

## MEMORANDUM

TO: House Education Committee

FROM: Loretta L.C. Brady, Ph.D., Professor, Psychologist, Director, Requity Labs.

DATE: January 14, 2020

RE: Consideration of HB1251

### *Introduction*

This bill seeks to amend RSA 193:38, a bill that prevents discrimination in schools, to prohibit public schools from permitting a male student to participate in a sport designated for females.

### *Background*

I come today as a citizen Ward 1 in Manchester, educator, licensed psychologist and health system trustee to provide testimony/public comment that HB1251 has no democratic, educational, mental health, or medical benefit and indeed, my comments today will emphasize the ways in which the proposed HB1251 harms our rights, lowers educational achievement, and interferes with the wellbeing of NH's students.

I provided my background to provide context of my credentials, however no one should mistake my testimony here today as an endorsement or perspective shared by any of my employers or non-profit affiliations. I speak only for myself, and rely on the evidence and information of my professional discipline to support the positions I put forward in my testimony today.

This legislation seeks to remedy a problem that does not exist, and there is nothing to hide it's targeting of gender nonconforming children, particularly the female asserting children. The first objection to HB1251 I wish to offer this committee is both it's intended and actual impact: it subjects masculine presenting children who wish to play on female sports teams to invasive and unnecessary medical procedures while requiring no similar vulnerability to feminine presenting or cisnormative children, whether they wish to play on male, female, or other sports teams. This is sexist discrimination and is outlawed by both state and Federal statutes. This reason alone should lead your committee to consider this bill "inexpedient to legislate". I provide additional evidence as to what other consequences and inconsistencies exist that also deter from this bill.

HB1251 pretends only two types of children exist; those whose supposed biology aligns with their social gender presentation, and those whose does not. Yet this assumption is inaccurate and ill informed. Indeed, Intersex children exist and always have, likewise non binary children exist and will confound even the most broad gender

describing language applied. Children then, can physiologically and socially present any myriad of ways, with no standard measures on any of the physiological areas proposed in this legislation with respect to the medical gender confirmation testing required.

This legislation is harmful in other ways as well. Educational achievement has been attributed to athletic participation. A major workforce development investment is underway in our community. Segregating children, or preventing only one very specific subgroup of athletes, from fully participating in their educational experience, is harmful. Such practices have long term impacts on children's educational interest and attainment.

Additionally, our state has also invested in social and emotional wellbeing because we recognize the long term health and learning benefits when children and adults experience belonging in their schools, teams, and communities. Belonging is enhanced when children are part of teams and this legislation increases barriers to sports participation, particularly for girls who may present more masculinely than their peers. When combined with the fact that black women and girls are more often misgendered than white women and girls I am also troubled by the additional disparate impact this legislation would have, especially in a state with such little commitment to cultural competence training for teachers and little support for vulnerable communities.

Psychologically and physically this exclusion also creates health impacts. Psychologist Sarah Rose Cavanaugh at Assumption College wrote about the health benefits of exercise and emphasized the ways in which physical activity enhances mood. Transgender students have identified risk for mental health symptoms that impact their educational attainment. We don't need to send transgender students any more exclusionary messages, nor do we need to deny the humanity of our students and surrender their bodies to state control.

Finally students who experience stigma are at increased risk of suicidal ideation, and transgender students have a particularly high risk of suicide completion. They are also at a higher than average risk of violence and sexual abuse, making the prospect of forced medical evaluation in order to engage what is a civil right all the more traumatizing for transgender students who already experience their very vulnerable position, one that would be cruelly reinforced in this proposed legislation.

I urge you to deny this legislation, the goal and intent of the HB this seeks to amend was to promote inclusion and student wellbeing and to restore full protections to all students regardless of the degree to which they achieve social convention. This proposal strips the very essence of the protections away and reifies harmful historical ideologies that have no place in a civic democracy and which are not supported by developmental science, educational research, or mental health advice.

## Arguments

Proponents of HB1251 have not offered any problems that this bill would counter. Their concerns for safety do not extend to traumatic brain injury or other injuries documented in male sports participation, rather they only frame sports injury risk as befalling female athletes. This is not born by data provided. They can not demonstrate it provides equal protection nor does it remedy any widespread harms. It adds undue burden to only a very small subset of our community without rationale or cause. This bill undermines the intent and impact of the HB that the proposal seeks to amend.

- Legislation that targets one group of students is anathema to our inclusive aims of public education.
- This legislation increases risk for stigma and social rejection, two known risk factors for suicide. Transgender students are already at high risk for suicidal ideation and attempts. Sports participation is a known protective factor for physical and emotional wellbeing, and reduces suicidal risk. This bill creates barriers to what we know are protective activities.
- While social categories may seem either/or in fact nature demonstrates that nuance and gradation are in fact the norm. Neuroscientists have identified that sex and gender are not solely biological, genetic, hormonal, or social. Rather, these are influenced by culture, language as well as physiology that is influenced by environment, experience, social culture, and physiology.
- Across human history and cultures there have and will remain intersexed and transgender people, this legislation unnecessarily singles out men and transgender people in suggesting some advantage in school athletics that is not borne out by relevant data, Olympic committee policies on gender participation, or state history involving transgender athletes. Furthermore it reifies harms to only female students, exempting male activities to further scrutiny in a nonsensical way.

This legislation should be deemed inexpedient to legislate. It harms our community and strengthens only the worst aspects of our policy agenda: to exclude, to stigmatize, and to reinforce outdated ideologies over abundant public health, education and sociological research available to better direct our mutually agreed upon aims of improving student performance and community outcomes. We need all our children to thrive, and this bill creates a wall to our community's success.

Citations & quotes follow

Holmes, M., & Monks, D. A. (2019). Bridging sex and gender in neuroscience by shedding a priori assumptions of causality. *Frontiers in neuroscience*, 13, 475.

<https://www.frontiersin.org/articles/10.3389/fnins.2019.00475/full>

“Thus, as transgender persons have become more visible in American political culture, opponents have advanced discriminatory laws and administrative policies barring access to public restrooms on the bases that transgender persons simply do not “exist,” that trans identity is the product of liberal myths and faulty science, and that civil rights law and constitutional protections regarding sex ought to be based on a narrow genitals- or chromosomal- based conception of sex.”

“In *Doe v. Yunits*, the Massachusetts Superior Court ruled in 2000 in favor of a transgender student’s right to dress in feminine attire based on her right to free expression under the U.S. Constitution’s First Amendment.<sup>9</sup> Federal appellate courts for the Sixth and Eleventh Circuits and the District of Columbia also ruled in favor of transgender plaintiffs who argued that they were guaranteed Title VII protections based on a 1989 U.S. Supreme Court decision that ruled sex stereotyping (e.g., discriminating against a woman for displaying masculine traits or a man for wearing feminine clothing) to be a form of sex discrimination.”

Hyde, J. S., Bigler, R. S., Joel, D., Tate, C. C., & van Anders, S. M. (2019). The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist*, 74(2), 171.

<https://people.socsci.tau.ac.il/mu/daphnajoel/files/2018/07/AmPsych-Gender-Binary-2018.pdf>

1. The authors identify 5 physiological areas of gender study, and in doing so they refute sexual dimorphism of the human brain, of the 2. behavioral neuroendocrinology findings of genetically fixed, non-overlapping, sexually dimorphic hormonal systems. They further examine psychological findings that highlight the similarities between men and women and demonstrate that 4. psychological research on transgender and nonbinary individuals’ identities and experiences are influenced by language, context, and behavior. The authors highlight 5. developmental research suggesting that the tendency to view gender/sex as a meaningful, binary category is culturally determined and malleable, and they demonstrate ways in which culture itself shapes biology and physiology as well as identity.

- “Although many studies have reported differences between women and men in brain structure (e.g., Lenroot & Giedd, 2010; Ruigrok et al., 2014), these differences are not sexually dimorphic; rather, there is considerable overlap between the distributions of women and men.”
- “For example, the intermediate nucleus of the human hypothalamus is about twice as large, on average, in men compared with women, yet in approximately 30% of men, the size of this nucleus falls in the female-typical range”
- “Thus, it is unlikely that brains are internally consistent and dimorphic; rather, each brain comprises a unique mosaic of features, some more common in females and others more common in males (Joel, 2011, 2012).”
- “For example, for a brain region that was larger, on average, in women, the female-end form was defined as volumes in the top 33% for women, and the male-end form was defined as volumes in the lowest 33% for men... Accordingly, sex differences in the human brain do not add up to create two types of brain, a male brain and a female brain. Instead, most brains are gender/sex mosaics.”
  - “*mosaicism*, that is, having at least one element with the female-end form and at least one element with the male-end form.”
- “Thus, human brains are not internally consistent for male-typical and female-typical features. Instead, most human brains are a mosaic of these features.”
- “Many people mistakenly assume that there are male hormones and female hormones, but this idea is challenged by the presence of estrogens (e.g., estradiol) and androgens (e.g., testosterone) in both women and men as well as in gender-diverse (e.g., nonbinary) people, because these hormones, as well as progesterone, are produced by both ovaries and testes as well as the adrenal

glands and through peripheral conversion in fatty tissue; these sources are present in all bodies (for a review, see Gillies & McArthur, 2010).

- “average levels of estradiol and progesterone do not differ between women and men (Liening, Stanton, Saini, & Schultheiss, 2010; van Anders, 2010)”
- “fetuses and prepubertal children cannot be categorized into a gender binary on the basis of androgens and estrogens”
- “That is, hormone levels are not a fixed characteristic of individuals—even though they may show some trait-like patterns—but instead are a set of changing and interdependent parameters”
  - “For example, engaging in dominance contests can increase estradiol and progesterone (Oxford, Tiedtke, Ossmann, Özbe, & Schultheiss, 2017; Stanton & Schultheiss, 2007). Social closeness also increases progesterone (S. L. Brown et al., 2009), as might social rejection (Duffy, Harris, Chartrand, & Stanton, 2017).”
- “But heritability estimates of testosterone also demonstrate a relatively large role for nongenetic factors, including the environment (e.g., time of day) and social factors (Harris et al., 1998; Kuijper et al., 2007; van Anders, 2013).”
  - “For example, sexual thoughts increase testosterone levels in women (Goldey & van Anders, 2011); testosterone responses to sexual thoughts are correlated with the type of fantasy content in men (Goldey, Avery, & van Anders, 2014); parenting behaviors decrease testosterone but only when they are nurturant (van Anders, Tolman, & Volling, 2012); and relationship transitions are recursively linked with testosterone (Dibble, Goldey, & van Anders, 2017).”
  - “Indeed, testosterone responses can be parsed more meaningfully into decreases related to nurturance (involving warm, close, supportive, and/or loving contact) and increases related to competition (involving acquisition of resources, broadly defined), providing a theoretical basis that is grounded in both sociocultural and evolutionary understandings as well as other endocrine systems (via the steroid/peptide theory of social bonds; van Anders et al., 2011).”
- “Thus, hormone research is showing the ways that gendered expectations and lived experiences can actually shape the very hormones thought to underlie the essence of femaleness and maleness, again challenging basic tenets of the gender binary.”
- “By 2005, enough meta-analyses of gender differences had appeared to make an overall pattern clear: Most psychological gender differences are small or trivial.”
  - “Based on 124 effect sizes, 30% were trivial ( $d < 0.10$ ) and an additional 48% were small, falling in an interval around  $d = 0.20$ . That is, a total of 78%, or fully three quarters, of gender differences were small or trivial.”
- “Today, *transgender* or *trans* refers to a spectrum of people and experiences, often collected under the term the *transgender umbrella* (e.g., Stryker, 2008). This umbrella can include those with a gender identity that does not conform to the birth-assigned category as well as those who practice nonconformity to social expectations in gender expression that cater to cisgender, heterosexual individuals.”
- “First, transgender and nonbinary individuals show that birth-assigned categories are imperfect for predicting how a person will self-label their gender identity, thereby undermining a key assumption of the gender binary.”
  - “They found differences between the two groups who shared the same birth-assigned sex category (i.e., between trans girls and cis boys, and between trans boys and cis girls) but similarities between the groups who shared the same gender identity. That is, trans girls and cis girls were statistically indistinguishable from each other on this task, as were trans boys and cis boys.”

- “Second, although many cis and trans women and men experience their identities as one category and not the other, others experience their identity as nonbinary (Galupo, Pulice- Farrow, & Ramirez, in press; Joel, Tarrasch, Berman, Mu- kamel, & Ziv, 2014; Tate et al., 2014), challenging the assumption that gender/sex comprises only the dichotomous categories of male and female.”
  - “The agender respondents in that sample provided poignant insights into their sense of self-categorization in a manner that requires more than two gender groups. For instance, one agender respondent noted, ‘I do not have an internal gender. It is not androgynous; it is not fluid; it is non-existent’.”
  - “Accordingly, fully integrating nonbinary experiences into psychology’s views of gender identity re- quires that scholars recognize that *male* and *female* are insufficient for capturing the full range of identities and acknowledge that gender/sex may be irrelevant to individ- uals’ sense of who they are.”
- “This concept of “doing gender” is closely linked to the view that gender is socially constructed at many levels, including interpersonal interactions and cultural messages...by engaging in gender displays through their choices concerning clothing, accessories, and grooming (e.g., wearing skirts and high heels, and shaving legs) and their adoption of roles and activities (e.g., working in computer science and repairing cars).”
- “Third, some transgender experiences highlight the fact that self-labeling with respect to gender (“being gender”) is separable from the enactment of traits, roles, and behaviors (“doing gender”).”
- “In English, gendered language includes nouns (e.g., *girl*), honorific titles (e.g., *Miss*), occupational titles (e.g., *actress*), and pronouns (e.g., *she*, *his*). Words that denote gender in English use a binary system with two dichotomous markings: male and female.”
  - “children raised within English-speaking (and other gendered-language) environments are literally forced by language to attend to gender and view it as a binary category.”

“what scientists call *sex*— genitals, genes—reflects how biological sex is socially interpreted and constructed”“*Gender/ sex* is a research concept that helps to overcome the gender binary (Jordan-Young & Rumiati, 2012; van Anders, 2015). It reminds us that when researchers study human phenom- ena, they study phenomena that exist in women, men, and gender-diverse people: whole people who are embodied in ways that reflect both evolution and social context.”

“Narratives suggest that forcing individuals into a gender category that is unwanted can have enormous psychological costs (e.g., Beemyn & Rankin, 2011).”