitudes are not driven entirely by dominant social gender constructs surrounding female inferiority, and the idea of benevolent sexism does not appear to play a role, unlike what was initially predicted. While participants are not extremist in these TERF views, findings still suggest that rigid schematic constructs of gender reinforce conditioned essentialist ideas, overlooking the existence of individuals who do not identify with their sex assigned at birth.

The majority of the sample expressed high athletic identity, along with degrees of hyper competitiveness, where the athletes frequently placed substantial importance on winning. High athletic identity was largely present across participants with trans-exclusionary attitudes (71.4%), and also present in more than half of those with contingency-based trans-inclusionary attitudes (68.2%).

Hypercompetitive attitudes were mostly found in participants with trans-exclusionary attitudes (90.5%). This result was consistent with the hypothesis outlined in Aim 1 regarding hypercompetitive states in athletes. However, 100% of those with trans-inclusionary attitudes were also coded for hypercompetitiveness, which was unexpected.

These results suggest that high athletic identity can be helpful as well as harmful (Cranswick et al., 2023). Participants described the extent to which they identified as an athlete as “*Eighty percent*” or “*Most of my identity*.” When harmful, high athletic identity results in hypercompetitive states, which were found in most of those with trans-exclusionary language use. Athletes were coded as hypercompetitive when describing the importance of winning using language such as “*Everything*” and “*Extremely*.” High-performing athletes may uphold the value of winning over anything else, including the moral standard of including marginalized participants in sport, particularly if this inclusion poses a threat to winning (Albouza et al., 2022). The results also suggest that cis women athletes with an identity deeply rooted in sport and winning (primarily those who function in hypercompetitive states) may associate the involvement of trans women athletes in their sport with personal failure in their sport, and this may be a basis for trans-exclusionary attitudes (Albouza et al., 2022; Cranswick et al., 2023).

However, this research does not explain why all 7 participants with trans-inclusionary attitudes were also found to be hypercompetitive. This suggests that hypercompetitiveness is not solely a harmful byproduct of high athletic identity, but one that still fosters the beneficial aspects of athletic identity – positive self-concept, team-oriented focus and concern for welfare of others (Albouza et al., 2022; Cranswick et al., 2023). These values align closer with participants who demonstrate trans-inclusionary

attitudes, justifying the presence of hypercompetitiveness in the results with this portion of the sample.

The last noteworthy finding associated with participants who expressed trans-exclusionary attitudes was the ‘enemy’ contesting orientation, where 90.5% of trans-exclusionary attitude participants regarded their opponents as enemies or reduced them down to someone to beat. One even remarked that they viewed their opponents as “*Breakfast*.” This result is consistent hypothesis detailed in Aim 1, where lowered moral reasoning as a result of ‘enemy’ contesting orientations during competition may be related to trans-exclusionary attitudes. Athletes that render their opposition to enemies are prioritizing their moral values for competition specific elements, and not for marginalized individuals such as trans women athletes. Similar to athletic identity and hypercompetitiveness, athletes with this contesting orientation may feel resistant to trans women athlete’s participation as they are considered a threat; an out-group member in a cisgendered system. (Shields et al., 2016).

Factors Associated With Contingency-Based Trans-Inclusionary Attitudes

It was initially predicted that participants would either express trans-exclusionary or trans-inclusionary attitudes. However, a theme emerged from the research that highlighted a unique set of attitudes towards trans women athletes in women’s sport, which was contingency-based trans-inclusionary attitudes. Here, the majority of the sample (68.8%) had trans-inclusionary language, followed by a contingency, either related to testosterone regulation or trans women athletes transitioning before puberty and not after. An example is as follows:

“I think as long as they find a way to regulate any unfair biological advantages, there should be no issue with it.”

More than half of the participants (63.6%) with contingency-based inclusive attitudes also tended to follow a general definition of inclusion, highlighting the need *“To give everyone an opportunity.”* However, there was also adherence to contingency-based language, with definitions of inclusion such as: *“To allow all people of shapes and sizes of the same category to compete in a sport.”*

One aspect of the research evident in Figure 4 (looking at factors associated with trans-exclusionary attitudes) is the differences of participants 3, 6, 22, 24 and 31 compared to the rest of the sample. The commonality among these participants was that they all had contingency-based inclusionary attitudes. This gives credence to initial predictions of factors associated with trans-exclusionary attitudes, and the fact that these factors are not present among participants with contingency-based inclusive attitudes.

Overall, the findings suggest participants who held contingency-based inclusionary attitudes have a disposition for involvement of everyone in sport regardless of identity yet cannot seem to detach from the cis-normative laws of sport and physiological equivalence classes. The majority of these participants (77.3%) also expressed desire for continued research on trans women athletes, which suggests that despite resisting the idea of trans women athletes due to assumptions of biological difference, participants are still open to understanding more about trans women athletes. One aspect to consider is why physiological advantages of trans women raises most concern for cis women athletes, but not if their cisgender competitors carry similar physiological advantages. This idea could indicate the lasting conditioning of gender

essentialism and its influence on cis women athletes and their world – the physiological equivalence dichotomy of sport. More research on trans women athletes can combat these essentialist notions and trans-exclusionary mindsets.

Much like participants that expressed trans-exclusionary language, elements under the domain of gender were most consistently present in participants with contingency-based trans-inclusionary language. Progressive perceptions of gender were predominantly represented in this group of participants (63.6%), and most notably, had a higher code frequency as well as presence (Figure 4/Table 1). These gender perceptions tended to change over time (differ from childhood), acknowledged the fluidity of gender, and extended beyond the cisgender binary. For example, *“Gender is a social construct.”* Along with this, most of these participants had regular, physical attribute-specific descriptions of physiological advantage that were not linked to sex (72.7%) rather than sex-based descriptions. For example:

“All bodies are different, and everyone has physiological differences that could be advantages. For example, me being 5'9" and the other girl in my position being 5'4" puts me at an advantage in certain areas. People that have PCOS leave them with higher testosterone levels, so they have an advantage. Regardless of that, though, everything always balances out in sport, and anyone can beat anyone on any given day.”

These underlying elements surrounding gender demonstrate the impact they can have on the consideration of trans women athletes’ participation in women’s professional sport. To an extent, the findings are consistent with the hypothesis detailed in Aim 2, where less rigid perceptions of gender are associated with less resistant attitudes toward trans women athlete’s participation in women’s professional sport. This suggests that perceiving gender beyond the conservative binary is a starting point in facilitating accepting stances toward trans women athlete’s participation in women’s sport. Adopting

broader gender perspectives and driving subversion of the cis-binary has been shown to generate healthier outlooks toward gender minorities, particularly in stages of youth (Spears, 2021). However, cis women athletes still maintain a degree of resistance to trans women athlete's participation in women's sport, over concern of "male biology". The ideas of male dominance and presumptive notions on trans women are still fixed, and this clearly serves as a barrier to totally inclusive attitudes towards trans women athlete's participation in women's sport.

Trans-Inclusionary and 'Unsure' Attitudes, Awareness/Association With Trans Women Athletes, and IOC Policy Disagreement

Since most of the sample displayed contingency-based inclusionary attitudes, very few participants (21.9%) cited trans-inclusionary language (without contingencies). All of these participants had a wholesome understanding of inclusion that was not selective to cisgender categories, for example:

"Professional sport is inclusive if there is access and equal opportunity for all people (regardless of race, gender, nationality, religion etc.) to try to play professionally. It would be great if people from all groups were represented as well!"

The participants also all believed trans women to be women, and all had a 'fellow' contesting orientation. 5 of the 7 trans-inclusionary participants (70.1%) were also either aware of, or knew a trans woman athlete, which is consistent with initial predictions in Aim 5. All of these factors were previously predicted to be associated with favorable stances to include trans women athletes in women's sport, however the small numbers representing these factors creates difficulty to draw valid conclusions. Nevertheless, the presence of these factors was not as consistent in those with

exclusionary attitudes, so finding them present in 100% of those with supportive stances toward trans women athletes can be considered as worthy of mention, despite the small numbers.

Of the 7 participants who expressed trans-inclusionary attitudes, 5 agreed with the IOC's latest policy on the inclusion of trans women athletes. As an unsurprising finding, this at least gives credence to the trans-inclusionary language category of this study. Otherwise, the remainder of the participants voiced outright disagreement with the policy, with both groups of trans-exclusionary and contingency-based trans-inclusionary participants each having high distribution of this disagreement (90.5% and 86.4%). This gives credence to the exclusion piece found in both trans-exclusionary and contingency-based inclusionary attitude categories of the sample, and reflects the power of cisnormative, sport-specific categorization of gender identities relevant to ideas of physiological equivalence.

Fairness Definition

The majority of the sample (84.4%) indicated that fairness in sport related only to equality, and the assurance that sport is rule-driven. 40.6% of the sample also described other factors that influenced fairness (as a way to define fairness) – factors such as performance enhancing drugs, politics, and financial resources. The 'fairness definition' category therefore did not uncover any significant themes that could explain influences on attitudes towards trans women athletes' participation in women's sport. Contrary to initial predictions in Aim 3, participants appeared to have a shared understanding of fairness, with no clear distribution among groups of differing attitudes. Only one

participant (who mostly displayed trans-inclusionary language) managed to recognize the inherent inequality and unfairness within sport, with the following interpretation:

“Personally, I think sport is rarely fair. To attempt to make it as fair as possible through controllable factors they can try to create equal facilities and resources for both teams.”

General Discussion

The findings from this study offer insight into the influential factors associated with attitudes surrounding trans women athlete’s participation in women’s professional sport. The majority of the sample of elite women’s soccer players expressed resistance towards trans women athletes’ participation in women’s sport. Despite inclinations of support toward trans women athletes’ inclusion, most of the cis women athletes surveyed expressed that trans women required a degree of regulation before being offered a place in women’s sport. Driving this resistance is the overlap of gender, athletic identity, and fairness in sport.

The element that first appears to drive this resistance is cisnormative perceptions of gender, reinforced by the structure of sport – that is, a cisgender binary of physiological equivalence classes (Gleaves & Lehrbach, 2016). Gender schemas behind these perceptions are shaped by the cis-dynamics of sport, and the male (superior) and female (inferior) hierarchy that feeds information resulting in fixed assumptions surrounding gender (Bem, 1981; Gleaves & Lehrbach, 2016; Spears, 2021). These entrenched, narrowed ideologies result in trans women being viewed as a threat to cis women’s success. As this study found, most cis women athletes with stronger athletic identities, tend to operate in hypercompetitive states, where anything impeding winning is a threat to identity and self-concept (Albouza et al., 2022). That being said, rigid

gender schemas and high athletic identity both share the commonality of reinforcing self-concept in athletes. Findings from the study suggest that trans women athlete's participation in women's sport acts as a significant threat to each of these aspects of the self-concept. Trans women are not only a disruption to the cis women athletes' gender-schematic self-concept of 'woman' but also threaten their success in sport, precisely due to presumptions that trans women are not within the physiological equivalence category of 'woman' (Albouza, et al., 2022; Bem, 1981; Cranswick et al., 2023). Another way to theorize this finding revolves around social identity theory, where cis women athletes' dominant cisgender social in-group identity is threatened by trans women athletes as outgroup members. This results in discrimination towards that outgroup (Brassel & Anderson, 2019). Being socially dominant, cisgender in-group memberships of the women's category of sport lodges into the self-esteem of cis women athletes, further reinforcing rejection of trans women athletes, as they are viewed as outgroup members. (Brassel & Anderson, 2019). Responses from these cis women athletes also indicate that trans women are misleadingly equated to cis men, strongly suggesting the need not only for more education around sex and gender, but more research on trans women athletes in particular.

The findings also suggest that fairness is a concept in sport that must be dismantled and redefined in order to reduce exclusionary stances toward trans women athletes' participation. The rigidity of these ideas, mediated by governing sports bodies, plays a large role in why cis women athletes view trans women athletes as threats to fairness. The divide between fairness and inclusion prevails, yet each premise is substantially important in the realm of sport. The findings in this study suggest that the

traditional ideas of fairness in competition are upheld over inclusion, despite cis women athletes recognizing the need for inclusion of trans women athletes. Whether it be due to genetic difference of intersex athletes or gender-affirming procedures for trans athletes, this level of variation exists among humankind (Cooper, 2023). To confine sport in a boundary suitable for only cis people is harmful to trans people, who are marginalized in many other realms of society, and fails to uphold the value of inclusion promised by the institution of sport (Cooper, 2023; Gleaves & Lehrbach, 2016).

Limitations and Future Directions

Despite the various insights gleaned from this study, there were many limitations. Firstly, most of the sample consisted of collegiate athletes. The intention to obtain professional athletes as opposed to collegiate athletes was to earn perspectives of the most elite competitors. While NCAA Division I athletes are considered some of the best and highest performing soccer athletes in the US, they are still competing at a level under the professional league, who would be considered the most elite. Professional players could also have higher stakes in their success than collegiate players, which makes their perspectives more crucial. This limits the data not only in terms of elite athletic status, but in terms of age as well, as all of the college athletes were aged between 18-25. Earning perspectives of older participants may have offered wider perspectives stemming from their greater experience playing at the elite level.

Secondly, the sample size was small. Therefore, themes that were found in very few participants (particularly trans-inclusionary attitudes) may not have been sufficient to compare, make inferences, or draw conclusions.

Lastly, questions in the survey were developed under theoretical frameworks and the domains within the frameworks might have predetermined participant responses, perhaps influencing validity and objectivity of the data, despite the intention to facilitate reflexivity as a researcher. As conclusions from this study were drawn from qualitative data, this work required a degree of interpretation from myself as a researcher, meaning there is always a risk of biased or flawed interpretations of the data.

Despite these limitations, this qualitative research established a lot that could be built on in the future, particularly in the development of quantitative methods to understand the underlying basis behind attitudes toward trans women athletes' participation in women's sport. This could be done using inventories such as the Athletic Identity Measurement Scale (AIMS) and the Bem Sex Role Inventory (BSRI) to earn quantitative perspectives and refine these pertinent factors behind trans-exclusionary or inclusionary attitudes towards trans athletes' participation.

Once more research behind trans women athletes becomes available, it would also be useful to revisit an athlete population with more research similar to this study to identify whether stances have changed over time, particularly as more education on trans identities is provided.

Appendix 1.

Theoretical Framework for Survey

1. Athletic Identity

Category	Questions	Reference for Category Formation
Self-reported degrees of athletic identity	To what extent would you consider 'athlete' as your identity? Does the success you achieve in sport help to define this identity? If you lose or fail, how does that impact your identity as an athlete?	Tanimoto & Miwa (2021), Albouza et al. (2022)
Hypercompetitive attitudes & self-regulation	For you, how important is it to win?	Albouza et al. (2022)
Contesting orientations & moral foundations	How do you view opponents in competition? Is there / why isn't there room for you to view your competition as a partner/fellow competitor?	Shields et al. (2016)

2. Fairness

Category	Questions	Reference for Category Formation
Player definition of fairness	In your opinion, what does it mean for professional sport to be fair? Do these elements / Are there elements in sport that can create unfairness?	Gleaves & Lehrbach (2016), Karkazis et. al (2012)
Physiological advantage	From your perspective, what does it mean for an athlete to have physiological advantages?	Hilton & Lundberg (2021) , Karkazis et. al (2012), Tidmas et al., (2023)

3. Gender

Category	Questions	Reference for Category Formation
Gender Perception	How much do you think you were socialized on how you perceive gender? Do you think the split of women's sport and men's sport helped you understand meanings of gender?	Bem (1981)
TERF argument	Do you consider trans women to be women? Why/why not? Do you think trans women, as women, have a right to compete in the women's sport category?	Harper (2022), McClearen (2023), Posbergh (2022),

4. Inclusion

Category	Questions	Reference for Category Formation
Player definition of inclusion	In your opinion, what does it mean for professional sport to be inclusive?	Gleaves & Lehrbach (2016)

IOC Inclusion Policy	What are your thoughts on IOC's policy to include trans women athletes without fixed regulation of testosterone?	International Olympic Committee (2021)
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5. Trans Women Athletes

Category	Questions	Reference for Category Formation
Player experience with trans women athletes	Have you ever played with/know of any trans women athletes? Do you know anyone who has played/competed with them?	Tanimoto & Miwa (2021)
Including trans women athletes in professional sport	What is your belief on participation of trans women athletes in elite sport?	Devine (2021)

References

- ACLU. (2023). The ACLU is tracking 84 anti-LGBTQ bills in the U.S that are passed into law. Retrieved from <https://www.aclu.org/legislative-attacks-on-lgbtq-rights>
- Australian Human Rights Commission. (2021). FIFA 2023 women's world cup human rights risk assessment. Retrieved from <https://humanrights.gov.au/our-work/business-and-human-rights/projects/fifa-womens-world-cup-2023-human-rights-risk-assessment>
- Albouza, Y., Chazaud, P., & Wach, M. (2022). Athletic identity, values and self-regulatory efficacy governing hypercompetitive attitudes. *Psychology of Sport and Exercise*, 58, 102079.
- Atwood, S., Morgenroth, T., & Olson, K. (2023). Gender essentialism and benevolent sexism in anti-trans rhetoric. *Social Issues and Policy Review*, 1-23.
- Axt, J., Conway, M., Westgate, E., & Buttrick, N. (2021). Implicit transgender attitudes independently predict beliefs about gender and transgender people. *Personality and Social Psychology Bulletin*, 47(2), 257-274.
- Bem, S. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364.
- Bernard, A., & Busse, R. (2004). Who wins the Olympic games: Economic resources and medal totals. *The Review of Economics and Statistics*, 86(1), 413-417.
- Brassel, S. T., & Anderson, V. N. (2020). Who thinks outside the gender box? Feminism, gender self-esteem, and attitudes toward trans people. *Sex Roles*, 82(7-8), 447–462
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, 24(2), 237–254.
- Coleman-Phillips, C. (2019). Transgender rugby player playing with 'a smile on my face'. BBC Sport. <https://www.bbc.com/sport/rugby-union/49298550>
- Cooper, J. (2023). Fair competition and inclusion in sport: Avoiding the marginalisation of intersex and trans women athletes. *Philosophies (Basel)*, 8(2), 28.

- Cranswick, I., Tod, D., Clarke, P., & Jones, A. (2023). Exploring the impact of athletic identity on gender role conflict and athlete injury fear avoidance in male English professional academy football players. *Science and Medicine in Football*, 1-9.
- Cunningham, G., & Pickett, A. (2018). Trans prejudice in sport: Differences from LGB Prejudice, the influence of gender, and changes over time. *Sex Roles*, 78(3), 220-227.
- Devine, C. (2021). Female Olympians' voices: Female sports categories and International Olympic Committee transgender guidelines. *International Review for the Sociology of Sport*, 0(0), 1-27.
- Dunham, Y., Baron, A.S., & Banaji, M.R. (2016). The development of implicit gender attitudes. *Developmental Science*, 19(5), 781-789.
- FIFA. (2011). Regulations: FIFA gender verification. Retrieved from <https://www.fifa.com/tournaments/womens/womensworldcup/germany2011/news/fifa-issues-gender-verification-regulations-for-all-competitions-1449540>
- Gleaves, J., & Lehrbach, T. (2016). Beyond fairness: The ethics of inclusion for transgender and intersex athletes. *Journal of The Philosophy of Sport*, 43(2), 311-326
- Glick, P., & Fiske, S. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512
- Graham, J., Nosek, B., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101, 366-385
- Hamilton, B., Lima, G., Barrett, J., Seal, L., Kolliari-Turner, A., Wang, G., Karanikolou, A., Bigard, X., Löllgen, H., Zupet, P., Ionesu, A., Debruyne, A., Jones, N., Vonbank, K., Fagnani, F, Fossati, C., Casasco, M., Constantinou, D., Wolfarth, B., ...Pitsiladis, Y. (2021). Integrating transwomen and female athletes with differences of sex development (DSD) into elite competition: the FIMS 2021 consensus statement. *Sports Medicine*, 51(7), 1401-1415.
- Hargie, O., Mitchell, D., & Somerville, I. (2017). 'People have a knack of making you feel excluded if they catch on to your difference': Transgender experiences of exclusion in sport. *International Review for the Sociology of Sport*, 52(2), 223-239
- Harper, J., O'Donnell, E., Khorashad, B., McDermott, H., & Witcomb, G. (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*, 55(15), 865-872

- Hilton, E., & Lundberg, T. (2021). Transgender women in the female category of sport: perspectives on testosterone suppression and performance advantage. *Sports Medicine*, 51(2), 199-214.
- International Olympic Committee. (2021). IOC framework on fairness, inclusion and non-discrimination on the basis of gender identity and sex variations. Retrieved from <https://olympics.com/ioc/documents/athletes/ioc-framework-on-fairness-inclusion-and-non-discrimination-on-the-basis-of-gender-identity-and-sex-variations>
- International Olympic Committee. (2021). Olympic charter. Retrieved from <https://olympics.com/ioc/olympic-charter>
- ISA Surf. (2023). International Surfing Association (ISA) Transgender policy rule. Retrieved from <https://isasurf.org/about-isa/isa-rulebook/>
- ITF. (2023). ITF transgender policy. Retrieved from <https://www.itftennis.com/en/about-us/governance/rules-and-regulations>
- Jackson, E. F., & Bussey, K. (2023). Broadening gender self-categorization development to include transgender identities. *Social Development*, 32(1), 17–31.
- Joel, D. (2012). Genetic-gonadal-genitals sex (3G-sex) and the misconception of brain and gender, or, why 3G-males and 3G-females have intersex brain and intersex gender. *Biology of Sex Differences*, 3(27).
- Karkazis, K., Jordan-Young, G., & Camporessi, S. (2012). Out of bounds? A critique of the new policies on hyperandrogenism in elite female athletes. *The American Journal of Bioethics*, 12(7), 3-16.
- Kidd, B., & Donnelly, P. (2000). Human rights in sports. *International Review for the Sociology of Sport*, 35(2), 131-148.
- Knox, T., Anderson, L., & Heather, A. (2019). Transwomen in elite sport: Scientific and ethical considerations. *Journal of Medical Ethics*, 45(6), 395-403.
- Love, A. (2014). Transgender exclusion and inclusion in sport. In J. Hargreaves & E. Anderson (Eds.), *Routledge handbook of sport, gender, and sexuality* (pp. 376-383). New York: Routledge
- McClearen, J. (2023). “If you let me play”: Girls’ empowerment and transgender exclusion in sports. *Feminist Media Studies*, 23(4), 1361–1375.
- Norton, T., & Herek, M. (2013). Heterosexuals’ attitudes toward transgender people: Findings from a national probability sample of US adults. *Sex Roles*, 68(11-12), 738-753.

- Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, 11(4), 327-344.
- Pike, J. (2021). Safety, fairness, and inclusion: Transgender athletes and the essence of rugby. *Journal of The Philosophy of Sport*, 48(2), 155-168
- Posbergh, A. (2022). Defining ‘woman’: A governmentality analysis of how protective policies are created in elite women’s sport. *International Review for the Sociology of Sport*, 0(0), 1-21.
- Reimer, A. (2020). When trans athletes come out, their teammates and coaches embrace them. *Outsports*. <https://www.outsports.com/2020/11/16/21569484/trans-awareness-week-trans-athletes-accepted-teammates-coaches>
- Shields, D., Funk, C., & Bredemeier, B. (2016). The moral frameworks and foundations of contesting orientations. *Journal of Sport & Exercise Psychology*, 38(2), 117-127.
- Smith, E. (2021). ‘Should I play, or will I be abused? - Rainbow laces shines spotlight on transphobia in British football. *Goal*. <https://www.goal.com/en/news/rainbow-laces-transphobia-british-football/blt52a3d9ca02720e30>
- Spears, G. K. (2021). Breaking the gender binary: using fairytales to transform playground possibilities for year 3 girls. *Education 3-13*, 49(6), 674–687.
- Tanimoto, C., & Miwa, K. (2021). Factors influencing acceptance of transgender athletes. *Sport Management Review*, 24(3), 452-474.
- Trans Legislation Tracker. (2023). 2023 anti-trans bills tracker. Retrieved from <https://translegislation.com>
- Tidmas, V., Halsted, C., Cohen, M., & Bottoms, L. (2023). The participation of trans women in competitive fencing and implications on fairness: A physiological perspective narrative review. *Sports*, 11(7), 133.
- World Athletics. (2023). Eligibility regulations for transgender athletes. Retrieved from <https://worldathletics.org/about-iaaf/documents/book-of-rules>
- World Rugby. (2020). Transgender guidelines. Retrieved from <https://www.world.rugby/the-game/player-welfare/guidelines/transgender>