IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA *Defendants.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin Oral Argument Requested

MEMORANDUM IN SUPPORT OF DEFENDANT-INTERVENOR AND THE STATE OF WEST VIRGINIA'S MOTION TO EXCLUDE EXPERT TESTIMONY OF ARON JANSSEN

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Introduction

West Virginia passed the Sports Act to protect the right of women and girls to be champions in their own sports. Plaintiff B.P.J. is challenging this law, arguing that biological males who identify as females should be allowed to compete on female teams. Lainey Armistead and West Virginia intervened in this case in support of the law. They want women and girls to have equal opportunities to win and to compete against opponents similar in size, strength, and stature.

To that end, they submitted reports from several expert witnesses in support of the Sports Act, including a report from psychiatrist Stephen Levine and a report from clinical psychologist James Cantor. Drs. Levine and Cantor each demonstrated, among other things, that gender identity—particularly among children and adolescents—is not fixed, as the rate of desistance among gender dysphoric youth is very high; social transition is at best an experimental therapy; and there is no scientific evidence that social transition, puberty blockers, or cross-sex hormones improve mental health outcomes for children and adolescents experiencing gender dysphoria. *See generally* Def.-Intervenor's App. in Supp. of Mot. for Summ. J. ("App.") 384–491; App. 276–383.[1]

In rebuttal, B.P.J. offered a report from Dr. Aron Janssen, a psychiatrist, purporting to show that, *contra* Drs. Levine and Cantor, social transition and puberty blockers improve mental health, desistance is unlikely for what he calls "insistent" gender dysphoric youth, and preventing youth who identify with the opposite sex from playing on sports teams aligned with their gender identity will harm their mental health.

But Dr. Janssen's opinions are so riddled with basic methodological errors that they fail to discredit Drs. Levine or Cantor and should not be admitted. Throughout

[1] All citations to documents filed in this case are to the document's original or bates stamped page number.

his report, Dr. Janssen conflates correlation with causation, cites studies that do not support his conclusions, and ignores conflicting evidence. Indeed, he cites no studies, sources, data, or anything else specific to the mental health effects of requiring athletes to compete on teams consistent with their biological sex. Thus, his opinion does not and cannot help this Court determine whether males who identify as females should be permitted on female sports teams. That, combined with the numerous errors in his opinion, makes his expert opinions speculative, his methods unreliable, and his opinion unhelpful. The Court should exclude his opinions.

Legal Standard

It is the "trial court's duty to play a gatekeeping function in deciding whether to admit expert testimony." *United States v. Crisp*, 324 F.3d 261, 265 (4th Cir. 2003); Fed. R. Evid. 702(a). In this role, the Court should ensure the evidence "rests on a reliable foundation and is relevant." *In re C.R. Bard, Inc.*, 948 F. Supp. 2d 589, 601 (S.D.W. Va. 2013) (citing *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 597 (1993)). Courts need to scrutinize expert opinions as "[e]xpert evidence can be both powerful and quite misleading." *Eghnayem v. Bos. Sci. Corp.*, 57 F. Supp. 3d 658, 697 (S.D.W. Va. 2014) (citation omitted). And the party proffering the expert testimony must "com[e] forward with evidence" where the court can determine if the testimony is properly admissible. *Maryland Cas. Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780, 783 (4th Cir. 1998) (per curiam).

A. Expert evidence must be relevant.

The purpose of using an expert witness is to "help the trier of fact" make factual determinations. *United States v. Lespier*, 725 F.3d 437, 449 (4th Cir. 2013); Fed. R. Evid. 702(a). But if the opinion is the product of "common sense rather than … specialized knowledge" it is unnecessary to the fact finder. *Mod. Remodeling, Inc. v.*

Tripod Holdings, LLC, No. CV CCB-19-1397, 2021 WL 5234698, at *4 (D. Md. Nov. 9, 2021).

B. Expert evidence must be reliable.

An expert's opinion must be reliable, meaning that it is based on sufficient and appropriate facts, the product of a reliable methodology, and an appropriate application of that methodology to the facts of the case. *In re C.R. Bard, Inc.*, 948 F. Supp. 2d at 601. There are at least four errors relevant to Dr. Janssen's opinions here that will render an expert's opinion unreliable.

First, the report must be based on sufficient facts or data to support the expert's opinions. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered."). A reliable expert opinion "must be based on scientific, technical, or other specialized knowledge and not on belief or speculation." *Oglesby v. Gen. Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999) (emphasis omitted). This knowledge must stem from valid scientific methods and be properly tested. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 203 (4th Cir. 2001). And the court is not required to accept the opinion evidence "that is connected to existing data only by the *ipse dixit* of the expert." *Id.* at 203 (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 157 (1999)).

Second, the expert must use facts or data supported by the record, for an opinion "based on assumptions not supported by the record should be excluded." *Tyger Constr. Co. Inc. v. Pensacola Constr. Co.*, 29 F.3d 137, 143 (4th Cir. 1994). When an expert's opinion is purely based on his unproven statement, a court could conclude that there is "too great an analytical gap between the data and the opinion proffered." *Knight v. Boehringer Ingelheim Pharms., Inc.*, 323 F. Supp. 3d 809, 821 (S.D.W. Va. 2018).

Third, experts must "acknowledge or account for" "evidence tending to refute the expert's theory" or it is "unreliable." *Eghnayem*, 57 F. Supp. 3d at 676-77 (cleaned up). When experts engage in a "[r]esult-driven analysis, or cherry-picking" it weakens the scientific method, and it is a "quintessential example of applying methodologies (valid or otherwise) in an unreliable fashion." *In re Lipitor*, 892 F.3d 624, 634 (4th Cir. 2018). Courts regularly exclude expert testimonies that cherry-pick data to support their opinion because it "is not good science." *Id.* (cleaned up). And when an expert that chooses to "completely ignore significant contrary" evidence and instead focuses on evidence that supports their contention, their opinion is unreliable. *Eghnayem*, 57 F. Supp. 3d at 677.

Fourth, an expert must "reliably appl[y]" the principles and methods "to the facts of the case." *In re C.R. Bard, Inc.*, 948 F. Supp. 2d at 601. A "bold statement of the experts' qualifications, conclusions, and assurances of reliability are not enough to satisfy the *Daubert* standard." *Id.* at 612 (citation omitted).

C. The proponent of expert evidence bears a "burden of coming forward" with facts establishing admissibility.

The proponent of expert evidence does not (at the *Daubert* stage) bear a burden to "prove" that the proffered evidence is true, but it does bear "the burden" to "come forward with evidence from which the court can determine that the proffered testimony is properly admissible" within the boundaries demarked by *Daubert*. *Maryland Cas. Co.*, 137 F.3d at 783.

Further, this is not a requirement that can be patched up after the facts in briefing or argument. Rather, it dovetails with the requirement of Rule 26 that the expert's pre-trial written report must contain not only "a complete statement of all opinions the witness will express," but also "the basis and reasons for them" and "the facts or data considered by the witness in forming them …." Fed. R. Civ. Proc.

26(a)(2)(B)(i)-(ii). Thus, information sufficient to meet that burden of coming forward must be "in [the expert's] report." *Eghnayem*, 57 F. Supp. 3d at 706.

Except where a motion challenges the expert qualification of the witness himself, the Rule 702 inquiry is an opinion-by-opinion one; each proffered opinion must meet the threshold requirements. *See, e.g., In re C.R. Bard, Inc.*, 948 F. Supp. 2d at 603.

The Supreme Court and subsequent courts have emphasized the potential for expert testimony to be "both powerful and quite misleading," *Daubert*, 509 U.S. at 595; *Cooper*, 259 F.3d at 199, and the resulting importance of the trial court's "gatekeeper" function in policing the minimum requirements of helpfulness and reliability. See, e.g., *In re C.R. Bard, Inc.*, 948 F. Supp. 2d at 601.

Argument

Dr. Janssen offers four basic opinions, none of which are admissible.

First, he opines that socially transitioning benefits individuals with gender dysphoria. This opinion is unreliable because Dr. Janssen's own sources do not make a causal link between social transition and positive outcomes. Dr. Janssen can only get to his conclusion by conflating correlation with causation, which is unscientific and renders his opinion unreliable.

Second, Dr. Janssen contends that putting children on puberty blockers will lead to beneficial outcomes. This opinion is unreliable because, again, Dr. Janssen's own sources do not support it. What is more, Dr. Janssen ignored substantial contrary evidence that puberty suppression is a risky, experimental, and unproven theory.

Third, Dr. Janssen contends that children with a "strong" or "insistent" identification with the opposite sex are unlikely to desist. This contention is not relevant to any issue in the case, nor is it reliable, as Dr. Janssen's own citations

confirm, there is not reliable evidence to predict whether a gender dysphoric child will persist or desist in identifying with the opposite sex.

Fourth, Dr. Janssen opines that not allowing biological males who identify as females to play female sports will harm their mental health. This testimony is unreliable as it is not based on any scientific data that actually studied the question. Stripped of any scientific content (because there is none), Dr. Janssen's opinion regresses into a truism—people who are not allowed to do what they want to do may react negatively—which is hardly something factfinders need an expert to know.

I. Dr. Janssen's opinion that socially transitioning is beneficial to individuals with gender dysphoria should be excluded because it is unreliable and based solely on Dr. Janssen's *ipse dixit*.

Dr. Janssen asserts that "[r]esearch indicates that social transition significantly improves the mental health of transgender young people." Def.-Intervenor and the State of W. Va.'s App. in Supp. of Mots. to Exclude Expert Testimony of Drs. Adkins, Fry, Janssen, and Safer ("Daubert App.")[2] 124 (¶ 35). Thus, according to Dr. Janssen, social transition brings "significant mental health benefits." Daubert App. 118 (¶ 18). He considers social transition to be "a part of gender-affirming care."[3] App. 927 (89:7–11). And he expands social transition to include participation in boys' or girls' athletic teams consistent with one's gender identity as

[2] The Daubert Appendix was filed contemporaneously and attached to Defendant Intervenor and the State of West Virginia's Motion to Exclude Expert Testimony of Dr. Deanna Adkins.

[3] It is worth noting that Dr. Janssen admits that the term "gender affirming care"—though used throughout Dr. Janssen's report as the appropriate mode of treatment for gender dysphoria—has no fixed or generally accepted meaning. App. 927 (87:11–24). Dr. Janssen testified that social transition "is a part of gender-affirming care (App. 927 (89:7–11)), but he admits "there is no one agreed upon use of [gender affirming care] and it is used by different people in different context to mean *whatever they want it to mean*, depending on who is asking the questions." App. 927 (87:11–19) (emphasis added). Thus, simply labelling social transition as part of "gender affirming care" does not validate it as an appropriate or beneficial treatment.

it may be an aspect of social transition "for some students." App. 928 (91:5–20). In short, he attempts to offer an expert opinion establishing a causal link between social transition and mental health benefits, presumably to support his later argument that allowing biological males who identify as females to compete on female teams is necessary to support their mental health.

But, as demonstrated below, his opinion is unreliable because he provides no scientific evidence of any such causal link. Instead, he conflates association and causation.[4] Dr. Janssen has not conducted his own independent research that social transitioning is linked with mental health benefits. *Berlyn, Inc. v. Gazette Newspapers, Inc.*, 214 F. Supp. 2d 530, 539–40 (D. Md. 2002) (excluding an expert because his methods were "wholly lacking in independent research"). And, in the absence of independent research, Dr. Janssen must provide "verifiable evidence that the testimony is based on scientifically valid principles." *Doe v. Ortho–Clinical Diagnostics, Inc.*, 440 F. Supp. 2d 465, 470 (M.D.N.C. 2006) (cleaned up); *Kolbe v. O'Malley*, 42 F. Supp. 3d 768, 780 (D. Md. 2014) ("courts have excluded testimony where the expert failed to conduct any independent examination or research to ensure the reliability of the information on which he relies"). His report contains no such evidence.

[4] The conflation of association and causation is a common error in Dr. Janssen's various criticisms of Drs. Levine and Cantor. For example, Dr. Janssen labels Dr. Levine's approach to the treatment of gender dysphoria as the "gender identity conversion model" and then claims that "people who reported experiencing those conversion efforts were more likely to have reported attempting suicide, especially those who reported receiving such therapy in childhood," thus implying that Dr. Levine's method of care leads to suicide. Daubert App. 123–24 (¶ 34). The only support Dr. Janssen cites for this provocative statement is Turban, J.L., et al. (2020). Daubert App. 736. But, as Dr. Janssen admitted, the authors of the study explicitly noted that it was cross-sectional and unable to demonstrate causation; so implying any causative relationship between suicide rates and conversion therapy would be erroneous. App. 978–79 (291:24–295:3).

To support the claim that social transitions improve mental health, Dr. Janssen cites studies by Gibson (Daubert App. 479), Olson (Daubert App. 647), and Durwood (Daubert App. 465).[5] Daubert App. 124 (¶ 35); App. 937 (126:17–127:5). Gibson is a cross-sectional study of transgender youth and their individual experiences with gender dysphoria, and Dr. Janssen admits cross-sectional studies do not demonstrate causation. App. 937 (127:6–18). He testified this study "demonstrated that there was a *correlation*" between mental health and socially transitioning. App. 937 (127:13–18) (emphasis added). But "[a] correlation does not equal causation." *In re Lipitor*, 174 F. Supp. 3d 911, 934 (D.S.C. 2016) (citing *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 885 (10th Cir. 2005); *Peters v. AstraZeneca LP*, 224 F. App'x 503, 507 (7th Cir. 2007) ("[A] correlation alone is not evidence of causation."). Dr. Janssen even admits the Gibson study "did not show causation." App. 937 (127:19–21). Thus, Gibson does not support Janssen's conclusion that socially transitioning has mental health benefits.

Likewise, in the Olson study, the authors expressly note the study design "preclud[es] the ability to make causal claims about the impact of social transitions on mental health," among numerous other serious and admitted limitations. Daubert App. 652. Further, as set forth in Dr. Cantor's report, there is peer-reviewed research by Schumm and Crawford demonstrating serious flaws in Olson's statistical analysis that, once corrected, result in a finding that socially transitioned youth exhibit far worse mental health outcomes than age-matched peers, to which Olson has never responded. Daubert App. 698; App. 394–95 (¶¶ 15, 16). Dr. Janssen utterly

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[5] Durwood, L., et al., *Mental Health and Self-Worth in Socially Transitioned Transgender Youth*, 56 J. Am. Acad. Child Adolesc. Psychiatry 116 (2017) (characterizing "whether social transitions per se caused the positive mental health outcomes observed in the transgender children in the present study" as something they could not establish, declining to draw such as "causal inference," and highlighting numerous limitations in the study population).

misapprehends the nature of the Schumm and Crawford critique, as he claims that "[t]he small statistical errors in Olson 2016 had already been corrected," citing to an errata published by Olson in 2018 that pre-dates the Schumm and Crawford critique. Daubert App. 124 (¶ 35 n.9). But the errata Olson published did *not* correct any statistical errors. As opposing counsel noted and Dr. Cantor confirmed, "the only correcting [*sic*] to the article was a missing comma, *not any changes to the statistics in the Olson analysis*." Supp. App. to Def.-Intervenor's Mot. for Summ. J. (Supp. App.) (filed contemporaneously) 276 (266:4–8) (emphasis added). Thus, Dr. Janssen's statement that Olson corrected her statistical errors is wrong on its face. Because neither Olson nor Dr. Janssen have addressed the published critique of Olson's statistical analysis, Dr. Janssen has nothing to rebut it except his *ipse dixit* assertion that the critique is "unsuccessful[ ]." Daubert App. 124 (¶ 35 n.9).

In the same vein, the authors of the Durwood study flat admitted that they did not establish causation. Daubert App. 469. And the study was based entirely on self-reports not presented as being assessed by a clinician from people recruited through word of mouth and online forums for families of transgender and gender non-confirming youth. App. 927 (86:5–87:10). Dr. Janssen himself characterized other studies using a similar selection model and methodology as so flawed as to be "meaningless." Daubert App. 128–29 (¶ 43); App. 919 (56:10–18); App. 919 (54:17–19); App. 920 (60:7–10). Thus, by Dr. Janssen's own standards, the conclusion of the Durwood study is not the "product of reliable principles and methods." *Berlyn, Inc.*, 214 F. Supp. 2d at 539–40.

In sum, Dr. Janssen provides no reliable evidence that social transition improves mental health. Instead, he strings together a modicum of information that there may be a correlation between social transition and mental health, and that *some* socially transitioned youth *may* exhibit mental health outcomes similar to those of age-matched peers, while others do not. Using this paltry data to infer that social

transition causally improves mental health is well out of bounds and should not be admitted.[6] *Huss v. Gayden*, 571 F.3d 442, 459 (5th Cir. 2009) ("[a]ny scientist or statistician must acknowledge, however, that correlation is not causation.").

II. Dr. Janssen's opinion that puberty blockers are related to positive mental health outcomes should be excluded because neither the literature he cites nor the literature he ignores support that conclusion.

Dr. Janssen asserts that "puberty-blocking medication and hormones have been associated with a variety of mental health benefits." Daubert App. 128 (¶ 41). He further opines that taking puberty-blocking medication is "associated with mental health benefits in both the short and long term." Daubert App. 118 (¶ 19). He believes that "puberty-delaying medication followed by gender-affirming hormones brings a transgender person's body into greater alignment with their identity over the long term." Daubert App 126–27 (¶ 40). And he considers the use of puberty blockers and cross sex hormones to be part of gender-affirming care. App. 928 (91:21–92:6).

But this opinion suffers two principal problems. *First*, it is not supported by the peer-reviewed literature that Dr. Janssen himself cites, none of which isolate the causal effects (if any) of puberty blockers on mental health outcomes. *Second*, Dr. Janssen is unaware of and does not account for the contrary literature—including practice guidelines from major medical organizations around the world—demonstrating that the use of puberty blockers is experimental and should be limited to research, not clinical, settings.

[6] To the extent B.P.J. intends to offer this same evidence but stop short of implying causation, such evidence is irrelevant because it doesn't support Janssen's ultimate conclusion that preventing biological males who identify as females from competing in female sports (which he claims is part and parcel of their social transition) harms their mental health.

A. Dr. Janssen cites no scientific evidence of a causal relationship between the use of puberty blockers and positive mental health outcomes.

Dr. Janssen cloaks his opinion about the mental health benefits of puberty blockers with the appearance of reliability via a nearly page-long footnote citing eight peer-reviewed sources. Daubert App. 127 (¶ 40 n.14). But on review, not one of these sources establishes that puberty blockers—as opposed to some other portion of the treatment—are the statistically significant cause of any benefits.[7]

And Dr. Janssen admits as much. Several of the studies he cites are cross-sectional, which, he agreed, precludes them from establishing causation. App. 939 (134:3–9) (admitting that Green study "was not designed to show causal outcomes"); App. 939 (135:10–15) (admitting that Turban study "was not designed to demonstrate causation"); App. 940 (139:14–140:17) (admitting that van der Miesen study was cross-sectional and therefore did not demonstrate causation).

Other studies failed to distinguish whether positive outcomes were caused by the hormone therapy itself or some other treatment modality, such as psychotherapy, that was administered at the same time. App. 938 (132:16–133:3) (admitting Tordoff article did not breakdown whether improvement was caused by hormone therapy or mental health therapy); App. 939 (136:8–24) (admitting participants in Achille study receive mental health therapy in addition or hormone treatment); App. 940–41 (141:8–142:9) (admitting that participants in De Vries study generally received psychotherapy and puberty blockers, preventing any conclusion as to which was causative); App. 942 (146:3–147:24) (admitting that none of Costa study participants received just puberty blockers, as opposed to both puberty blockers and

[7] It is important to note that Janssen lacks the basic understanding of puberty in children. Janssen was not able to testify on the age that puberty typically starts in biological males without "information in from of [him]." App. 953 (191:1–7). It is confounding that an expert witness in the area of gender dysphoria—and someone who routinely works with puberty blockers—could lack this basic information.

psychotherapy). *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 265 (4th Cir. 1999) ("[a] differential diagnosis that fails to take serious account of other potential causes may be so lacking that it cannot provide a reliable basis for an opinion on causation.").

And some studies reported results that lacked statistical significance. App. 940 (138:11–16) (admitting that none of the results in the Kuper study with respect to the use of puberty blockers reached statistical significance); App. 942 (146:3–147:24) (admitting that Costa study results lacked statistical significance); App. 939 (136:8–24) (admitting Achille study results generally lacked statistical significance). *In re Lipitor*, 174 F. Supp. 3d at 926 (expert who failed to show that reliance on "non-statistically significant findings is accepted within her scientific community" had her opinion excluded).

As a result, none of these studies establish causation. *Id.* at 934 (expert's testimony was excluded when she relied on an observational study and "confuse[d] association and causation" because "it is accepted by all parties in this case and well established in case law that an association is insufficient to prove causation.").

What is more, Dr. Janssen admits that very little is known about the long-term effects of medically delaying puberty. App. 958–59 (212:3–215:20). In particular, he admits that he is aware of no studies assessing how the prolonged delay of puberty affects brain development. App. 959 (214:14–19). With respect to studies on the effects of prolonged puberty suppression on bone health and gonadal function, he simply states that he is not an endocrinologist and doesn't keep up with that literature. App. 958–59 (213:14–214:8). He further admits that any recommendation to treat gender dysphoria with puberty suppression is based on low quality evidence, as the term "low quality" is used by the Endocrine Society. App. 959 (215:21–217:9).

In sum, Dr. Janssen's own testimony shows that his opinion about puberty blockers improving mental health is not based on any peer-reviewed evidence establishing such a causal link, and that the use of puberty suppression medication

is based on low quality evidence. Accordingly, his opinion that puberty suppression improves mental health outcomes lacks basic reliability and is not admissible.

B. Dr. Janssen ignores the substantial literature against the use of puberty blockers

Further demonstrating the unreliability of Dr. Janssen's opinions about puberty blockers, Dr. Janssen utterly ignores the substantial contrary research and guidelines that caution against puberty suppression. Health policy organizations and major gender clinics in Sweden, Finland, and the United Kingdom recently changed their policies and now recommend that puberty blockers be delayed to age 16 or used only in a research setting, not clinical setting. Daubert App. 733; Daubert App. 624; Daubert App. 475; Daubert App. 477; Daubert App. 754. While Dr. Janssen admitted to hearing about these changes, he knew little about them and did not account for them in his report. App. 931 (103:8–15); App. 932 (107:3–8) (Sweden); App. 931–32 (105:6–106:10) (United Kingdom); App. 933 (110:2–10) (Finland). Likewise, he had little familiarity with the UK National Health Service's published review of evidence on puberty suppression, which concluded that the evidence in favor of puberty suppression was unreliable. Daubert App. 754; App. 933 (111:1–113:15). And he did not cite or account for that study in his report.

As a psychiatrist who treats children with gender dysphoria, Dr. Janssen should know about this emerging research, and he should be prepared to engage with it. *Eghnayem*, 57 F. Supp. 3d at 676 (expert's opinion may be unreliable if "he fails to account for contrary scientific literature") *Tyree v. Bos. Sci. Corp.*, 54 F. Supp. 3d 501, 558 (S.D.W. Va. 2014) (citation omitted) (expert's opinion is unreliable if he instead "selectively [chooses] his support from the scientific landscape."). Instead, he ignored it. *In re Lipitor*, 174 F. Supp. 3d at 931 ("[s]uch cherry-picking of data is unreliable and 'fails to satisfy the scientific method and *Daubert*.'") (citation omitted). And his choice "to completely ignore significant contrary" evidence further demonstrates his

opinion is unreliable. *Eghnayem*, 57 F. Supp. 3d at 677 (citing *Rimbert v. Eli Lilly & Co.*, No. CIV 06–0874 JCH/LFG, 2009 WL 2208570, at *14 n. 19 (D.N.M. July 21, 2009)).

III. Dr. Janssen's opinion that children with a "strong" or "insistent" understanding of their gender are unlikely to desist should be excluded because it is irrelevant and is not supported by the sources Dr. Janssen cites.

Dr. Janssen contends that children with a "consistent, persistent, and insistent understanding of their gender identity from a young age" are more likely to persist in that identity into puberty. Daubert App. 120 (¶ 26). Presumably, this opinion is intended to imply there is a subset of the gender dysphoric population who can be identified as likely to persist, thus justifying an early social transition that would, in Dr. Janssen's view, include playing on a sports team that does not align with their biological sex.

But this opinion is irrelevant to who gets to participate on what team under the Sports Act. Whether transitioning is beneficial does not impact which individuals should compete on which sports team. What's more, this opinion is also irrelevant without some demonstration that social transition is beneficial, which is lacking for the reasons set forth above. Even if we could identify on the front end which children will and will not persist in gender dysphoria (and we cannot), that would not matter in this case without proof there are particular benefits to gain or harms to avoid by allowing those children on to a sports team reserved for the opposite sex. And, as previously discussed, Dr. Janssen cites no such evidence. Thus, his opinion that "insistence" allows us to predict which children will persist in identifying as transgender should be excluded as irrelevant.

In addition, the opinion itself is unreliable because it cites only two studies, neither of which supports the proposition that persistence can be predicted. As an initial matter, it is well-established that a large majority of children who express a

gender identity different from their natal sex will desist. *See* Daubert App. 419-444. Dr. Janssen does not contradict this evidence.[8] It is equally well-established that no one can determine which children will desist and which will not. App. 986 (322:12-323:2). Dr. Janssen agrees with this too, noting that "[w]e cannot definitively determine which prepubertal children will go on to identify as transgender when they reach adolescence …." Daubert App. 120 (¶ 26).

Dr. Janssen then attempts to pull back his admission by claiming a child is less likely to desist if the child's gender identification is "strong," "persistent," "insistent," and "consistent." Daubert App. 120, 125 (¶¶ 26, 37). This assertion is based entirely on two articles—one by Steensma (Daubert App. 724) and one by Rae (Daubert App. 678)—neither of which provide a reliable method for predicting which children will persist in identifying with the opposite sex.

As Dr. Janssen admitted, in the Steensma study, even among the most insistent group of participants—those who met all of the criteria for a diagnosis of gender identity disorder—nearly half desisted in identifying with the opposite sex. App. 969 (255:15–23). Thus, "insistence," as measured by Steensma, was not a reliable method for determining who would persist; at most, it identified a group for whom the likelihood of persistence was a coin flip. Further, the Steensma study noted that persistence was more likely in natal girls that natal boys, making it is all the

[8] To be sure, Dr. Janssen quibbles with whether a child who desists experiences an actual change in gender identity (he thinks not) or simply a change in their understanding of their gender identity (he thinks so). Dauber App. 120 (¶ 26); App. 986 (322:1–323:2). But for purposes of evaluating this opinion, it doesn't matter. Whether the desisting child experiences an actual change in gender identity or simply a change in their understanding of gender identity, the fact remains that a child who once expressed a gender identity different from his natal sex desisted from such expression before the conclusion of puberty. And nothing in Dr. Janssen's report denies the existence or ubiquity of this phenomenon.

more clear that there is no reliable method for determining persistence among natal boys. Daubert App. 724.

The Rae study suffers the same problems and more. In that study, the researchers assigned each child a "gender identity and preference score" between 0 and 1 based on the intensity of the child's identification with the opposite sex, with 1 being high intensity and 0 being low intensity. Daubert App. 681. They then measured whether children with a high score were likely to transition. Daubert App. 681. Notably, even among children with a score of 0.75—just *above* the median for children who transitioned—the odds of the child transitioning were only 48%. Daubert App. 686. So the Rae study also fails to provide any reliable basis on which to determine whether a child expressing gender non-conformity will persist or desist into adolescence.

Further, the Rae study was riddled with methodological errors and limitations. As the authors and Dr. Janssen acknowledged, the study did not compare a single group of children before and after transition; the participants were skewed by race, class, parental education, and political affiliation; follow-up was too short to know how many children would ultimately transition or detransition; the sample overrepresented the number of children who would transition; and participants were recruited through internet listserves and events serving the transgender community, thus leading to selection bias. App. 969–70 (257:2–258:10).

In sum, the cited studies cannot answer the question of whether a child who identifies with the opposite sex will persist into adolescence. Dr. Janssen acknowledges this in one breath while suggesting in the next that undefined adjectives like "strong" and "insistent" are meaningfully predictive. This suggestion is unreliable and misleading, as the very studies Dr. Janssen cites show that even the most "insistent" children—and, notably, "insistence" is measured differently in these studies—have no more than about a 50-50 chance of persisting. Accordingly,

even putting aside the lack of evidence that social transition is beneficial, any contention that we can know who will persist and need to socially transition is beyond the available science, and Dr. Janssen should be excluded from suggesting otherwise. *Eghnayem*, 57 F. Supp. 3d at 677 (noting that "a reliable expert would not … misstate the findings of others, make sweeping statements without support, and cite papers that do not provide the support asserted.") (citation omitted).

IV. Dr. Janssen's opinion that preventing biological males who identify as female from playing on female sports teams causes harm should be excluded because no scientific evidence supports it.

Dr. Janssen contends that preventing biological males who identify as females from competing on female sports teams would be harmful. Daubert App. 132 (¶ 51). This opinion should be excluded because of the wide analytical gap between the scientific evidence cited and Dr. Janssen's conclusion. Stripped of its non-scientific patina, Dr. Janssen's opinion is nothing more than the truism that people who are prevented from doing something they want to do may react negatively, which is hardly the proper subject for expert testimony.

A. Dr. Janssen's opinion leaves too large an analytical gap between the evidence cited and his conclusion.

Dr. Janssen's contention that preventing males who identify as females from participating on female sports teams will harm their mental health appears based on all of two articles—one by White Hughto, which is cited for the broad proposition that "stigma" has a harmful effect on transgender people, (Daubert App. 924) and one by Clark, which is cited for the proposition that LGBTQ youth benefit from participation in sports. Daubert App. 445; Daubert App. 132 (¶¶ 51 & n.21, 52 & n.22). Neither of these studies supports Dr. Janssen's conclusion.

The White Hughto article is a literature review that speculates on the ways "stigma," which it defines as "the social process of labeling, stereotyping, and rejecting

human difference as a form of social control," might affect the health of people who identify as transgender. Daubert App. 925. The article admits to a "dearth of research" on "the long-term physical health effects of stigma-related stress in transgender persons," but asserts that such effects are "likely" based solely on research of "other stigmatized groups." Daubert App. 932. The article concludes with a research agenda providing that "[s]tronger evidence—using population-based, longitudinal, and experimental designs—is needed to document the causal relationship between stigma and adverse health in US transgender populations." Daubert App. 936.

On its face, this article reaches no scientific conclusions at all, much less any conclusions related to participation in sports by people who identify as transgender. Instead, it puts forth a broad conception of "stigma," hypothesizes that "stigma" is related to adverse health effects in the transgender population, and proposes a research agenda to test that hypothesis. Without scientific evidence that the hypothesis is true, the article cannot reliably demonstrate anything. *E. Auto Distributors, Inc. v. Peugeot Motors of Am., Inc.*, 795 F.2d 329, 337 (4th Cir. 1986) (his conclusions are "not supported by the record."); *Ortho-Clinical Diagnostics, Inc.*, 440 F. Supp. 2d at 474 (expert's "conclusion in this matter is not supported even by the literature he presented to the Court" and does not meet the *Daubert* standard).

But even if the article proved the hypothesis that "stigma" is related to poorer health—and it doesn't even claim to do so—the hypothesis operates at far too high a level of generality to fit the facts of this case. The article makes no attempt to link its concept of "stigma" to sports participation, much less does it show that preventing biological males who identify as female from playing on female sports teams leads to any adverse health effects or outcomes. It therefore cannot support Dr. Janssen's opinion. *Gen. Elec. Co.*, 522 U.S. at 146 ("A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered."); *Tyree*, 54

F. Supp. 3d at 580, (excluding expert's opinion because it was too general and does not relate to particular plaintiff); *Eline v. Town of Ocean City,* 7 F.4th 214, 223 (4th Cir. 2021) (noting that even if expert's testimony is generally applicable "that does not make [his] testimony or opinions relevant to the discrete issue in this case."); *Sardis v. Overhead Door Corp.*, 10 F.4th 268, 281 (4th Cir. 2021) (noting that expert must have a "valid scientific connection to the pertinent inquiry.") (citation omitted).

Likewise, the Clark study merely showed a correlation between participation in sports and positive mental health outcomes for youth who identify as LGBTQ—*not* just youth who identify as transgender. Daubert App. 458. Indeed, the study found that there was no statistically significant interaction between transgender identification and sports participation. Daubert App. 455. So the study cannot support Dr. Janssen's opinion concerning transgender participation in sports for two reasons.

First, it did not show causation between participation and mental health benefits, not even as to the broad group of LGBTQ youth. *In re Lipitor*, 174 F. Supp. 3d at 934 ("Evidence of mere correlation, even a strong correlation, is often spurious and misleading when masqueraded as causal evidence.") (citing *United States v. Valencia*, 600 F.3d 389, 425 (5th Cir. 2010)). *Second*, it did not even show a correlation between sports participation by people who identify as *transgender* and any mental health benefits.

More fundamentally, the Clark study does not address which team a student should play for. Even if it established some causal relationship between the participation of transgender youth in sports and some positive outcome (and it does not), the Sports Act does not preclude anyone from participating in sports. And nothing cited by Dr. Janssen makes the slightest attempt to show that a male student who identifies as female obtains benefits—or avoids harm—*only* by participating on the women's team.

Dr. Janssen's personal experience does not help him either. Dr. Janssen has seen over 500 patients in his clinic, "less than two or three" of whom were affected by not being able to play sports consistent with their gender identity. App. 978 (293:13–18). He recalled few details about any of these situations. App. 978 (293:19–21); App. 987–88 (329:5–330:3). And in none of them did he report suicidality or anything approaching the "profoundly harmful impact" on mental health he posits would occur in his report. App. 987–88 (329:5–330:3); Daubert App. 132. Thus, Dr. Janssen cites neither scholarly literature nor his own clinical experience in support of his claim that the Sports Act will cause harm to students' mental health. Instead, he "asserted what amounted to a wholly conclusory finding based upon his subjective beliefs rather than any valid scientific method." *Cooper*, 259 F.3d at 200; *Belville v. Ford Motor Co.*, 919 F.3d 224, 234 (4th Cir. 2019) (court excluded expert's opinion when the expert never tested out the theory and the results "were purely theoretical.").

Notably, although Dr. Janssen asserts that the Sports Act will cause harm, he cannot describe when this "harm[ ]" will occur. Daubert App. 132 (¶ 51). He testified that it was "out of the scope of [his] expertise" to say whether a biological male that identifies as a woman should be immediately permitted on a female sports team. App. 988 (330:14–22). According to Dr. Janssen, whether it would be harmful to prevent a student from participating in accordance with their gender identity for any particular length of time—including a full year—would depend on "individualized assessment." App. 988 (331:9–11). This retreat to "individualized assessment" merely highlights the lack of objective, scientific data that there is any such harm. *In re C.R. Bard, Inc.*, 948 F. Supp. 2d at 605 ("subjective, conclusory approach . . . cannot reasonably be assessed for reliability"); *Eghnayem*, 57 F. Supp. 3d at 701 (expert "provided no objective data to back up this assertion" and his testimony was excluded).

Put simply, Dr. Janssen has no evidence—not in the scholarly literature nor in his own clinical practice—that the Sports Act will harm anyone. Accordingly, his opinion is unreliable and should be excluded.

B. Stripped of its non-scientific elements, Dr. Janssen's opinion is nothing more than a truism that cannot be the subject of expert testimony.

Lacking any scientific support to say that it harms males who identify as female from participating in female sports, Dr. Janssen's opinion reverts to a simple truism: preventing people from doing what they want may engender a negative reaction. Dr. Janssen exemplified this logic when he testified that "[a]ny potential exclusions from a peer-appropriate activity" can have "negative consequences" on mental health. App. 955 (200:1–11).

A factfinder does not need Dr. Janssen to know that. This opinion is not difficult to understand, and this opinion only relies on matters that are "obviously" within the knowledge of the fact finder. *Mod. Remodeling, Inc.*, 2021 WL 5234698, at *4. In this respect, Dr. Janssen's testimony is similar to part of the expert opinion excluded in *Koenig v. Johnson*, No. 2:18-CV-3599-DCN, 2020 WL 2308305, at *6 (D.S.C. May 8, 2020). There, the court held that the jurors did not need an expert to tell them the party's car was visible to plaintiffs before the accident. *Id.* Once the jurors heard about their perspective locations before the accident, that fact would have been obvious. Dr. Janssen's testimony is the same here. He is merely testifying about the disappointment people feel when they are kept from doing something they would like to do.

The simplistic nature of Dr. Janssen's opinion becomes all the more evident when he discusses the mental health effects on groups other than those with gender dysphoria. For example, he concedes that individuals whose gender identity aligns with their biological sex may suffer from the same mental health effects if they are kept from a team consistent with their biological sex. App. 974 (274:24–275:13). Thus,

if a biological woman were excluded from the female team—perhaps because she was displaced by a biological male who identifies as female or simply because she wasn't good enough to make the team—that woman could also feel the mental health effects of sports exclusion by Dr. Janssen's logic. Anyone can feel these mental health impacts—it is not exclusive to individuals who identify with the opposite sex.

And many individuals could feel the effects of sports exclusion for many different reasons. For example, the team could have a lack of space, the individual could show a subpar sports performance, or the individual could have a poor attitude. Furthermore, some coaches may decide that some athletes are talented enough to play on the varsity team, while other groups of subpar athletes are relegated to the junior varsity team. There are many different scenarios that could result in exclusion and the result would be the same—negative mental health impacts from "exclusions from a peer-appropriate activity." App. 955 (200:7–10).

Dr. Janssen is merely testifying that sports exclusion carries disappointment and could impact someone's mental health and mood. This is something that a factfinder's "independent exercise of common sense" could deduce for itself. *Koenig*, 2020 WL 2308305, at *6. It is not the proper subject of expert testimony.

Conclusion

At bottom, Dr. Janssen's report is a smokescreen of scholarly citations that do not add up to the conclusions he proffers. They do not show any causative relationship between social transition or puberty suppression and positive mental health outcomes. They do not show that we can predict which gender dysphoric children will persist in identifying as transgender. And most of all, they do not show any negative mental health effects associated with preventing biological males who identify as female from playing female sports. At most, Dr. Janssen posits that anyone excluded

from sports participation for any reason may experience negative emotions. And the factfinder doesn't need an expert to know that.

For these reasons, Dr. Janssen's proffered opinions should be excluded and Dr. Janssen precluded from testifying in this case.

Respectfully submitted this 12th day of May, 2022.

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA

Defendants,

and

LAINEY ARMISTEAD

Defendant-Intervenor.

Case No. 2:21-cv-00316

Hon. Joseph R. Goodwin

Certificate of Service

I, Brandon Steele, hereby certify that on May 12, 2022, I electronically filed a true and exact copy of the forgoing with the Clerk of Court and all parties using the CM/ECF system.

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