

Social Science Literature on  
Sport and Transitioning/Transitioned Athletes

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## ***1.0 Purpose***

In this report, I review the ‘social science’ literature pertaining to the general issue of athletes who have transitioned or are transitioning from male to female or female to male with respect to sex/gender, as these terms are understood from both the academic and lay communities and for those athletes who do not fit precisely into the traditionally established categories of ‘man’ and ‘woman.’ This review addresses the historical and current factors, which have led to issues that are problematic for the Canadian sport system – that our sport system does not provide fair, equal, and safe opportunities for all athletes to participate and compete. Why has this matter arisen? How has it been dealt with in the past? What are the issues of complication which make it contentious? What are the contributing factors that have created problems for the athletes and sport administrators? In addition to the literature on sport and gender, sport and sexuality, and the Olympic Games, the review addresses the broader literature on gender/sexuality as well to determine what factors beyond sport are pertinent to these debates. I must assert that, following my review of the current literature, these processes are very complicated and they present feelings, ideologies, social meanings, and even language that is contestable, debatable, and without common consensus in various academic sub disciplines. Plummer (1996, p.xiii) writes that gender is “one of the most contested concepts in the social sciences and in contemporary political struggles.” I also assert that finding completely different interpretations and conclusions drawn about this issue is not disconcerting but, rather, serves an educational purpose in identifying the values prevalent in our sport subcultures and in society, more broadly. From the questions that arise, it is evident that there are normalized assumptions about sport and gender in our society and in our sciences, which present challenges to those whose life experiences do not fit the conventional model. This, in turn, presents opportunities for the advancement of knowledge on the issue so that policies can be developed for the Canadian sport system to ensure a safe and equitable environment for all athletes.

## ***2.0 Glossary of Terms***

(While it is helpful to define terms and to present working definitions of terms, it must be underscored that in many cases, the language used to discuss issues of transition is politically charged for historical and social reasons. From time to time, historically, the employment of these terms becomes offensive to certain parties. However, for practical purposes, it is useful to employ a common language while sustaining a general sensitivity for how we use that language.)

**Sex** – traditionally defined biologically by the presence of particular external genitalia, chromosomes, and hormones (Kessler, 1998; Denny, 1998).

**Hermaphrodite** – older term used to describe infants born with one ovary and one testis or with organs that contain a mix of both kinds of tissues.

**Intersexual** – person born with ambiguous genitalia (replacing the term ‘hermaphrodite’ (Currah et al 2006).

**Gender** – traditionally defined as socially, culturally, and psychologically determined aspects of femaleness and maleness (McCarthy, 2003).

**Gender identity** – the internal experience of one’s gender (McCarthy, 2003).

**Gender Variance** – interests and behaviours that are not consistent with cultural norms typical or one’s assigned sex or do not align completely with either assigned sex.

**Gender Dysphoria** – persons uncomfortable in their anatomical and assigned sex (Rudacille, 2005).

**Transgender** – a broad term identifying diversity in identities, practices, and beliefs among gender nonconforming people. The majority of transgender individuals choose not to modify their bodies.

**Transsexual** - an older term, at one time used to describe an individual who has undergone a ‘sex-change’ operation.

**Transitioning/transitioned** – individuals who experience gender dysphoria and choose to modify their bodies through surgery and hormone treatments. A transitioned female is male-bodied and transitions to female; a transitioned male is female bodied and transitions to male.

**Gender Identity Disorder (GID)** – a formal diagnosis established by the American Psychiatric Association in its *Diagnostic and Statistical Manual of Mental Disorders* to replace ‘transsexualism’ (Rudacille, 2005).

**Androgen Insensitivity Syndrome** - hormonal anomalies result in various sex organ developments – in some cases an individual’s organs appear to be ‘female’ at birth and during childhood but develop into male genitalia during puberty. These individuals appear identical to females with XX chromosomes at birth but in fact have XY chromosomes (Currah et al 2006).

### ***3.0 The Problem with Terminology: Sex/ Gender and Other Terms***

There are significant differences with respect to how the academic literature employs terminology. The sub disciplines of biology, psychology, and sociology have long histories of classifying both human physiologies and behaviours, and interpreting what social meanings people draw from their life experiences. When we examine the issue of gender variance, how people have experienced it, how the fields of science, medicine, and psychology have weighed in with diagnosis and treatment, and how social activists and sociologists have interpreted the medicalization of gender variance, it is evident that all interpretations are politically charged. In other words, according to the literature, there is no objective scientific standpoint on gender variance. Consequently, there are no neutral terms (Valentine, 2007) and there are no neutral systems of classification, treatment, or strategies of empowerment. The basic point of contention pits biology versus social construction but the practical realities for individuals really mean treatment or surgery versus acceptance and empowerment without surgery. People who do not fit

the normalized mold are either pathologized as defective or they are permitted to discover their selfhood without physical treatments, or they find themselves somewhere in between.

The majority of authors examined in this review, those who have written about various aspects of gender variance, agree that ‘sex’ has been used to connote the visible anatomy of the human body and ‘gender’ has been used to describe how people identify themselves socially, act on maleness and femaleness, and relate to one another. It is common knowledge that western social structures are built upon the notion that the categories ‘man’ and ‘woman’ are immutable in biological terms. However, the physical evidence presented by human bodies and the analytical arguments forwarded by various authors suggest that this is not the case and that a physical continuum exists. Further, Rudacille (2005) argues that the response by science to the “riddle of gender” has been determined by cultural beliefs in the first instance. Scientists assumed the categories of man and woman and then built their typologies on that socially established base. Hubbard (1998) argues that the pressures to conform to a two-sex model of male and female have been so great in western civilization, that doctors introduced medical interventions to correct sex ambiguities to ensure that everyone conformed to the binary model of man and woman. The literature is fragmented on this contentious issue with respect to who is served by these interventions – patient, parents, or medical ‘necessity.’ This corrective surgery for infants and children emphasizes the physical appearances of genitalia followed up with rearing styles appropriate for the right gender. From this paradigm of sex and gender, Hubbard (1998) argues, a person’s sex must fit the binary model and a person’s gender must match genital appearance in order for one to be ‘normal.’ In this sense, Kessler and McKenna (Hubbard, 1998) argue, scientific knowledge does not provide an answer to what makes a man or a woman but, rather, “it justifies (and appears to give grounds for) the already existing knowledge that a person is either a woman or a man and that there is no problem in differentiating between the two. Biological, psychological, and social differences do not lead to our seeing two genders. Our seeing two genders leads to the ‘discovery’ of biological, psychological, and social differences (p. 50).” Other researchers argue that ‘sex’ is not completely determined by biology and that ‘gender’ is not completely determined by processes of social construction (Greenberg, 2006). This sort of thinking, in general, disrupts deeply engrained notions about sex and gender in our society. Indeed, the birth of intersex individuals and their negative responses to surgery challenge the fundamental assumption that physical characteristics unequivocally define male and female. Other societies utilize a different language for individuals who do not fit the binary – a third sex. A useful point of departure, then, to enable us to get past conflicting notions of what makes women and men, physically, is to acknowledge that the traditional model does not always fit every man and every woman.

Recent shifts in knowledge and acceptance, from elementary schools to our legal system suggest that people have been willing to accept changes to traditional heterosexual values. However, it is likely that the general population is not aware that approximately 1.7% of the world’s population does not fit into the once immutable biological categories of ‘woman’ and ‘man’ (Blackless et al, 2000, p. 161). These individuals “do not conform to a Platonic ideal of absolute sex chromosome, gonadal, genital, and hormonal dimorphism” (p. 161). From this study, one may discern that it is possible that 2 out of 100 Canadians do not perfectly fit the “sexually dimorphic” norm. This data has a profound significance for those institutions, legal or

social, including sport, based primarily on the binary sex model – we assume that we may accurately determine who is a woman and who is a man. In our binary-based society, then, who or what characteristics determine male and female? Other factors confounding the logic of our binary sex and gender models include a lack of congruence between sex organs and gender identity and/or gender presentation and how men and women identify with their physical characteristics, how they experience their gender identities, how they relate to others, and how they relate to society's expectations. Gender variance used to be attributed exclusively to social factors and upbringing. There is no consensus in the literature with respect to the causes of gender variance. However, there is more recent emphasis on biological factors (Rudacille, 2005; Currah et al, 2006). What is most significant here is not what causes gender variance but, rather, how it is experienced and how others respond to it and how well our social, political, and legal institutions address it, so as not to discriminate against the people who experience it.

#### ***4.0 The Binary Classification System***

Our inability to deal with, at times even to conceive, that gender variance is not abnormal but, instead, unique and more prevalent than commonly acknowledged, is based upon deep cultural assumptions that sex and gender are and should be binary constructs and that congruency is the order of the day. These assumptions have been sustained, reproduced, and celebrated extensively for generations. In very general and simplified terms, western social, political, religious, and economic institutions were built on the fundamental notion that men and women were clearly discernable entities. Societies established and celebrated a paradigm of opposites for male and female attributes, which people generally accepted as biological facts. In 19<sup>th</sup> century Canada, for example, social roles, behaviours, and expectations were founded upon the scientific and medical knowledge that men and women were physically different. Further, it was also expected that male-bodied individuals and female-bodied individuals would be attracted to members of the 'opposite' sex and that they should adhere to the socialization processes appropriate to their anatomical makeup. Women were expected to act, dress, and behave like women and men like men. Even though men and women worked side-by-side in the fields and later in the factories, and child-rearing roles changed considerably for working-class families over the course of the century, separate spheres developed for women and men (Strong-Boag and Fellman, 1986). In these separate spheres, men assumed roles in the economy, politics, law, and in various positions of leadership in social institutions. Women, middle and upper class, assumed domestic roles and some leadership roles in charity and philanthropy. In these general terms, the doctrines of science and medicine supported the creation and maintenance of separate spheres.

A substantial body of literature identified significant physical differences between women and men, rationalizing physical capabilities and physical disabilities (Vertinsky, 1994). Our social structures and daily practices served to confirm our attitudes toward the sexes, and rationalized both opportunity and potential for men and women. How could, or why would, average people question the doctrines of science and medicine that blatantly stated that women were physically inferior to men and were better suited to certain tasks and responsibilities? Consequently, any variations to dress, looks, behaviour, desires, or activities by either sex were met with suspicion by men and women. Obvious contradictions to these common assumptions

about women's inherent weaknesses such as the physical demands of childbirth and manual labour readily existed throughout history.

Behaviours that resisted and challenged common views, such as public exercise, physical education, and sport helped to shift professional views on the safety of physical activity for women. The First World War created career opportunities once not available to women. Yet, in spite of the shifting cultural practices which occurred over the course of the early 20<sup>th</sup> century, in spite of changing notions about what was appropriate behavior for men and women, the binary model of woman and man, maleness and femaleness, remained intact. Physical differences that did not align with normalized appearances were categorized as abnormal and behaviours that did not align were pathologized as mental disorders - undesirable and treatable (Butler, 2006). A lack of openness to difference and a general disgust for gender variance placed additional pressures upon individuals. Society did not offer any social or biological territory for those who found themselves between sexes and genders. The sheer pressure of the binary model of personhood, buttressed by science, medicine, and innumerable cultural institutions, rendered any alternatives unthinkable. Physical and behavior modification, then, became the solution to sustain congruency between sex and gender (Hubbard, 1998). Sport was one of the fundamental and prevalent social institutions of the 19<sup>th</sup> and 20<sup>th</sup> centuries which endorsed the binary model. Sport leaders and athletes went to great pains to ensure that sport sustained gender polarities.

### *5.0 The Role of Sport in Binary Models*

As doctors rejected women's exercise as physically dangerous during the last quarter of the 19<sup>th</sup> century (Lenskyj, 1986), male sporting club leaders rejected women's efforts to join their sporting clubs and to use their sport facilities (Hall, 2002). Schools and universities provided opportunities for women's sport and exercise (Morrow and Wamsley, 2005); however, these institutions provided opportunities only to the limited number of attendees. 19<sup>th</sup> century sport clubs reinforced the binary by ensuring that women were positioned as well-dressed admirers of men's sports, a function of social graces, in addition to creating organized settings for mutual attraction. Further, the phenomenon of Muscular Christianity – a popular idea within men's sporting clubs and private schools - was a direct reaction to emerging female leadership in the Protestant church. The strength, virility, and toughness taught to men through physical activity, tempered by rules and Christian values, served to sustain the gender order inherent in sport (Morrow and Wamsley, 2005). There was no place in this ideological structure for women to actively participate. While doctors began to concede in the early 1900s that light exercise could be beneficial to women (Vertinsky, 1994; Lenskyj, 1986) and the emergence of the bicycle as a form of transportation and fun for both men and women created new opportunities for public exercise for women, (Lenskyj, 1986) sport remained the exclusive domain of men for the early part of the century.

Even with the emergence of the famous Edmonton Grads basketball team (1915-1940) (Macdonald, 1976) and the early successes of women's softball and hockey during the 1920s and 1930s (Adams, 2007), sport was viewed primarily as a male enterprise. In response to general suspicion and criticism, female athletes repeatedly stated that sport did not compromise femininity and that most of the traditional social characteristics of womanhood were maintained.

Male coaches and early sport administrators (Wamsley, 1997) ensured that women's participation would be viewed in its proper social context by ensuring 'ladylike' behaviours on and off the courts and fields, female chaperones for trips, and all took great care in press commentaries to demonstrate that significant shifts in traditional social values had not taken place. In spite of these attempts to 'protect' traditional femininity, there was a broad social concern that sport in the 1920s and early 1930s made women 'mannish' or even encouraged homosexuality. Compulsory heterosexuality had always been both implicitly and explicitly promoted through sport. Also, contributing to the 20<sup>th</sup> century gender binary was a new compulsion for records and statistics.

The fastidious record-keeping of the second half of the 19<sup>th</sup> century as a matter of modern record, modern state formation, and bureaucratic process translated easily to sport. Distances, weights, and time keeping were fundamental modern constructs that defined and organized modern sport (Guttmann, 2004). Those who could run distances in shorter times, jump higher and farther, lift more weight, etc., came to be recognized as athletic, in quantitative terms, which represented an alternative conceptualization to team sports and early aesthetic sports. Sport, in part, became popularized within the context of modern, nation state formation, and the economic, political, and cultural competition which emanated from these overtly political processes. Sport became quantified like every other aspect of life, from agricultural products and production, to business inventories, to population statistics. Early sport competitions promoted by the British celebrated imperialism, assimilation, and provided a cultural corollary to the economic ties between countries and the social hierarchies they supported. Later competitions between nations advanced independent nation states, their successes and failures, and placed more emphasis on performance and winning. The early assumptions prevailed: men were strong, women were weak; men were athletes; women were admiring spectators. At the same time, the assignment of appropriate physical and cultural attributes to peoples' bodies served to reinforce distinctions and, also, to deepen the perceived connections between biology and behavior. This is the early context of sport – the gender binary ran deep in its organization and sport was a very important vehicle serving to remind everyone that certain physical characteristics were appropriate for men and others for women. Anything else was 'unnatural.' One of the primary vehicles which emphasized and broadcasted the physical and social differences between men and women to the world, and fully legitimized the process of quantifying human performance during the course of the 20<sup>th</sup> century, was the Olympic Games.

## ***6.0 The Olympic Games***

Since their inception, the Olympic Games have reproduced a gender order and have sustained polarities between women and men based on performance, appearance, and social decorum. The founder of the modern Games, Pierre de Coubertin, and his aristocratic contemporaries embraced the Victorian era notion of separate spheres for men and women. In fact, Coubertin was opposed to women's participation throughout his term as International Olympic Committee (IOC) President. For men, Coubertin argued, success in sport competition demonstrated personal worth and prepared one to serve the nation. The physical domination of others had significant social value for men and, by extension, was the sort of behavior considered to be completely inappropriate for women. Additionally, physical strain and exertion was viewed



as unladylike and with a certain degree of disgust, as medicine, science, social morality, and deeply engrained class values blended rather seamlessly to sustain this gender order. If not for local host committees, in Paris, St. Louis, London, and Stockholm, which organized the early Olympic programs, women probably would not have appeared in unofficial events until much later. The IOC assumed control of the Olympic competitive program following the 1912 Games in Stockholm (Young and Wamsley, 2005).

The popular press, *The New York Times* for example, made distinctions between male bodies in these early years of the Olympic Games. Journalists wrote about athlete's appearances and predicted who would win events based on size and strength or speed, when really their assumptions were not based on fact. But early on, a logic of performance was developing at the Games, as spectators in host cities watched these new public performances, saw people's bodies performing in relatively revealing clothing, for the era, and journalists interpreted these sights for the rest of the world (Wamsley and Pfister, 2005). By the 1920s, the widely publicized photograph of the American sprinter Charlie Paddock's flying finish in the 100 metres race represented the new emphasis of the Olympic Games – assessing human bodies through the variables of distance travelled over time, distances jumped in length and height, and weight moved – all quantifiable human performances. This way of thinking was alternative to conceptions about team sports such as rugby, or sports with points systems such as tennis, or more qualitatively understood and scored sports such as gymnastics that had been so popular in Europe during the late 19<sup>th</sup> century.

By the 1920s, the Olympic Games had become the world's most important international sporting competition, the International Sport Federations controlled the competitive and participatory elements of most sports, and the IOC was increasingly more influential in these administrative relationships. And the significance of the Olympics was increasingly acknowledged by the press. By the early 1930s, the IOC had weathered the challenges of more participation-based events such as the Worker's Olympics (Kidd, 2005) and the Women's Olympics (Pfister, 2000).

The majority of male sport leaders rejected the efforts of women's lobbying groups to permit women's official participation in athletics (track and field) events, considered the most important part of the Olympic program. Successful female athletes challenged the traditional paradigm of male supremacy with their abilities to run fast, and to jump far and high, without showing any signs of the medical complications supposedly caused by vigorous exercise for women. Female athletes challenged the binary proclaimed by Coubertin, that men were the real athletes and women were admiring spectators. The common view of male physical supremacy diminished when the public watched women performing in similar contexts. However, the logic of sport asserted that competitions were quantifiable and gave inherent advantages to those who were bigger, stronger, faster and with greater physiological capacities in various dimensions. Different sorts of people could still compete in team sports, with different body types, shapes, and sizes because there were different roles for each player and a wide range of contributions possible. A 100 metre sprint, for example, had very particular requirements, even in these early stages of international competition. As competitive levels improved over the course of the 20<sup>th</sup> century, team sports too became more restrictive with respect to size and shape. However, the

binary model made little sense, even in the 1920s. Indeed, female athletes had more in common physically with male athletes than with other women and the same applied to men. All men were not faster and stronger than all women. Kane (1995) cites J. Rathe (1994 unpublished manuscript, p.4): “the range of difference among individuals in both sexes is greater than the average difference between the sexes.” This had been evident in farm fields and other venues of labour and life for centuries. There has always been a continuum of physical capacities not restricted to the categories of male and female; but sport has been strategically used to identify and legitimize a gender binary – a ‘bio-logic.’ Olympic leaders, sports administrators, athletes, the media, all of us have found ways to distinguish between men and women, in spite of a significant body of evidence that suggests that physical capacity operates on a continuum.

How the Olympic Games have been organized, how athletes, coaches, and team managers have participated in them, how the media has interpreted them, and how spectators have consumed them, have contributed to a gender order that runs deep in our societies. Society has always judged athletes in three capacities. However, this appraisal was reproduced by an order of importance for male athletes and female athletes. Clearly evident in the 1920s, men were judged for: 1. their athletic performance 2. their behavior 3. their looks; women were judged for: 1. their looks 2. their behavior 3. their performance (Wamsley and Pfister, 2005). Since the early participatory gains for women in the 1920s, female athletes have been sexualized for the consumption of others. Men, too, were sexualized for consumption. However, within gender relations, men were generally empowered by sexualization because their performances were not diminished and objectification that was evident to them tended to work in their favour. The bodies of all elite athletes in the 20<sup>th</sup> century were objectified in one way or another – for profit in gate receipts for competition, to sell newspapers; to service the emerging performance logic of sport (and therefore for the nationalist or competitive aims of their countries); for consumption – sexual, cultural, fetishistic; and for entertainment. Men, for the most part were privileged through this process. Some women, too, were privileged but usually at more cost than men.

Olympic and sport leaders remained at the forefront of ensuring the binary between men and women. Coubertin, his successor, Count Henri Baillet-Latour, International Sport Federation administrators, and countless others outright rejected women’s participation in competitive sport, particularly at the Olympic level. The fourth IOC president, Sigfrid Edstrom, was also not in favour of women’s participation in athletics but as an astute political leader within sport, he could see that the IOC could no longer prevent women from participating (Schultz, 2000). The Women’s Olympics of the 1920s and early 1930s demonstrated that women were talented athletes and that spectators wanted to watch them. If the IOC was to maintain control over sport and to apply an international consistency in world competition, then marginalized groups that threatened this sovereignty had to be assimilated or incorporated into an acceptable model. The organizers of the Women’s Olympics and the primary lobby group, the Federation Sportive Feminine Internationale (FSFI), relinquished control over women’s athletics, who could participate and how they would participate, to the IOC and the IAAF in exchange for five athletics events in the Olympic Games of 1928 (Schultz, 2000). Even though the behavioural decorum and appearance of female athletes was under strict surveillance during the 1920s (Schweinbenz, 2001), the permanent acceptance of female athletes into the athletics program of

1932 led to more strategic initiatives on the part of IOC leadership to ensure that a gender binary prevailed in the Olympic Games. As American Olympic Committee President, the views of Avery Brundage, who became IOC president from 1952 to 1972, on the participation of women, were clearly evident. Sport leaders and the popular press worked to channel women into the 'feminized' sports. Sports like fencing, swimming, tennis, figure skating, and gymnastics were commonly viewed as appropriately ladylike sports, where women's 'natural' attributes such as grace, rhythm, and artistry could be demonstrated. Lobbyists for women's participation had ensured a place for female athletes and the Olympic Games encouraged thousands of women to participate in high levels of competitions. However, the Olympics served to support traditional notions of femininity within this context. Attention to beauty, looks, and decorum remained foundational to women's Olympic sport. Men were men and women were women and challenges to the binary were met with accusations of homosexuality and suspicion of foul play (Cahn, 1994). Female athletes who did not meet these standards of beauty or feminine grace were accused of being mannish, lesbians, or of being unnatural. As intensely competitive as Brundage was, he was also openly accusatory against any athletes, Americans included, who breached amateur regulations or against women who did not look like women, in his opinion. During the 1930s, Brundage once appealed to the IOC to have an American female athlete barred from competition because he thought that her voice was too deep and her feet were too big (Wamsley, 2007). Brundage was openly disgusted by female athletes who did not meet traditional standards of femininity and at times unabashed about those female athletes he found attractive (Wamsley, 2007). Female athletes who performed best in the feminized sports received the most accolades from sport leaders and the popular press, later television (Morrow, 1987). These accolades implied that femininity – compulsory heterosexuality assumed - was not compromised but, rather, accentuated through specific sports. Other, significant competitive pressures introduced the world to women's participation in non-traditional sports in spite of the constant reminders that the qualitative sports were most appropriate and most attractive.

The Cold War period, which emphasized military, economic, political, and cultural competitions between the Soviet Union and its allies and the United States and its allies, (Hoberman, 1992) increased the breadth and depth of women's participation in elite sport (Kidd, 1996). The arrival of the Soviet Union with a full team of male and female athletes in the Games of 1952 forced western nations to field full teams of women across the spectrum of sport. Yet, the press reserved its favourable commentaries for attractive women in 'ladylike' sports (Wamsley and Pfister, 2005). The Cold War obsession with symbolic competition created unprecedented opportunities for female athletes but, at the same time, the sporting culture that developed during this period chastised women who did not look or act like women – the pressures to achieve competitive success between east and west were at direct odds with the gender binary that sporting culture had promoted and secured for decades. Consequently, many athletes suffered severe criticism and outright suspicion for their appearances and physical performances. The Cold War era was a time of hyper competition, played out symbolically at such events as the Olympic Games, utilizing the latest training techniques, technologies, and unprecedented resources (Hoberman, 1992); but, the era was also characterized by an equally obsessive shadow of suspicion – military, political, and cultural – and the historical assumption that sport was fair, the competitive ground was equal, and that rules ensured fair play (Kirkwood, 2004) made sport highly susceptible to distrust between competitors and competing nations.

That the Olympic Games provided a level playing field for athletes was a myth firmly entrenched from the era of the earliest Games. Coubertin argued that athletes of all classes “ranked equally with the fear of God” (Muller, 2000, p. 115). Sport, he wrote, “creates an atmosphere of absolute frankness” (Muller, 2000, p. 275). Athletes learned their place through these physical hierarchies, with physical domination and defeating others creating the basis of competitive sport. From the earliest Games, the IOC promoted amateur regulations to preserve the ‘fairness’ of competition and to ensure a level playing field. Yet, country of origin, resources and facilities for training, money for equipment, travel, and competition – even sheer opportunity to participate - were never part of the equation that described the level playing field (Ritchie, 1996). Issues of social class, race, and gender were, therefore, not considered. However, by the Cold War period, when national obsessions over competitiveness built the extensive and expensive sport systems that we have today, the concept of the level playing field to which all athletes were supposed to aspire was firmly entrenched in the Olympic Games.

Viewing themselves as guardians of pure sport and fair play, the IOC in the post World War II era, at the beginning of the Cold War, questioned the application of the Soviets to enter the Olympics, fearing that its athletes would breach amateur regulations (Senn, 1999). The entry of the Soviets was met with immediate suspicion. Surveillance and suspicion had been a part of international sport since its outset, as evident in the earliest concerns for standard rules and amateur codes, but the Cold War raised these issues to levels of heightened sensitivity. In this era, the stakes for winning were so much higher. Cultural investment in winning international competitions reached new heights (Hoberman, 1992). To the present day, these levels of suspicion (Ritchie, 1996) of fellow competitors have not diminished. While it is very easy to demonstrate that the notion of fair play has never been achieved, historically, it is another issue to deal with fair play from an administrative standpoint. The IOC and all other sub level sport administrations must deal with the issue of fairness on a daily basis. The millions of athletes and those who work in the sport industry have direct investments in the assurance that competitions will be fair and that sports governing bodies will do their utmost to ensure fairness or prevent cheating. The sport model, historically conceived and sustained, depends on it.

From the outset of international competition, athletes had always attempted to gain advantage through ingesting various substances (Todd and Todd, 2000). Scientists in many countries performed experiments to improve productivity in the labour process and enhance performance in sport (Kirkwood, 2004) and the discovery of synthetic testosterone in the 1930s opened up possibilities to enhance size, strength, and speed for athletics. Weightlifters in the east and west took steroids and amphetamines were used widely on the Tour de France throughout the 1950s. Based on naïve assumptions that doping was confined to professional sport, the IOC under Brundage was more engaged in monitoring amateur regulations (Guttman, 1983). The drug-related death of Olympic cyclist Knud Jensen in 1960, however, created a crisis for the IOC, resulting in the formation of the Medical Commission and regulated drug testing for the Olympics (Hoberman, 2005). Suspicions over drug taking were prevalent during the Cold War period and peaked during the 1970s, when East German women were ostracized by the press covering the Montreal Games (Todd & Todd, 2000). Cold War suspicions raised two challenges, linked ideologically, to the ‘purity’ of sport that administrators had so long fought to preserve: athletes were taking drugs to improve performance; “unfeminine women” from east bloc nations

were outperforming western women (Lenskyj, 1986). Elite level female athletes exhibited physical characteristics normally associated with men. They were big, strong, and fast, presenting a direct challenge to traditional notions of femininity. Ritchie (2003) reports that these suspicions led to the British Amateur Athletic Association requiring its females to secure a letter of sex verification from a doctor before entering competition as early as 1948. Rumours of eastern bloc cheating, the use of steroids to enhance performance, and the suspicion that male athletes were masquerading as women, Ritchie (2003) argues, presented the socio-historical context for sex testing, what he calls one of the most misguided sport policies ever. Sex testing, Ritchie (1996, p. 63) writes, “is merely a more obvious example of sport’s investment in sexual certainty.” Ritchie (1996, p. 135) cites Eduardo Hay, the doctor in charge of the first sex test: “Sex testing was introduced to squash speculation in the press about women whose ‘external appearance and muscular development were more masculine than feminine.’” For the west, east bloc athletes became suspects for cheating. The Olympic Games had preserved the gender binary into the 1950s, assuring sports spectators that athletes fit the traditional molds for men and women. Cold War politics and investment in sport meant full-time training, supervised by scientific experts, and supported by the technologies produced in laboratories. Developments in training and training science and a far more extensive commitment by athletes to full-time competitive preparation resulted in new athletic bodies which challenged the gender binary. To the increasing television audiences, athletes looked bigger and stronger, and the appearance of big, strong, women directly confronted long-standing common knowledge about feminine bodies (Lenskyj, 1986).

### *7.0 Sex Testing in Sport and the Olympic Games*

The first sex testing consisted of a visual examination of the genitalia of female athletes at various track and field championships in 1966 and 1967 and in the 1966 Commonwealth Games in Kingston, Jamaica and the 1967 Pan American Games in Winnipeg (Ljungquist and Simpson, 1992). The IOC introduced chromosome testing at the 1968 Mexico City Olympic Games, after much criticism of the humiliating experiences created by earlier tests. The buccal smear, sex chromatin, or Barr Body test consisted of a swab extracted from the athlete’s mouth. If the test was positive, then the athlete was certified to be female; if not, then she had to undergo blood tests and a physical examination. The International Amateur Athletic Federation (IAAF) the governing body for track and field employed the Barr test until 1991 (<http://www.iaaf.org/newsfiles/36983.pdf>), whereas the IOC Medical Commission replaced X chromosome with DNA-based testing, an analysis of the SRY gene on the Y chromosome to indicate that the athlete was male, used for the first time at the Winter Games in 1992 (Lundquist & Simpson, 1992). The IAAF, after 1991, introduced a new policy through which challenges or suspicions could be raised against athletes. The athlete could then be subjected to a medical evaluation before a gynecologist, endocrinologist, psychologist, internal medicine specialist, and an expert on gender/transgender issues (<http://www.iaaf.org/newsfiles/36983.pdf>). The point being, that a physical exam, similar to that conducted in the 1960s, could be part of the process. The IOC finally eliminated sex testing by the Sydney Olympics in 2000, reserving the right to sex test in the future if necessary. The social science literature, generally, concludes that sex testing was an invasion of the rights of athletes – humiliating and degrading to say the least and, in some circumstances leading to severe personal trauma among athletes whose physical circumstances were labeled ‘abnormal’ by the testing process (Dickinson et al, 2002; Carlson,

2005; Teetzel, 2007; Pilgrim et al 2002/2003; Cavanagh & Sykes, 2006; Sykes, 2006; Ritchie, 1996; Ritchie, 2003). The following case examples briefly document anecdotal stories of gender variant athletes and some of the later consequences of sex testing. These include, but are not limited to, a history of improper diagnoses, pathologization, stereotypical labeling and, what the literature has determined to be, unfair disqualification of athletes.

### ***8.0 Prominent Issues of Gender Issues in Sport***

**Stanislawa Walasiewicz** – (a.k.a. Stella Walsh) – gold medal winner, 100m, Los Angeles 1932. Killed during a robbery in 1980 and the autopsy revealed ambiguous genitalia, and possibly androgen insensitivity syndrome. The 1980s press accused her of being a man (<http://www.infoplease.com/biography/var/stellawalsh.html>) reinvigorating debates over the issue of men competing as women in international sport. A telling example of how intersex people are profoundly misunderstood, she is still listed on the Canadian Broadcasting Corporation's Top Ten Worst Cheaters in sport (<http://www.cbc.ca/sports/columns/top10/cheats.html#walsh>).

**Hermann Ratjen** – (a.k.a. Dora Ratjen) The only reported case of a man competing as a woman at the Olympic Games. Ratjen claimed that the Nazis forced him to compete as a woman in the high jump competition. He competed for three years. Some Internet sources identify Ratjen as intersex.

**Zdenka Koubkova** – 800m runner, competed in the 1930s, who underwent surgery to become a man (<http://www.time.com/time/magazine/article/0,9171,756527,00.html>) - source not verified.

**Mary Edith Louise Weston** – shot put and javelin - became Mark Weston in 1937.

**Claire Bresolles and Lea Caurla** - members of the French 4 x 100m relay team that won silver medals at the 1946 European championships in Oslo. Later, they both lived as men: Pierre Bresolles and Leon Caurla ([http://findarticles.com/p/articles/mi\\_qn4158/is\\_20000521/ai\\_n14315195](http://findarticles.com/p/articles/mi_qn4158/is_20000521/ai_n14315195)) - source not verified.

**Eva Klobukowska** – the first athlete to ‘fail’ the chromosome test – disqualified in 1967 and stripped of her 1964 Olympic medal – publically humiliated.

**Tamara and Irina Press** – Soviet track and field athletes who retired prior to sex testing at the 1966 European Cup – presented to the American public as the monstrosities of eastern bloc training and deception (Cavanagh & Sykes, 2006).

**Maria Jose Martinez Patino** – a hurdler who failed the sex test at the 1985 World University Games – officials told her to fake an injury – she refused and was disqualified, publically humiliated, and suffered intense international scrutiny – Ritchie (2003) reports a battery

of degrading tests which eventually revealed androgen insensitivity syndrome – her status was returned 2 ½ years later.

**Renee Richards** – transitioned athlete - male to female sex-reassignment surgery – challenged the US Tennis Association to enter competition.

**Danielle Swope** – intersexed athlete who underwent surgery – eventually permitted to compete in golf as a woman.

**Mianne Bagger** - the first transitioned athlete to play in an LPGA event.

**Santhi Soundarajan** – stripped of her medal at the Asian Games after ‘failing’ a gender test.

**Michelle Dumaresq** – transitioned Canadian cyclist – many athletes protested her participation.

**Kristen Worley** – transitioned Canadian cyclist.

**Eric Schineggar** – an intersex athlete, Erika ‘failed’ the sex test before the 1968 Grenoble Olympics and was asked to withdraw – she voluntarily surrendered her 1966 World Cup ski medal and later underwent surgery.

From all accounts, it is clearly evident that sex testing from its outset has been a harmful, damaging, humiliating process fueled by inaccurate scientific assumptions and tests which do not accommodate the continuum that exists between maleness and femaleness. These tests have demonstrated that the gender binary, as historically constructed, does not exist for all human beings. Unfortunately, many athletes suffered great harm, both personally and professionally, from these testing procedures, from the blatantly inaccurate cultural labeling process that accompanied the procedures and outcomes, to the deep levels of ostracization by peers and the public. In short, sex testing proved to be an exercise in human rights violations, inspired by a culture of suspicion, one not separated sufficiently in the sport nexus from the consumption of performance enhancing substances (Cole, 2000). Yet, for all that we have learned in examining the history of sex testing and gender verification, the sports world still must invoke the gender binary as a matter of organization at its foundational level because that is the way sport is currently understood and practiced. This was evident in the 1996 Olympic Games in Atlanta, where testing revealed seven athletes with partial or complete androgen insensitivity and all were permitted to compete. However, there are still undercurrents of suspicion evident in IAAF policies on gender verification and even though sex testing has been eliminated from the Olympics, the IOC may exercise its right in the future.

As mentioned above, it is recognized in the literature that the driving force behind sex testing was a culture of hyper competition and suspicion. People feared that men, seeking any means to win medals, would compete as women, or that competing nations would seek means to ‘masculinize’ women through drug regimens (Hoberman, 2005). However, administrative bodies did not separate the two phenomena from the outset. From all of the literature examined, there is no consistent, demonstrative evidence to suggest that men have been or are attempting to enter

elite sport contests as women. There is significant evidence, however, demonstrating that extensive drug-taking programs have been a part of sport for decades and that long-term consumption of these drugs changes people's bodies in such ways that provide competitive advantages (Todd & Todd, 2000). However, the conceptualization and labeling has been historically problematic. Suggesting that drugs make one more masculine, for example, is problematic in the first instance. Invoking the gender binary to address challenges to the gender binary creates a loop of confusion. In spite of any gains that we have made with respect to intersex individuals and their participation in athletic competition, there are still deep-seated suspicions and a fear of deception in sport. This remains the social context faced by transitioning and transitioned athletes in sport.

### ***9.0 Athletes and Transition***

Viviane Namaste dedicates the book *Invisible Lives* (2000) to the “transsexuals who have not survived,” invoking a sense of the oppression, harassment, and violence which faces gender variant people in society. The 1997 San Francisco Department of Public Health Study reported that more than 83% of male to female, female to male individuals endured verbal abuse; more than 30% endured physical abuse; more than 46% reported employment discrimination; more than 32% had attempted suicide. Gender variance assumes many forms not limited to “crossdressers, drag kings/queens, transsexuals, people who are androgynous, Two-Spirit people, and people who are bi-gendered or multi-gendered, as well as people who do not identify with any labels” (<http://www.vch.ca/transhealth/>). The literature encourages us not to make assumptions about how gender variant people feel about their bodies, not to treat people in general categories – for example – not all gender variant people want sex change operations. Writing specifically about social identity, Ringo (2002, p.5) states, “People with different kinds of bodies in different states of functionality experience the world differently.” To address these issues generally, authors call for a conceptual blending of gender (Ekins & King, 1996; Butler, 2004). Since issues of gender variance and transition cross all social pathways including the workplace, many businesses have implemented anti-discrimination processes and educational sessions for employees. The Human Rights Campaign in the United States, for example, reports that 195 companies have earned a score of 100 percent on the 2008 Corporate Equality Index, identifying the best places to work for lesbian, gay, bisexual, and transgender individuals (LGBT) (<http://www.hrc.org/index.htm>). Some companies like Marriott have instituted a supplier diversity program with a goal of reaching 15 percent business relationships with minority, women, and LGBT suppliers by 2009 (<http://www.marriott.com/corporateinfo/supplier/default.mi>). TD Financial, in Canada, advertises transgender non-discrimination policies in its workplace ([http://www.td.com/corporateresponsibility/recognition\\_2006.jsp](http://www.td.com/corporateresponsibility/recognition_2006.jsp)). Colleges and universities have also provided protection against discrimination for transitioned individuals (<http://ai.eecs.umich.edu/people/conway/TS/TGTSISLinks.html#companies>).

However, of all institutions to deal with gender variance, including law and the workplace, sport is not conducive to gender blending – to considering maleness and femaleness on a continuum (Kane, 1995) or to preventing discrimination and harassment towards transitioning and transitioned athletes. Indeed, sport is one of the primary institutions where the



gender binary is constantly reproduced and where, historically, resistance to the blurring of these lines has been both strategic and extensive. The news media has always played a role in reinforcing the gender binary through sport and by communicating information to the general public. Given the historical resistance of sport culture to gender blending, the issue of gender variance and athlete transitioning tends to be treated with sensationalistic headlines.

Historical examples aside – Renee Richards did compete in Women’s Tennis; Mianne Bagger participates in women’s golf – current transitioning and transitioned athletes wish to compete in Olympic sport. Easily predictable, based on the gender order historically produced through sport, there is little opposition within men’s sport to permitting female to male transitioned athletes to participate, in spite of public beliefs suggesting that there may be performance advantages due to the body’s response to hormone injections (Teetzel, 2007). Since participants, administrators, and spectators have always believed that male athletes are better than females, (Messner, 1990) female to male transitioned athletes represent no challenge to male authority or performance. (However, anecdotal evidence intimates that Erika Schineggar was not welcome on the Austrian men’s ski team after ‘failing’ the sex test in 1968 (<http://www.ftmaustralia.org/library/05/erik.html>). Male to female transitioned athletes, however, are treated with suspicion, falling into the historical context of athlete deception, cheating, and the assumption that someone would alter his/her body to gain advantage in sport, in spite of a distinct lack of evidence. On this issue, golfer Mianne Bagger is cited (Cavanagh and Sykes, 2006, p. 95, citing Kelso, 2004): “People often just do not understand the struggle that you go through in your daily life. The idea [that] a man would go through this to be a pro golfer is a total misunderstanding of who and what we are.”

In the post Cold War era of suspicion, which now includes debates over the possibility of genetic manipulation, transitioned athletes are regularly subject to transphobia, “the irrational fear or hatred of the gendered subject in transition” (Cavanagh and Sykes, 2006, p. 92). The fears of a sporting world ensconced in the historical rubric of the gender binary buttressed by the ideology of fair play are raised within the context of perceived physiological advantages that may influence the outcome of competitive events. And, Teetzel (2007) argues that there is also a perception that the transitioning process can create advantages for athletes who must use substances that are banned by the World Anti-Doping Agency code.

Pilgrim et al (2002-2003, p. 528) raise four main issues with respect to transitioned athletes participating in competitions:

1. Whether the athlete is male to female or female to male
2. Whether the sport itself is ‘male’ or ‘female’ according to traditional values
3. The physical characteristics of the transitioned athlete and
4. Is there a real or perceived advantage for the transitioned athlete?

Even though Kane (1995) asserts that the way sport is organized to celebrate the accomplishments of men of size, speed, and strength and to ignore the continuum of these qualities and the women who have such qualities, we must still address the issue of transitioning within the current sport model – transitioned athletes wish to participate now in the model that

exists. Female athletes have protested the presence of transitioned athletes and fear that male to female transitioned athletes retain competitive advantages (Pilgrim et al 2002-2003). The common physiological arguments raised by opponents of transitioned athletes are that males have greater strength, greater maximum oxygen uptake, lower body fat, and greater bone mass and that these residual qualities provide unfair advantages after the athlete has transitioned. In addition to issues of strength and endurance, Teetzel (1997) raises the possibility that average hand and foot sizes for men and women are different and critics could raise the possibility that a basketball, volleyball, or water polo player or swimmers would then have unfair physical advantages. Operating within this context of thinking, one would have to ask if height and weight or jumping ability are factors. The counterargument to this line of reasoning, as discussed above, is that various issues with respect to body size are irrelevant, since there is so much variation in body sizes for men and women throughout the world.

Transitioning athletes undergo extensive surgical procedures and hormone treatments over long periods of time. Teetzel (2007) argues that studies on the physical effects of hormone treatments on transitioned athletes are inconclusive. She reports that current studies analyze average people who have transitioned, not elite athletes. Pilgrim et al (2002-2003) report that estrogen treatments, experienced by male to female transitioned athletes, result in increased stored fat, a decreased power-to-weight ratio, and a general decrease in physical performance. Further, the removal of the testes prevents the production of testosterone resulting in decreased muscle mass and blood hemoglobin. Further, they conclude, there is a decrease in strength and maximal oxygen uptake, which should result in decreased performance during strength and endurance-related activities. While skeletal bone mass should be retained, they argue, it would be driven by a smaller muscle mass. Anecdotal evidence collected from interviews with Renee Richards and Michelle Dumaresq (Pilgrim et al, 2002-2003) suggests that size and strength are diminished during the transition process. Dumaresq stated in her interview that after a five-year period in the transitioning process, she lost four inches in height, twenty pounds in weight, and that her blood testosterone level was within the range of an average woman.

Transitioning athletes must undergo extensive hormone treatments to reach appropriate levels found in male and female bodies. The bodies of male to female transitioning athletes, for example, no longer produce testosterone so it must be prescribed therapeutically. This, of course violates the anti-doping regulations for competitions such as the Olympic Games. The World Anti-Doping Code prohibits the use of substances, not naturally produced by the body, such as testosterone and estrogen. Exceptions may be granted for medical need through a therapeutic-use exemption. Exemptions must be granted for athletes to compete. The question raised by competitors, then, is whether or not this is a form of doping which provides competitive advantages. Teetzel's (2007) review of literature, in agreement with the reviews of others (Pilgrim et al, 2002/2003) concludes that the therapeutic hormone treatments necessary for male to female transitions should not provide any advantages for these athletes. She also argues that the World Anti-Doping Code should not be invoked to prohibit transitioned athletes from competing because none of its criteria – 1. enhances performance 2. Causes harm 3. Violates the spirit of sport – are compromised. Teetzel (2007) concludes, as have others, (<http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2004/06/14/MNGNM75MUK1.DTL>) that illegal doping and hormone treatments for transitioning athletes are completely separate issues.

In female to male transition, Pilgrim et al (2002-2003) argue that testosterone therapy should increase muscle mass, power-to-weight ratio, red blood cell mass, and oxygen uptake. But, they conclude (p. 531), that these differences “are not so great as to make the female-to-male transsexual athletes stand out among their fellow competitors.”

From the literature examined, the following studies have been cited as evidence in the debates over physiology, performance, and transitioning:

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### ***10.0 Current Issues for the IOC and Sport Governing Bodies***

Transitioning and transitioned athletes and their supporters have been lobbying extensively for full participation in the Olympic Games. In the fall of 2003, an ad hoc committee organized by the IOC Medical Commission met in Stockholm to make recommendations for transitioned athletes. The result is referred to as the Stockholm Consensus and it outlines the parameters of participation in the Olympic Games for transitioned athletes:

1. Any “individuals undergoing sex reassignment of male to female before puberty should be regarded as girls and women” (female). This also applies to individuals undergoing female to male reassignment, who should be regarded as boys and men (male).
2. Individuals undergoing sex reassignment from male to female after puberty (and vice versa) shall be eligible for participation in female or male competitions, respectively, under the following conditions:
  - a. Surgical anatomical changes have been completed, including external genitalia changes and gonadectomy.
  - b. Legal recognition of their assigned sex has been conferred by the appropriate official authorities.
  - c. Hormonal therapy appropriate for the assigned sex has been administered in a verifiable manner and for a sufficient length of time to minimize gender-related advantages in sport competitions.
3. Eligibility should begin no sooner than two years after gonadectomy.
4. A confidential case-by-case evaluation should occur.
5. In the event that the gender of a competing athlete is questioned, the medical delegate (or equivalent) of the relevant sporting body shall have the authority to take all appropriate measures for the determination of the gender of a competitor ([http://multimedia.olympic.org/pdf/en\\_report\\_905.pdf](http://multimedia.olympic.org/pdf/en_report_905.pdf).)

Some (Ljungquist & Genel, 2005) believe these policies to be fair and equitable. Cavanagh and Sykes (2006) argue that the Stockholm Consensus serves a similar purpose to the original modes of sex testing and that it is another form of policing gender, and preventing or disqualifying female athletes. They also argue that this policy prevents individuals from self-identifying their own gender, once again suggesting that men would endeavour to masquerade as women. Further, they suggest, the policy does nothing to address or protect intersex individuals from scrutiny and suspicion, while ensuring their privacy. Nor does it specifically address females who transition to males, demonstrating that the old regime of male athletic superiority remains an underlying assumption. Finally, they point out that not all athletes will be able to obtain a valid proof of their gender identity – the legal recognition of assigned sex by the

“appropriate authorities.” Obviously, one of the main issues for a transitioning athlete will be access to the full range of pre and postoperative resources required for the process, not to mention the judicial, government, and medical support structures that are necessary to make transitioning conceivable.

In all of the oppositional language evaluating whether or not transitioning athletes have ‘unnatural’ advantages, there is little mention of the transphobia that athletes must endure at all levels. As Cavanagh and Sykes (2006) point out, transitioned athletes must adjust to a new anatomy, a lengthy regimen of hormone treatments, surgical complications, in addition to the suspicious, often incredulous, atmosphere extant in one of the most rigidly binary institutions in history – competitive sport. Even if transitioned athletes are accepted into the Olympic Games, there will be residual period of suspicion that the IOC does not appear to be prepared to deal with. Cunningham (2008) argues that to seek change in sport organizations, there must be a full commitment to the issue of the day - gender diversity. He recommends the formation of change teams or coalitions of like-minded individuals who convince others to value gender diversity. And, with top management support, a broader educational campaign may be initiated to raise awareness among the general public, to break down deep-seated fears and assumptions with no basis in experience or fact.

### ***11.0 Concluding Remarks***

For hundreds of years, we have been led to believe that the categories ‘man’ and ‘woman’ are immutable biological and social facts. We have created long-standing and influential institutions that support this gender binary. So prevalent has this gender logic been that it remains a striking epiphany that all people do not fit neatly into these categories. The literature demonstrates myriad examples of gender variance, widely experienced and widely practiced over the centuries. Incontrovertible evidence abounds demonstrating a strategic cultural emphasis on creating science and social relations that supports our gender binary, ignoring the countless examples of individuals who do not fit this mold. Historically, sport is one of the primary institutions, its context communicated widely to all corners of the world, that has confirmed and sustained, even advocated for a gender binary, in spite of the fact that sport has shown us that female and male athletes have so much more in common physically than average men and women compared to their own sex. This is the powerful, longstanding social context that transitioning/transitioned athletes face as they seek to participate in sport, indeed, to carry on their daily lives. The gender binary provides the social context, the hyper competition of the post Cold War commercialized era of spectator sport provides a setting for suspicion, fear, and rejection, all contributing to an atmosphere of transphobia.

Sport operates on a continuum, not a binary; women who want to be strong, fast, muscular, and powerful are women, not women trying to be men. There is no evidence demonstrating that men wish to masquerade as women in sport competition. There is no evidence that men or women want to have sex change operations, to transition, in order to better compete in sport. There is no evidence that transitioning athletes use this complex, difficult personal journey to gain competitive advantages.

The IOC's response to transitioned athlete participation does not appear to be based on extensive scientific study; it requires athletes to have significant financial means, and it requires national governments and judiciaries to be in full support of people who experience and practice gender variance. Intersex individuals are not protected from public scrutiny; transitioned athletes are suspects, accused of deception by their very existence. If the culture of sport changes around issues of gender, if the parameters of the gender binary shift, then even the most powerful organizations must react to such changes. The literature informs us that there is tremendous diversity in who we are, what we feel, and what we practice; even our most entrenched institutions must come to terms with that.

***The most helpful publications dealing directly with athletes and transitioning are:***

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