## PSHCEE Speech: Should Transgender women be allowed to participate in female sporting competitions?

Hello, my name is Archie and today I am going to be talking about whether it is right for transgender women to participate as females in female sporting competitions. Simply put: a trans woman is a woman who was assigned as male at birth.

In recent years, a bitter argument has developed in regards to transwomen athletes being allowed to participate in female divisions, with most recently being World Rugby's decision to ban trans women from playing in international women's rugby. This decision was made on the grounds that it was unsafe for trans women to compete against female counterparts however, the decision has caused controversy in the sporting world.

World Rugby's decision goes against most of the sporting world. In 2004, the International Olympic Committee allowed trans women to compete in women's events, which has resulted in many sporting organizations to adopt this same decision. As a result, transgender women have claimed victory in many sports such as weightlifter Laurel Hubbard, from NZ, who won silver at the World Championships in 2017 and transgender cyclist Veronica Ivy, who won the UCI Women's track championship in 2018 With some transgender athletes in uproar that they are not allowed to compete in male or female competitions yet, and with some trans-women athletes dominating female competitions the questions arises: Should trans women be allowed to participate in female competitions?

The dominance of trans women in some competitions has caused female athletes to complain that it is unfair to make them compete against people that were born biologically as a male. So, is this a fair complaint? Well, sport science proves that most males are bigger, faster, and stronger than most females. Males are proven to have larger muscles, greater lung capacity and stronger bones and ligaments mainly due to the actions of testosterone in the body.

The advantages of all of these differs from sport to sport such as an estimated 10% advantage in track running and 30% advantage in weightlifting, according to sport science research. In fact, even at the lower end of scale, the advantage is enough for teenage males (who have not fully completed puberty) to

outperform elite women. For instance, the 100m record for elite women in 10.49s whilst the record set by a 15-year-old boy is 10.20s.

It is clear that trans women will have a slight advantage over females due to testosterone levels being higher in trans women. Given this information, many would argue that it is unfair for trans women to participate in female competitions and events. So, is there any way to attempt to make the competition fair?

There is one method that might be capable of doing this and that is testosterone suppression. If doping testosterone can help gain an advantage surely suppressing its production will remove some of the advantage it holds? A review by physiologist Dr Emma Hilton, at the University of Manchester suggests otherwise. Her review summarised existing research on the effect of testosterone suppression trans women regarding strength, muscle size and lean body mass. Hilton's analysis, showed that muscle mass and strength in trans women showed very little change, where the lean amount of body mass and strength reduced by 5% after one to three years of testosterone suppression. Thus, Hilton concluded that the biological advantage gained by trans women is only minimally reduced when testosterone is suppressed so sporting organizations may be compelled to change their rules on trans women competing in female sport.

Although Hilton's review concluded testosterone suppression had minimal effect, most of the studies did not measure sporting performance directly and was from a medical point of view, rather than a sporting point of view. None of the studies measured speed or skills so can we really assume this evidence is true in regards to sporting performance?

There is also evidence that points in the other direction. In 2015, Ms Joanna Harper, a former medical physicist, published a study into transgender runners which indicated that testosterone suppression cut performance sharply. However, the study only included eight runners who only recently made the transition to trans a couple years earlier, and the experiment did not attempt to control other variables such as the level of training.

The mixed results of evidence and the amount of variables that need to be taken into consideration shows that one thing is for certain: Proving that trans women should (or should not) participate in female competitions is extremely

challenging. It is clearly a lengthy process and may take years to conclude. In the meantime, we may see sport governing bodies deliberate over whether to implicate harsher rules on trans women or adopt guidelines of their own which attempts to make trans women participation in women's sport 'fair'.

It is safe to say that this debate will not be ending anytime soon, and we are likely to see more controversy as the years go on.

This is the end of my speech; thank you for listening.