No. 23-2807

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

REBECCA ROE, by and through her parents and next friends, Rachel and Ryan Roe, et al.,

Plaintiffs-Appellants,

v.

DEBBIE CRITCHFIELD, in her official capacity as Idaho State Superintendent of Public Instructions, et al.,

Defendants-Appellees,

On Appeal from the United States District Court
for the District of Idaho
No. 1:23-cv-00315-DCN

Addendum to Defendant's Opposition to Plaintiffs' Emergency Motion for Injunction Pending Appeal

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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF IDAHO

REBECCA ROE, by and through her parents and next friends, Rachel and Ryan Roe; SEXUALITY AND GENDER ALLIANCE, an association,

Plaintiff,

vs.

DEBBIE CRITCHFIELD, in her official capacity as Idaho State Superintendent of Public Instruction; IDAHO STATE BOARD OF EDUCATION; LINDA CLARK, WILLIAM G. GILBERT JR., DAVID HILL, SHAWN KEOUGH, KURT LIEBICH, CALLY J. ROACH, and CINDY SIDDOWAY, in their official capacities as members of the Idaho State Board of Education; INDEPENDENT SCHOOL DISTRICT OF BOISE CITY #1; DAVE WAGERS, MARIA GREELEY, NANCY GREGORY, ELIZABETH LANGLEY, BETH OPPENHEIMER, SHIVA RAJBHANDARI, in their official capacities as members of the Independent School District of Boise City #1 Board of Trustees; COBY DENNIS, in his official capacity as Superintendent of Independent School District of Boise City #1,

Defendants.

Case No. 1:23-CV-315-DCN

Boise, Idaho
September 13, 2023
9:03 a.m.

TRANSCRIPT OF MOTION HEARING PROCEEDINGS

BEFORE THE HONORABLE DAVID C. NYE
CHIEF UNITED STATES DISTRICT COURT JUDGE

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Proceedings recorded by stenography. Transcript produced by computer-aided transcription.

I N D E X

(Proceedings commenced at 9:03 a.m., September 13, 2023.)

THE COURT: Please be seated.

THE COURTROOM DEPUTY: The Court will now hear the motion hearings in Roe versus Critchfield, Case Number 1:23-CV-315.

Counsel, would you please state your appearance for the record, beginning with the plaintiffs.

MR. RENN: Good morning, Your Honor. Peter Renn on behalf of plaintiffs. Also with me at counsel's table is Sam Linnet, Kell Olson, and Max Rosen.

THE COURT: Thank you.

MR. WILSON: Good morning, Your Honor. Lincoln Wilson with the Idaho Attorney General's Office. With me are Rafael Droz and our legal assistant, Isaac Considine.

THE COURT: Thank you.

Let me start by saying up until late last night, we had no water this week in this building. So in an oral argument about rest rooms, I was going to have to tell you we don't have any, but we do have strategically placed porta-potties outside.

Fortunately, thanks to a good maintenance crew and commercial plumbers, we have water today. There are rest rooms all over the building available for you. So that irony, at least, is gone.

Second thing, I do have several questions for each

side. I intend to ask those questions at the appropriate time in your presentations. Sometimes a little -- I'm a little slow; and if I miss the appropriate point, I'll wait and ask them at the end of your presentation. I have no desire to interrupt your flow or to throw you off track.

Okay. Finally, I believe that Bennett has discussed the order of presentation with you, but I will run through it now so that it's on the record.

At the start, we'll start with the preliminary injunction. Plaintiff carries the burden of proof on that and will go first. Defendant may respond and may also address their motion to dismiss. Plaintiffs will reply to the preliminary injunction and respond to the motion to dismiss. And then the defendant will get the final word on the motion to dismiss. So we'll go in that order.

And with that, if you're ready to proceed, go ahead.

MR. RENN: Thank you, Your Honor. And again, Peter Renn on behalf of plaintiffs.

Our motion for preliminary injunction simply asks this Court to maintain the long-standing status quo that has existed in Idaho before S.B. 1100, as the TRO currently does.

If S.B. 1100 is allowed to take effect, it would categorically exclude every transgender student across the state of Idaho in every school across Idaho from using the facilities that match their gender identity. That is a

sweeping blanket restriction which the Government hasn't met its heavy burden of justifying on the factual record currently before this Court.

The undisputed reality is that for years, transgender students have been using facilities matching their gender identity without any evidence of harm. That includes the president of our plaintiff student organization, A.J., who attends school right down the street at Boise High and has joined us here in the courtroom today.

A.J. is a transgender boy who has used the boys' facilities for more than a year now. Ousting him and others like him statewide from the facilities that they've already been using would be a seismic disruption to the status quo, and it certainly shouldn't happen while this active litigation is challenging the law.

I'd like to begin by first making clear what constitutes the status quo; next, explain why plaintiffs are likely to prevail on the merits of their claims; and finally, address the irreparable harms that the law would inflict in the absence of any hardships to defendants from the law's continued injunction.

First, I want to clarify at the outset what exactly constitutes the status quo for two reasons. First, I think it shows the enormous change that S.B. 1100 would actually have. And second, I want to clear up any confusion generated as a

result of the declaration of Greg Wilson submitted by the Government in opposing the TRO.

While we may use different terminology, I don't think there is actually a factual dispute between the parties on this point. There's no indication in the record that before S.B. 1100, any district policy categorically banned transgender students from using the facilities matching their gender identity.

THE COURT: So that I'm clear, you're talking now about the 75/25 split?

MR. RENN: That's exactly right, Your Honor.

And our position is that the record shows that there's not a single school district before S.B. 1100 that categorically banned transgender students from using the facilities that matched their gender identity.

THE COURT: So your position, if I'm understanding, is that it's 25 percent that are inclusive, 75 percent that say nothing?

MR. RENN: That's essentially right, Your Honor.

And the analogy that we've offered in our briefing is, say, 25 percent of employers had nondiscrimination policies that expressly said we will not discriminate against veterans. That doesn't mean that the remaining 75 percent of employers therefore discriminate against veterans or won't hire veterans. And I think it's really as simple as that.

According to the record pre S.B. 1100, no categorical bans anywhere; post S.B. 1100, categorical bans everywhere. That would be a violent disruption to the status quo.

Before I move on, the one final point I want to make about the status quo is this. There is no evidence that there is any school that did not or does not have separate facilities for boys and separate facilities for girls.

Now, the Government disagrees about whether transgender boys should be treated as boys and whether transgender girls should be treated as girls. But no one disagrees that all schools in Idaho do maintain separate facilities, and plaintiffs don't challenge that practice.

With that aside, I'd like to turn to the merits, starting first with equal protection before addressing Title IX and finally plaintiffs' privacy claim.

Both sides agree that S.B. 1100 triggers heightened scrutiny at the very least because the law discriminates based on sex. And that means that the Government bears a heavy burden of demonstrating an exceedingly persuasive justification.

But I do want to take a moment to explain why the law also discriminates on the basis of transgender status. This Court recognized in *Hecox* that the statute there discriminated against transgender people because it denied transgender girls, and transgender girls alone, of the ability to compete

on athletic teams consistent with their gender identity. That was the specific injury, that only one group suffered it.

Notably, this Court did not read the statute as discriminating everyone assigned male at birth, including cisgender boys. And the reason is because cisgender boys could still compete on athletic teams consistent with their gender identity.

Here as well, transgender students, and transgender students alone, are barred from facilities accessing their -- matching their gender identity. In other words, the law does not discriminate against everyone, as defendants have suggested; rather, it discriminates against transgender people in particular.

And I think that conclusion is reinforced by the considerations that the Ninth Circuit analyzed in *Hecox*. First, this law is written specifically to exclude transgender people from facilities matching their gender identity. And when a law is facially discriminatory, as this one is, you don't even need to look at the legislative history.

But second, the legislative history does in fact confirm that this was its intent. In fact, the Government's most recent filing on Monday confirms that this was a shared understanding on both sides of the aisle. The law was designed to exclude transgender people from facilities matching their gender identity.

The point that the Government has never responded to is that it is undisputed that the animating purpose of S.B. 1100 was to react to local school district policies that were inclusive, that specifically allowed transgender students to use facilities matching their gender identity.

And furthermore, the Government's entire defense is premised on the notion, while wrong, that transgender students should not be using the same facilities as cisgender people. And so it's factually unsupportable for the Government to claim they didn't want to exclude transgender people from facilities matching their gender identity.

And third, the only change that S.B. 1100 accomplishes is with respect to transgender people. Cisgender people were already barred from using the facilities designated for another sex.

So why does any of this matter? It matters because the discrimination and the discriminatory classification that the Government has to defend under heightened scrutiny is not simply about having separate facilities for males and separate facilities for females. Rather, the Government must specifically defend the exclusion of transgender people from facilities matching their gender identity.

But again, both sides agree that heightened scrutiny is required in any event, no matter how the law is sliced or diced, because of its sex-based harm as to transgender people.

And S.B. 1100 fails heightened scrutiny for three reasons. The Government fails to produce its own evidence; the Government fails to rebut our evidence; and the law affirmatively undermines its own stated goals.

First and foremost, the Government has not met its heavy burden of proving that safety and privacy will be harmed without the law taking immediate effect.

The question is simple. Why does Idaho need a statewide ban when it hasn't ever had one before? There is no witness, document, or other piece of evidence currently before this Court to answer that question. And that is fatal under heightened scrutiny.

The precedent is crystal-clear on this point, including through *Hecox* and *Latta*, that the Government does need evidence to prove up its justifications. That's one of the primary differences between rational basis review on the one hand and heightened scrutiny on the other. The Government is not allowed to just rely on its own imagination.

The reason we have heightened scrutiny in the first place is because there are certain minority groups that are especially vulnerable to being the subject of stereotypes, misunderstanding, and overgeneralization. And it is the duty of courts to prevent those fears and biases from seeping into the law by applying the rigorous tests that heightened scrutiny requires.

Here, we don't have to speculate about what might happen if transgender students were to use facilities matching their gender identity. It is undisputed that for years, a number of Idaho schools have had inclusive policies expressly allowing transgender students to use facilities matching their gender identity.

The record shows that, according to the Idaho School Board Association, 60 school districts and charter schools had such policies before S.B. 1100. Boise School District is one such example, and it has had an inclusive policy for at least the last seven years.

And yet, against that backdrop, the Government is unable to show any evidence of any privacy or safety problem. There is no evidence of cisgender students pretending to be transgender in Idaho. There is no evidence of transgender students in Idaho engaging in misconduct.

And in moments of candor in the legislative proceedings, legislators admitted that transgender students are not a threat to others, even as legislators also simultaneously expressed disapproval of transgender people.

Second, S.B. 1100 fails heightened scrutiny because the Government fails to rebut our evidence from law enforcement, school administrators, and students themselves demonstrating that there is not a substantial relationship between this law and privacy or safety.

That includes the unrebutted expert testimony of Officer Ballis, who is also the president of the Idaho Association of School Resource Officers. He testified that inclusive policies like the one that exists in his district, which has existed since 2015, have not led to transgender students harming others, nor has it led to cisgender students pretending to be transgender.

Moreover, schools and law enforcement already have the tools to address any such issues directly. In its own words, S.B. 1100, quote, "adds nothing to their existing tools which already address safety concerns," end quote.

And under heightened scrutiny, the Government's burden is to show why alternatives to discrimination would not be enough to satisfy their interests. And the defendants have not done that here.

The Government also leaves unrebutted two pieces of evidence in the form of declarations of Diana Bruce and Foster Jones, who are school administrators who have implemented inclusive policies that have been applied to literally tens of thousands of students. They similarly confirm, like Officer Ballis, that inclusive policies have not led to the problems imagined by S.B. 1100.

Moreover, they also confirm that there are nondiscriminatory actions that schools can take to increase safety and privacy for all.

For example, Ms. Bruce notes that if a cisgender student were to object to sharing a facility with a transgender student, the school can make another facility available that is even more private. But in fact, no cisgender student ever even asked for that option.

Finally, the Government also ignores the testimony of A.J., who used the boys' facilities at his school for all of last year without causing harm to anyone else.

As the Fourth Circuit recognized in *Grimm* and as the Seventh Circuit recognized in *Whitaker*, prior use of even shorter periods than that is powerful evidence against the hypothesized concerns of the Government. Those courts observed that it's usually adults who are the ones imagining the problems -- speculating what if this happens or what if that happens -- when in fact the facts on the ground disprove those concerns.

Rather than confront these facts, the Government relies almost exclusively on *Adams*. And the crux of *Adams* is that the mere presence of transgender people supposedly violates the privacy rights of others using the facilities at the same time.

But the Ninth Circuit rejected that exact argument in *Parents for Privacy v. Barr*. It said, look, we will even credit the subjective feelings of the objecting students that you feel severely distressed by having to share the same

facilities as transgender students. But as an objective matter, that is not enough because their mere presence does not violate your rights.

In any event, *Adams* is also factually distinguishable, including on the very basic threshold question of whether the Government intentionally discriminated against transgender students.

On the particular record involving the particular policy before the particular school board at issue there, the Court of Appeals held that there was not intentional discrimination against transgender people; and therefore, it proceeded to answer a fundamentally different constitutional question than the one presented here, which was about whether or not sex-separated facilities are permissible as a general matter.

But first, we aren't challenging that. And second, *Hecox* teaches us that you're analyzing the classification wrong in the first place. You have to grapple with the fact that this law, like the one in *Hecox*, discriminates against transgender people. And you have to wrestle with the fact that that imposes as a second-class status on that particular group.

Third, S.B. 1100 fails heightened scrutiny because it fails to achieve its own stated goals and in fact undermines them. The law says that its purpose is to promote the safety

and privacy of all students, and that necessarily has to include transgender students, which the law affirmatively actually undermines.

And I think the United States' brief on this point really does a good job of explaining why. There is unrebutted evidence in the record that the exclusion of transgender people from facilities matching their gender identity increases the risk of serious psychological harm, including depression, anxiety, stigmatization, and suicidality. A staggering 60 percent of transgender youth who are excluded from facilities matching their gender identity seriously contemplated suicide.

Furthermore, this law also exposes their private information, which exposes them, in turn, to harassment, discrimination, and violence.

And part of heightened scrutiny, as this Court recognized in *Hecox*, requires the Government to be able to overcome the second-class status and the stigma that the law imposes. This law does not promote the safety or privacy of transgender students; it puts them directly in harm's way.

Plaintiffs are also likely to succeed on the merits of their Title IX claim. In some ways, the Title IX claim is even more straightforward than the equal protection claim, because the only question in dispute is whether the law discriminates against transgender people. If the answer to

that question is yes, then we've shown a likelihood of success, and the Government doesn't get any defense that it can mount based on either safety or privacy.

As a threshold matter, the Ninth Circuit precedent is clear that Title IX does bar discrimination against transgender people. Now, that may not be true in the Eleventh Circuit. But in *Grabowski*, the Ninth Circuit held that *Bostock's* sex discrimination analysis applies equally to Title IX.

So against that backdrop, defendants' only resort is to say, yes, but we think an exception applies. And that argument fails for multiple reasons that we've outlined in our brief, but I think the most simple one is this. No exception can swallow a rule.

So the rule here, which is statutory, is Title IX's prohibition against sex discrimination and, more specifically, its bar against harming transgender people. The exception, which is regulatory, that the Government hopes to rely upon is that schools can provide separate facilities on the basis of sex.

But all that exception does is to say you can have a separate rest room for males, and you can have a separate rest room for females, and nowhere have we argued that that is impermissible.

And the reason is because the mere fact of separation

doesn't cause harm. Sure, it's differential treatment, but that's not enough to constitute discrimination, which requires both differential treatment plus injury.

The exception does not go on to say, and when you put up a sign on that door that says male, it's okay to exclude transgender males from that facility. To understand the exception in that way would authorize sex-based harm against transgender people, and that can't be right, because the whole point of Title IX is to prohibit sex-based harm.

Grimm, *Whitaker*, and *A.C.* all interpreted the regulatory exception in this way. While the Eleventh Circuit held in *Adams* that sex in Title IX must mean, quote/unquote, biological sex, the Ninth Circuit specifically rejected that argument in *Parents For Privacy v. Barr*.

So again, I think the principle of that is sufficient to resolve this issue, is that an exception cannot swallow a rule. And that is especially true when it is a regulatory exception trying to swallow a statutory rule.

The statute here is the North Star that the regulations have to follow. And so when courts are interpreting what does this regulation mean, it has to read all of these pieces in concert with one another to harmonize them.

Plaintiffs are also likely to prevail on the merits of their privacy claim, which defendants do not squarely

address in opposing the preliminary injunction and do not address at all in moving to dismiss.

Courts have universally recognized a constitutional right of privacy in one's transgender status because of the serious consequences that can follow when that status is involuntarily disclosed, especially in context where someone would otherwise keep that information private.

The right to control that information properly belongs to the individual to decide whether, when, where, and to whom to disclose it. But S.B. 1100 takes that away from the individual to make that decision. The law takes away control over disclosure from transgender students.

As Courts have recognized and as the unrebutted evidence in the record shows, their exclusion from the same communal facilities that everyone else uses discloses their transgender status.

Most of us use the rest room several times a day. And for transgender students, every Monday through Friday every week of the semester, every semester until they graduate, they are barred from using the same communal facilities that everyone else uses. That involuntary disclosure of their transgender status exposes them to harassment, discrimination, and even physical assaults.

The Government's only response on this point is to say, go elsewhere; use single-user facilities instead. But

that only makes things worse because it draws even greater attention to the transgender students at issue, including, for example, when they have to go use the nurse's rest room or the faculty rest room. And in the words of the Third Circuit, their relegation to these alternate facilities paints them with a scarlet T for everyone to see.

I also have to point out that the harms of the privacy violation here are irreversible, which makes a preliminary injunction especially critical. You cannot unring the bell once somebody's transgender status has been involuntarily disclosed.

Finally, the balance of hardships and equities tips sharply in plaintiffs' favor here. First, the violation of constitutional rights is itself irreparable harm. Second, there is unrebutted evidence that the law causes serious psychological harms, profound stigma, privacy violations, and health and academic consequences as a result of distraction and physical pain. None of these harms are somehow cured by single-user facilities, which are separate and unequal in every respect and stigmatizing to forcible use.

On the other side of the ledger, the Government hasn't proven with evidence any harm that it would suffer from a preliminary injunction. If the Court agrees with us that we are likely to succeed on the merits of our claims, that also necessarily means that defendants have failed to show harms

from the law's preliminary injunction.

And I want to be clear that this is not a case involving competing constitutional rights. The Ninth Circuit held in *Parents For Privacy v. Barr* that there are no constitutional rights of cisgender students that are violated by the mere presence of transgender students using those same facilities. So this is not a case of rights on one side versus rights on the other. There is only constitutional harm on one side here.

To close, I'd like to bring things back to the actual students whose lives will be dramatically changed if this Court were to dissolve the TRO without granting a preliminary injunction to take its place.

A.J. is in his senior year of high school. If a preliminary injunction is denied, in all likelihood, he'll have to spend the rest of his high school experience marginalized from his peers on a daily basis and unable to use the exact same boys' rest room that he's used for more than a year now without incident.

That experience of discrimination is how he will remember high school for the rest of his life. We urge the Court not to let that happen to him nor to any of the other transgender youth in Idaho.

Unless the Court has any other questions, I'll reserve the balance of my time for rebuttal.

THE COURT: Let me ask a couple questions, and I guess I'll begin where you just ended.

Realitywise, as far as if *Hecox* has taught us anything, this case isn't going to end today; it's going to be appealed. *Hecox* has been on appeal now for two years. So the likelihood that A.J. is going to have problems during his senior year, that -- that's probably not true. But we'll see.

MR. RENN: We certainly hope that's the case if the Court agrees to grant the preliminary injunction. If the Court were to merely dissolve the TRO, then I think the harms that we discussed would absolutely occur to him as well as to many other transgender youth in Idaho.

THE COURT: And as a practical matter, if I decide to dissolve the TRO, you're going to ask me for a stay of that decision while you appeal. I'm going to deny it because, otherwise, I just gave you the preliminary injunction you're looking at.

So the Ninth Circuit is going to make that decision on a stay. I don't know what they're going to do; I have no idea. But I don't know that today's the end for A.J. either way that I go. But there are certainly other children that would be impacted, yes.

In your brief, you -- the author wrote that the statute denies transgender youth the equal dignity and respect that Idaho affords to nontransgender youth. What is that

referring to?

I mean, it seems to me that the dignity and respect from the statute is given to all youth, the right to use a bathroom free from use of a different biological gender. That's all that is. So what dignity and respect are you referring to?

MR. RENN: The dignity and respect that cisgender students are afforded currently under Idaho law and which transgender students are not afforded is the basic ability to use facilities matching their gender identity.

That's exactly how this Court analyzed this issue in *Hecox*. The Court didn't say, well, Lindsey Hecox has the equal ability to compete on male teams just like everyone else assigned male at birth, because that's not an option for her.

Here as well, it's not an option for A.J. to use the rest room that is inconsistent with his gender identity and that is associated with his birth-assigned sex. The only option for them is to be able to use the same communal facilities that everyone else uses.

This law basically tells transgender students like A.J. that there is something so unfit about you, so unworthy about you, that you cannot even set foot in the same communal facilities that all of your peers use. I think that message of discrimination is unmistakable, and it's heard loud and clear by transgender youth.

That's exactly what the declarations in the record show, which is the only evidence on this point, Your Honor. It confirms that these students understand that lawmakers disapprove of their living their lives consistent with their gender identity.

And the expert testimony of Dr. Budge also confirms the very real, very stark, and very serious harms that occur when you deny transgender people, and transgender people alone, of access to facilities matching their gender identity.

We all have a gender identity, cisgender and transgender people alike. And transgender people, as things currently stand in Idaho, may continue to freely use facilities that match their gender identity. This law targets transgender students to say but you, this class of people, may not.

THE COURT: The -- in order for you to support your position, you have to say that sex means more than biological gender; right?

MR. RENN: That is our position. But I don't think there's any dispute, Your Honor, that no matter how you define sex, S.B. 1100 does discriminate against transgender individuals on the basis of sex, no matter how that term is defined, even if you read it as narrowly as the Government is suggesting.

And the reason that doesn't cause a problem in the

case of cisgender people, as we've explained, is that discrimination requires not merely differential treatment but differential treatment plus injury. So the only group that has suffered sex-based harm under the law is transgender people.

But it's absolutely right, Your Honor, that gender identity is, in our view and in the view of the medical experts, the critical determinant of sex in situations where somebody's gender identity diverges from their sex assigned at birth.

THE COURT: How do you separate this case from the *Adams* case, the Eleventh Circuit case?

MR. RENN: Your Honor, I think that the piece of *Adams* that the Government hangs its hat on is the notion that the mere presence of transgender students using the facilities that match their gender identity infringes upon the privacy rights of cisgender people using those same facilities. That is -- that is the key holding of *Adams* that the Government relies upon.

And yet, that specific premise was rejected in *Parents For Privacy v. Barr*. That was the argument in the case. The plaintiffs said your mere presence of a transgender student in the same facilities as us violates our rights. And the Ninth Circuit was absolutely clear that is not enough. You've got to show more than that, and you haven't done that

here.

That's what equal protection is all about. Your mere discomfort, dislike, or disapproval of a group cannot be given effect in the law.

THE COURT: And yet, in *Hecox*, the Court wrote -- Ninth Circuit wrote, "Moreover, bathrooms, by their very nature, implicate important privacy interests and are not the equivalent of athletic teams."

I'm not so sure the Ninth Circuit panel would go the same way it did prior to *Bostock*. I don't know, but that's a concern I have.

MR. RENN: Your Honor, we also take the position that there are important privacy interests implicated in the rest room as to transgender students. The evidence shows that they're the ones at highest risk of victimization and discrimination and harassment in these facilities. And I think the Government --

THE COURT: Now, what do you mean by that? Can you show any statistic in Idaho where a transgender student has been harassed in a bathroom?

MR. RENN: The record shows from Dr. Budge that, statistically speaking, transgender youth are the ones most likely to be victimized in these sex-separated spaces rather than cisgender students in general.

THE COURT: Here in Idaho?

MR. RENN: Dr. Budge's testimony is national. So it's not specific to Idaho. But I do think the general point absolutely does apply here.

But I think, more generally as to your point --

THE COURT: I would hope to think we're better in Idaho.

MR. RENN: Certainly, we would hope that.

But I think the more general point, Your Honor, is all that *Hecox* was saying in that passage that you just quoted is *Adams* was a different case. It decided that there wasn't intentional discrimination against transgender people. We are not saying whether we agree with that or not. We're just saying that that's a different case than the case before us.

I think the case that really answers the key question before this Court is not to be found in *Hecox* but, rather, in *Parents for Privacy v. Barr*, which squarely addressed the issue of rest rooms. We understand, of course, *Hecox* was a case about athletics. But *Parents for Privacy* was a case specifically about facility access and the question of whether it's permissible to categorically say that the mere presence of transgender students violates the rights of others.

THE COURT: Okay. I think this may be the last question I have for you. But tell me what you disagree about this statement: Historically, a person's sex was identified objectively by their natal or birth gender. You're asking

that a person's sex be identified subjectively by the gender that they've come to identify with over time.

Do you agree or disagree with that statement?

MR. RENN: I don't think it's accurate as far as medical science currently tells us, which is that gender identity is the critical determinant of sex in situations again where somebody's sex assigned at birth differs from their gender identity.

But I don't think that history will provide us any meaningful answers to the question that's presented before this Court. Because, at most, the Government's position is we've had this long historical practice. They say it's near universal.

But the practice that they're alluding, even if it's keyed off that definition of so-called biological sex that Your Honor just articulated, merely says that it's permissible to have sex-separated facilities at all. In other words, it's okay to have one room with the sign "male" on it, and it's okay to have another room that says "female" on it. But that doesn't tell you anything about whether or not it's okay to exclude transgender boys from the male facility or transgender girls from the girls' facility.

And as we've also noted, the mere fact that even if there were a long tradition of excluding transgender people from facilities matching their gender identity -- which there

is not -- that would not be sufficient under equal protection. Otherwise, we would still have laws that bar same-sex couples from marriage, for example. And *Latta* makes clear that the ancient lineage of a practice does not in any way make it constitutional.

THE COURT: So you're telling me it's not necessary for me to take a deep dive historically like the Supreme Court was talking about for guns in -- what is it, *Bruen*? I don't have to do that type of an analysis here?

MR. RENN: That's absolutely right, Your Honor. And I think the reason why is elucidated in the *Hecox* footnote that rejects the Government's argument about history. It says you are conflating due process or history is, of course, relevant with equal protection, where it frankly is not in the way that the Government articulates. Otherwise, maintaining discrimination would become a purpose unto itself. And we know that's not the law under equal protection.

THE COURT: All right. And then I do have one more question. Maybe this is a softball pitch; I don't know. Title IX and its implementing regs, are you suggesting that it discriminates on the basis of sex when it says it's okay to have separate bathrooms and changing rooms for boys and girls?

MR. RENN: Absolutely, Your Honor. And the unifying principle that I think, to cut through all of the morass, answers this problem that the Government raises about the

exception is Title IX doesn't authorize sex-based harm, full stop. The whole point of Title IX is to prevent sex-based harm.

So whatever the exception says -- and we can argue about its precise contours -- it cannot authorize sex-based harm. And that's exactly what S.B. 1100 does.

THE COURT: All right. Thank you.

MR. RENN: Thank you, Your Honor.

THE COURT: Mr. Wilson. I'm going to do what I said I wasn't going to do and throw you off right from the start.

MR. WILSON: Thank you, Your Honor.

THE COURT: Since the federal government is not here, tell me about the injunction impact in this case, the Tennessee injunction. I would ask them what impact it has, but they're not here.

MR. WILSON: Your Honor, I think the Tennessee injunction really just illustrates the deficiencies of the Title IX arguments by the plaintiffs and the federal government. The federal government came into this court saying that sex doesn't mean biological sex in Title IX and that Title IX prohibits sex-separated bathrooms.

They didn't mention to the Court that Idaho sued them over regulations that were going to adopt that interpretation. Idaho said this is a threat to our sovereignty and the protection of our laws, and we are likely to succeed on the

merits. And the Tennessee court ruled that they were likely to succeed on the merits, that Title IX does allow sex-separated rest rooms, and it enjoined them from enforcing that -- those regulations against the State of Idaho.

So the fact that they don't even mention that says a lot about their arguments.

THE COURT: It doesn't prevent them from making the argument, but they can't say the regulations require this. That's the way I read it.

MR. WILSON: You know, Your Honor, I'll say, to me, it's a fine line. I wouldn't -- I certainly wouldn't have done it because they are coming into court and saying Idaho's laws should be overturned and this court should enjoin them, when that was the basis that Idaho prevailed on a preliminary injunction against the federal government.

I'm not filing a motion for contempt here. I'm certainly not filing a motion in Tennessee. But we think that this says enough about what the Court needs to know about those arguments.

THE COURT: Okay. Thank you.

MR. WILSON: So good morning, Your Honor. Lincoln Wilson for the Idaho Attorney General's Office. It's a pleasure to be here today.

My presentation today, we've got some slides ready. It's going to focus mostly on the likelihood of success on the

merits, but I want to say a word briefly about the status quo since Mr. Renn began on that point.

And as to the status quo, I think it's worth thinking about what President Kennedy said, paraphrasing G.K. Chesterton, that you really shouldn't knock over a fence until you know why it's there. And when you have an old boundary line, if you can't explain why that -- why it lies there, don't move it until you know that.

And that seems to be what plaintiffs are wanting to do here. We have a standard of sex-separated rest rooms that has been with us since the Egyptians. It's been with us since the founding of the American government. It's been there since the founding of this state. It was recognized by Justice Ginsburg and by Justice Marshall.

And plaintiffs say that when Idaho enacts a law that preserves that standard in Idaho amid new social challenges, that Idaho has no basis to do that and that Idaho is discriminating on that basis.

I think plaintiffs fail to give an adequate account for that long-standing recognition of sex-specific privacy, and that's really relevant to the status quo.

The other thing that matters is that Mr. Renn is saying we're just trying to preserve the way things already are where different districts can make their own rules and they can all make their own decisions about how to handle

this.

I think that's not exactly correct, Your Honor, because if plaintiffs' arguments are right, if they are likely to succeed on the merits, then the opposite of S.B. 1100 has to take effect; that any student with gender dysphoria can use a bathroom that aligns with their gender identity anywhere in the state. If there's an equal protection right to that or a Title IX right to that, that's got to be true across the board.

There's not room for "let individual districts make their own decisions" based on plaintiffs' arguments. It's a constitutional, statutory all-or-nothing proposition. And we don't think they're likely to succeed on that.

So getting into the merits, I'm going to focus on the two things that plaintiffs have to prove today. They have to prove that they're likely to succeed on the legal theories that they advance, and they have to prove that they're likely to succeed on their underlying scientific claims about the reality of sex and gender. We don't think they're likely to prevail on either and I'll outline why.

THE COURT: And you're taking the position that those are either/or arguments? If either one fails, the whole thing topples?

MR. WILSON: Yes, exactly.

So it's correct that plaintiffs note that we really

focused our case on *Adams*. It's the best decision for us. We think it's worthy of special reliance. It's an en banc decision. We have a lot of federal judges. They came down and they reached this decision addressing the policy that we think is indistinguishable from this case. Sex-separated bathrooms with an accommodation for single-user rest rooms for people with gender dysphoria if they wanted to use it.

The Eleventh Circuit recognized that that biological sex classification, same phrase used in this statute, was a sex classification for purposes of Supreme Court case law. And that makes sense because the Supreme Court's equal protection jurisprudence has always recognized sex as binary, as immutable, and as biological. Every Supreme Court equal protection case recognizes sex to that effect.

And the *Adams* court held that a law that's recognizing these sex-based privacy interests satisfied intermediate scrutiny because of those well-settled sex-based privacy interests.

And the record that it relied on, I think it bears noting that it wasn't an extensive record of expert testimony proffered by the school district. It wasn't specific factual declarations refuting a factual declaration proffered by the plaintiffs. It was relying on history. It was relying on case law. It was relying on Justice Marshall and Justice Ginsburg and many other circuit courts. It relied on the

Ninth Circuit's decision in *Byrd* that recognized that there's a fundamental right to be free from the opposing sex when you're in a state of partial undress.

And the reason that the Eleventh Circuit could do this is because when you're making these general findings about the way the world is, you're not in the realm of adjudicative facts that get proven by a declaration or by an expert report. You're in the realm of legislative facts. And those are the basic things that the courts find about the world, that the Supreme Court does just as well as this Court. And the Eleventh Circuit recognized, based on that long tradition, these fundamental interests.

So when plaintiffs come in here and say all of their individual factual declarations are unrebutted, it just isn't so. They're rebutted by these basic materials in the law that the Eleventh Circuit recognized, and the Court's entitled to find that, and it should find that based on that long tradition.

We'd also submit that the *Parents for Privacy* decision is not to the contrary. Plaintiffs argue a lot more out of that decision than it actually says. *Parents for Privacy* is about the inverse or converse, depending on how you think of it, of this case. It was a policy that allowed students to use the bathroom that corresponded with their gender identity, and it was challenged by parents who

basically wanted their kids to not be in the presence of transgender individuals.

So for one, it's the flip side; for another, it's a different interest. Those parents specifically said, and the Ninth Circuit addressed, we don't want to be around students with gender dysphoria. And the Ninth Circuit said you don't have a privacy interest in that.

Adams was not about the same thing. *Adams* didn't say there's a constitutional right to be away from people with gender dysphoria. *Adams* says there's a fundamental privacy interest in being free from the opposite sex when you're in a partial state of undress, and those interests are adequate to support laws that have been in place since the founding of this nation.

The Court has already pointed out as to *Hecox* that the Ninth Circuit specifically distinguished *Adams*, noting that -- and the Court already quoted it -- bathrooms, by their very nature, implicate important privacy interests that are not the equivalent of athletic teams. So it's tough for plaintiffs to say that *Hecox* controls this case when *Hecox* distinguished *Adams*.

The other thing is that *Hecox* -- and obviously, the Court is well aware of the decision; it was this Court's decision. But *Hecox* rested on a finding that the Fairness in Women's Sports Act was targeting people with gender dysphoria.

And plaintiffs are really trying to show that that's the case here, but it's simply not.

If you look through the legislative testimony, most of the time that gender dysphoria is being discussed, it's by opponents of the bill. And when the supporters are discussing it, they're largely saying very sympathetic things, talking about the need for accommodation of people with gender dysphoria, specifically saying this is about preventing general sex-based harm; we don't think people with gender dysphoria are a threat. That's what the record shows. It doesn't show targeting of people with gender dysphoria.

And more important, even beyond that, you know, that legislative testimony -- because legislative testimony is of limited utility -- ultimately, you look to what does the law say? What does it do? And this is a law that, like the policy in *Adams*, specifically provides an accommodation.

And plaintiffs' privacy claim fails because when there's this accommodation of single-user rest rooms, then plaintiffs can't claim an injury to their purported right to privacy in their transgender status. If you have the ability to use a bathroom that won't disclose your gender identity, then you're not harmed by this law.

Now, Dr. Budge, she comes to this Court, and she has said that single-user bathrooms are not good enough. She says that they actually -- that the studies recognize that they

perpetuate harm. The problem is that the Price-Feeney study that she cites for that specifically recognizes gender-neutral bathrooms as gender affirming.

And Dr. Budge said that these single-user rest rooms are gender-neutral bathrooms. We've got that in the deposition cite at the bottom here.

Parents for Privacy, moreover, to the extent it is relevant, in that case, the parents of the students who didn't want to be around kids with gender dysphoria, they said, well, it's not good enough that if we have to be away, we have to use single-user rest rooms that are not as nice and they're further away and harder to walk to.

Parents for Privacy in the Ninth Circuit said that's not a problem if the law provides alternative options to those who don't want to share facilities even if those facilities are inferior and less convenient.

Now, Your Honor, what's good for the goose is good for the gander. If that was an adequate accommodation for that policy, it's an adequate accommodation here.

It also illustrates that if the Constitution allows latitude for a California school district to enact a policy where students can use the bathroom that correlates with their gender identity, well, then surely the law and the Constitution gives Idaho latitude to uphold the sex-specific standards of privacy that have existed in this country from

the beginning.

I'd like to give a brief word now about Title IX. We think that *Adams* got it right on Title IX. *Adams* basically said that where the law grants express permission, that is not a prohibition. And plaintiffs have tried to say -- they've tried to dodge this, but Title IX is quite clear, both as a matter of statute and as a matter of regulation.

As a matter of statute, it says that "No provision in this chapter shall be construed to prohibit any educational institution receiving funds under this Act from maintaining separate living facilities for the different sexes."

Now, if separate living facilities for sexes are allowed, then separate bathrooms should be allowed as well for the same privacy reasons. And that's why Title IX and its implementing regulations says that directly, that schools may provide separate toilet, locker room, and shower facilities on the basis of sex.

Plaintiffs' only answer, then, is to say, well, sex means something different here. It means -- it means gender identity. Well, Your Honor, that's undermined by their own arguments because they rely on *Grabowski*, the Ninth Circuit's decision. And the Ninth Circuit's *Grabowski* decision says that *Bostock*'s Title VII rationale applies to Title IX.

Well, *Bostock*'s Title VII rationale was premised on this same definition of sex as a biological construct. What

Bostock says is if you are discriminating based on gender dysphoria, you're necessarily discriminating on the basis of sex, that sex as a biological construct. Now, if sex as a biological construct applies in Title IX, and Title IX says that we can have bathrooms separated by sex, then that's perfect allowance for exactly what the State of Idaho has done here.

And that's even more clear when you look at the Ninth Circuit's decision in *Parents for Privacy*. I'm going to quote directly from that decision, 57 F.4th at page 811. "Title IX authorizes sex-segregated facilities based on biological sex."

And that's even more clear in the light of the fact that Title IX is spending-clause legislation. And spending-clause legislation is where you're conditioning the grant of funds based on specific things being done by a state.

The Supreme Court has held that those conditions need to be unambiguous. And as the Eleventh Circuit said in *Adams,* a statute that expressly allows bathrooms based on sex is not giving an unambiguous condition that they may not be based on sex.

I'd like to turn now to the scientific aspect of plaintiffs' case. We really appreciated the Court's grant of leave to do some additional discovery here. The Court expressed that it wanted to make its decision based on the fullest record possible. And so we deposed plaintiffs' key

expert, Dr. Budge. We offered our expert, Dr. Cantor, for deposition, but plaintiffs declined to take his deposition. And we think that what we learned from Dr. Budge and from Dr. Cantor shows that her key scientific claims simply don't hold up. Plaintiffs are not likely to succeed on them.

And Dr. Budge's core scientific claim is that plaintiffs are entitled to access to gender-affirming facilities as part of a social transition as an important step in treating the symptoms of gender dysphoria. That's gender-affirming facilities; it's gender-affirming care.

Plaintiffs tried to say this case is not about gender-affirming care. They say the Court doesn't need to address it. Respectfully, it's at the heart of their claims. And as our reply brief illustrates, it's woven throughout many of the allegations of their complaint.

So Dr. Budge offers in effect what are several general causation opinions that get plaintiffs to the place where they think they need to be to win; that gender identity determines sex; that widely accepted standards require gender-affirming care to treat gender dysphoria; that social transition, including rest rooms matching gender identity, treats gender dysphoria; and that single-user bathrooms are not adequate care for gender dysphoria.

Well, Your Honor, every one of these claims is unreliable and is contrary to well-settled science. If we

were at the *Daubert* stage, I don't think Dr. Budge would survive. We can save that for the merits. But there's enough here at the preliminary injunction stage that plaintiffs are not likely to succeed.

It's important to note about Dr. Budge that she's an admitted activist. This is an article that she did about her lab in UW Madison. She admitted that these quotes were accurate in her deposition, and she says she was not shy about her advocacy and activism, and she isn't concerned about tainting the lab's work or how some might view it as biased.

Now, her answer to that was, "Well, all science is biased in some way, and I'm transparent about this." But we also talked to her about her articles. You don't see a conflict disclosure at the bottom of every one of her scientific articles where she says, "By the way, I'm an activist for these causes, and it may taint the research here." It's not a disclosure she actually makes.

And you could imagine, if we were in any other scenario, an expert coming into court making a scientific claim, if they were -- if it was an opioid case and they say, "I'm an activist for Purdue Pharma," would we -- would we take that seriously? I don't think we would.

When you look at Dr. Budge's scientific claims, there's well-settled standards about how we evaluate these claims about causation. Where there's a claim that some

intervention -- medical intervention has a specific outcome, either positive or negative, there's a well-accepted rubric by which you would analyze that. And at its most fundamental level, it has to consider both the totality and the hierarchy of the evidence.

The totality means you have to consider every relevant study out there. You have to look at the whole field and what's known about the topic. You don't get to cherry-pick and say, "Well, I like this one, but I'm going to ignore that one." You have to look at it all.

And you have to account for the hierarchy, because some quality of evidence is better than others. At the very top of the pyramid, which is a pyramid of evidence -- it's a generalized concept, but it's in Dr. Cantor's report. At the very top of that pyramid are systematic reviews and meta analyses. Those are -- that's the evidence that synthesizes everything, that studies it together and draws a conclusion.

Below that, individual randomized controlled trials, because those can sort out bias and chance. Below that, various observational studies, cohort studies, case-controlled studies, case series. And below that, just sort of general background information, expert opinion, other materials.

If you look at Dr. Budge and how she approaches this, the systematic reviews and meta analyses in this field, her report ignores them. Two major reviews on gender-affirming

care were completed by the UK and Sweden, the public health authorities for those nations within the last year. Both of them said that the benefits of these treatments of gender-affirming care treatments on a medical basis don't outweigh their risks.

Dr. Budge doesn't even mention those reviews in her report, let alone address them and try to explain them away. Instead, she just says, "I'm just going to talk about the evidence in the U.S.," as though science that's done in a foreign country doesn't matter.

And what does she focus on instead? She focuses on stuff at the very bottom of the pyramid. She focuses on her clinical experience and surveys.

So when Mr. Renn was speaking about studies that he says scientifically show the various harms that transgender people experience from these bathroom laws, what he's talking about are surveys. And surveys are asking a bunch of people, "Are you -- do you have gender dysphoria? How did you experience this? How did it make you feel? What was the impact?" It's not high-quality evidence from which this Court can make a determination about this in the -- as a scientific matter.

So let's look at these opinions. Every one of them is unreliable. First, it's at the very core of Dr. Budge's opinion that gender identity is the most important and

determinative factor of individual sex.

The Court recognized this in talking to Mr. Renn, and Mr. Renn agreed that sex must mean more than biology for them to win. The Court asked him that, and Mr. Renn agreed with that. And of course, Dr. Budge says that gender identity is what really matters to sex. The problem is that's completely contrary to science, to say nothing of being contrary to the Supreme Court of the United States case law.

Dr. Cantor points out that the definitions of sex from The Endocrine Society, the American Academy of Pediatrics, and the American Psychiatric Association all explicitly define sex solely in terms of biological features, excluding gender identity.

And these are organizations that have policies about gender-affirming care. We disagree with those policies, but there's no question that they define sex as biological sex, just like the Supreme Court of the United States does.

Dr. Budge says it's gender identity that matters. She doesn't cite anything for that. She doesn't point to an authority about that. No one else understands it that way.

Dr. Budge also says that gender-affirming care is widely accepted. She points to the WPATH standards -- that I know this Court has some familiarity with -- because those standards -- she says they recommend puberty-delaying medication and gender-affirming hormones as medically

necessary treatments for adolescents. That's further down the path after social transition, is a medical transition. And Dr. Budge says this is something that is necessary as part of gender-affirming care.

Well, Dr. Cantor points out that the WPATH standards are repeatedly rejected outside of the United States. And again, the systematic reviews by the UK and Sweden, both completed in the last year, have concluded if there are any benefits to those treatments, they do not outweigh the risks. They have disallowed those treatments except in experimental context.

Dr. Budge would not be allowed to have the clinical practice that she did if she were practicing in the UK or Sweden. She doesn't mention this in her report.

Science also does not support social transition. Dr. Budge says that social transition is medically necessary across all aspects of a transgender individual's life, including rest rooms. She says that their gender needs to be affirmed in all those contexts.

Well, that's actually something that we contest with a scientific study. Is social transition really necessary to treat gender dysphoria? You could monitor people with gender dysphoria over time without social transition and find out does their gender dysphoria resolve on its own. Because if that were the case, then social transition is not necessary to

treat it.

Dr. Budge says, in every single case she's had, she's always recommended social transition; it's always necessary. Well, in fact there are studies about this; there are 11 of them. They all looked at gender dysphoria in minors over time without any intervention or social transition, and they all showed that gender dysphoria desisted in the majority of patients, in some cases the vast majority, without any intervention.

Dr. Budge cites none of these studies in her report. She doesn't even address them. And that is especially glaring because those studies were previously cited by Dr. Cantor to Dr. Budge in another case, and she still didn't address them.

Not only did she not address them, she didn't even read them until the moment of her deposition. At her deposition, she was confronted with a study from 2021 that looked at this issue and studied -- it was the largest study of its kind, found desistance in gender dysphoria by a majority of patients without intervention.

And she concluded -- or I'm sorry. Dr. Budge concluded, "Well, this study shouldn't have been published, and I don't think the people there really had gender dysphoria."

That's not what the study says, and that's not scientific. You don't ignore evidence in formulating your

opinion, reach your opinion, and then just dismiss the evidence and say, "That's just not right. I don't agree with what that study says. They can't be factually correct," when you're trying to dismiss it.

The last thing is on Dr. Budge's statements, she says that the Price-Feeney study and others have confirmed the negative psychological impact of being invalidated and othered by single-user bathrooms. The problem is the Price-Feeney study says the opposite. It says that providing gender-neutral bathrooms can be viewed as part of gender-affirming support and care.

And, Your Honor, there's many elementary principles of science that Dr. Budge runs afoul of, but one of the most basic is you don't cite a study for the opposite of what it says. Dr. Budge agreed that single-user bathrooms are gender-neutral, and her study that she cites says they can be viewed as part of gender-affirming support and care.

We think that Dr. Budge would not survive a *Daubert* challenge if we were at that stage. But what's clear in any event is that we're in a situation where, no matter how you slice it, there's a lot of medical uncertainty. And the Supreme Court of the United States says that states have wide discretion to pass legislation in areas where there is medical and scientific uncertainty. This is certainly such a case.

The Sixth Circuit recently said the same about a

gender-affirming care issue, that when the states are currently engaged in serious, thoughtful debates about the issue, then the burden of constitutionalizing new areas of American life is not and should not be a light one.

I'm just going to end with a brief note about the other preliminary injunction factors. The Court already observed in its TRO order that those other factors appear evenly split. We think that it's certainly evenly split at best, and we don't think plaintiffs have shown more.

We actually think that the accommodation that's provided by the statute is something that really precludes them from showing irreparable harm here. If *Parents for Privacy* is right and single-user bathrooms are okay for people who don't feel comfortable with the laws about the common ones, then that's also true here, and plaintiffs don't have any irreparable harm. And that's basically the end of the story.

On the other hand, the long-settled sex-specific privacy interests that S.B. 1100 upholds are also something that are well settled, and those would be disrupted if -- by an injunction against this law.

If the Court has no other questions, I'll reserve --

THE COURT: I do have some questions. Obviously, there is a circuit split here between the Eleventh, the Seventh, and the Third -- Third or Fourth?

MR. WILSON: Fourth.

THE COURT: Fourth. How do you distinguish the Seventh and the Fourth case, their positions, from yours?

MR. WILSON: I would not -- honestly, Your Honor, I'll make no attempt to distinguish those cases. We just think that they're wrongly decided and the Eleventh Circuit has the correct and best reasoning.

I think what you see in every one of these circuits is, you know, you could probably get Mr. Renn's brief out of the dissents in *Adams*, and you could get our brief out of the majority opinion in *Adams*. Same thing if you go over to the Fourth Circuit; the majority opinion looks like Mr. Renn's brief, and the dissent looks like ours.

It's really just a question of whether the Court believes that -- which one of those sides has analyzed the law and the understanding of sex correctly.

THE COURT: What about the argument, if I understood it correctly, from the other side that *Bostock* has already been adopted in the Ninth Circuit for Title IX?

MR. WILSON: We think that that actually hurts their case on Title IX. Because the key thing about that is that *Bostock*'s essential proposition was it said that if you have a law that discriminates based on transgender status, that is necessarily a law that discriminates based on sex. And sex it understood as biological sex.

Now, if that holding has been applied to Title IX, then, under Title IX, sex means biological sex. And Title IX, as a matter of statute and as a matter of regulation, says that sex-separated bathrooms are okay, that the statute doesn't prohibit those. So if that's true, then the fact that the *Bostock*'s rationale applies to Title IX actually makes the case stronger for us.

And the Ninth Circuit has held specifically in *Parents for Privacy* -- I'll grab the quote again -- that Title IX authorizes sex-segregated facilities based on biological sex. And that's page 811, 57 F.4th.

(Reporter interruption.)

MR. WILSON: 57 F.4th at 811.

THE COURT: Do you agree --

MR. WILSON: I'm sorry. I was -- that was the *Adams* decision. *Parents for Privacy* is 949 F.3d at 1227.

THE COURT: Do you agree with Mr. Renn when he was talking about the 75/25 statistics that there's 25 percent of the school districts in Idaho have inclusive policies, and the other 75 percent are silent? I guess my real question is, are there any school districts in Idaho that have a policy that says you must use your biological gender bathroom?

MR. WILSON: I'm not aware of any districts that have done that. I think this is, again, the nature of a long -- a long-standing rule, something that was true for the Egyptians

and true for the founders and true when this state was created.

You don't usually make policies to reinforce those standards. It was because districts were making policies to the contrary that the legislature passed S.B. 1100 in this case.

THE COURT: All right. I think I had one other question. Okay. I understand your argument on the experts. That seems to me to be an argument on weight. Doesn't that go later in the case, on summary judgment, rather than on a motion to dismiss?

MR. WILSON: So I'll concede that our experts -- that's not relevant to the motion to dismiss. That's only relevant to the motion for preliminary injunction.

But on the preliminary injunction motion, every one of plaintiffs' claims is founded on Dr. Budge's declaration about gender-affirming care. That's at the heart of it. And if that is not something that the Court gives a lot of credence to, then plaintiffs can't prevail on the science, just like they can't prevail on the law.

THE COURT: Okay. Thank you. I appreciate you clarifying that. That's all I had.

MR. WILSON: Thank you, Your Honor.

THE COURT: Thank you.

Mr. Renn.

MR. RENN: Your Honor, I think I'd like to start out by talking about what specifically is the fence that we're dealing with, because that's of course what Lincoln -- Mr. Wilson started out with.

And I want to be clear that the fence that S.B. 1100 imposes is not the fence between males and females.

THE COURT: You're saying "fence"?

MR. RENN: Fence.

THE COURT: Okay. I thought you were saying "defense" at first.

MR. RENN: I think the quote was, "Before we tear down a fence, we should understand why the fence exists."

And I want to be clear about what the fence actually does. What is it dividing? And it is not, in the form of S.B. 1100, dividing between males and females. It is making a distinction instead between transgender people and cisgender people.

And I do want to make crystal clear that, including under Title IX, we do not dispute that it is permissible for the Government to have separate facilities for males and separate facilities for females. And again, the reason why that's permissible and why S.B. 1100 is not permissible is that that mere act of separation doesn't cause harm to cisgender people, but it does cause harm to transgender people.

I also want to talk about *Adams*, because of course that's the cornerstone of many of the Government's arguments. And just to level set, as I think the Court has acknowledged, *Adams* is truly an outlier decision in the federal judiciary not merely among the federal courts of appeal, as Your Honor noted, the Fourth Circuit in *Grimm*, the Seventh Circuit twice in both *Whitaker* and in *A.C.*, and also I think the Third Circuit in the *Doe v. Boyertown* case, and the Sixth Circuit in the *Dodds* case have all held or strongly suggested that the exclusion of transgender students from facilities matching their gender identity violates either equal protection or Title IX.

And also, at the District Court level, as we cite in footnote 4 of our motion for preliminary injunction, there are about a dozen other decisions that go our way.

And so the mere fact that the Eleventh Circuit has decided what it's decided does not mean it's all representative of what the federal judiciary has generally decided on this particular point.

I also think that *Adams* is factually distinguishable in numerous respects, while we disagree of course as to its core reasoning. It was a decision after a full-blown trial on the merits. And while the Government tries to claim that the Eleventh Circuit didn't rely on facts in its decision, I don't think that's quite right.

The Court did, for example, rely on a factual stipulation between the parties concerning privacy and safety objections. It relied on facts relating to rest room usage and the layout of rest rooms at a particular high school in Florida.

And at the end of the day, the Court of Appeals found that in that particular case against that particular factual record involving a local school district, they did not believe that there was animus there.

Now, this is a totally different record that this Court has before it, and we don't even have to show animus, merely to show that there was an intent to discriminate or, rather, exclude transgender students from the facilities matching their gender identity.

And I think Mr. Wilson just conceded at the end of his argument that S.B. 1100 was of course a direct reaction to local school districts allowing transgender students to use the facilities matching their gender identity.

So it's impossible to see this as anything other than what it is, which is a targeting, just like in *Hecox*, of transgender students. And again, we don't have to show that there was animus, although I do think there's powerful evidence of that. We merely have to show that the Government intended to exclude transgender students from the facilities matching their gender identity for heightened scrutiny to

apply.

The other point about *Adams* is the Court was, at most, upholding the general permissibility of sex-separated facilities. But as we've explained, that's not the right way to look at the problem. And *Hecox* teaches us that you have to actually look at the specific group that the law is excluding.

Mr. Wilson also said that what's good for the goose is good for the gander in the sense that if cisgender students who object to the mere presence of transgender students can be required to use alternate facilities, then why can't the same be true for transgender students?

And I think the factual record on this point is crystal clear that there are very serious unique harms that transgender students experience when they are stigmatized and told you cannot use the same facilities as everyone else.

The statistic that I mentioned of 60 percent of transgender youth seriously contemplating suicide when they've been excluded from facilities matching their gender identity has no parallel on the other side with respect to cisgender students who choose a more private facility because they don't want to use the same facilities as transgender students.

On Title IX, another argument that I think that the Government fails to grapple with is that if they are right and the Government can essentially exclude transgender people from the facilities matching their gender identity as a result of

the exception, it's also the case that the Government doesn't have to even offer any sort of quote/unquote accommodation to that population of people, which I think just really underscores the extreme nature of their argument.

They're essentially saying that someone like A.J. could, under Title IX, be lawfully forced to have no other option than to use the girls' facilities. And I don't think that's a conclusion that any court of appeal has found reasonable or any district court has found reasonable in the case of transgender students.

I also want to talk a little bit about the battle of the experts that I think the Government is trying to set up before this Court.

First of all, what is key to the health of transgender people is their ability to live their lives consistent with their gender identity. And we don't even have to get into the expert testimony to establish this point. The Ninth Circuit held in *Karnoski,* quote, "Living in a manner consistent with one's gender identity is a key aspect of treatment for gender dysphoria," end quote.

The Ninth Circuit held the exact same propositions in *Edmo*. This Court held the exact same propositions in *F.V.* And all Dr. Budge does is to confirm that, of course, the conclusions of the Ninth Circuit and this Court are absolutely correct on that very, very basic and elementary point.

But the reason why, frankly, I did not spend much time in my opening arguments talking about Dr. Budge versus Dr. Cantor is that that dispute is truly immaterial to the outcome of the motion for preliminary injunction and certainly the outcome of any motion to dismiss.

Dr. Budge outlines that there are six different categories of harm that transgender people experience when they're excluded from the facilities matching their gender identity. Dr. Cantor, at most, rebuts one of them. He doesn't talk at all about the stigmatization, for example, that transgender people experience. Even if you believe everything else he says, he doesn't talk about the other psychological harms that transgender people experience from this form of discrimination.

And I think this is perhaps the most telling aspect of why his testimony is relevant to this Court. He affirmatively supports the right of transgender people to use facilities matching their gender identity. So you can believe everything that he believes about transition and gender dysphoria and standards of care and yet still also believe that transgender people should be able to use facilities matching their gender identity.

And if the Court were to go down the road of weighing Dr. Cantor's testimony versus Dr. Budge's testimony, I think that Dr. Cantor's testimony doesn't really hold a candle to

Dr. Budge.

Dr. Budge is also the same expert that the Seventh Circuit relied upon in *Whitaker* and found her opinions to be quite helpful and authoritative. And meanwhile, Dr. Cantor has virtually no experience treating patients with gender dysphoria.

I think a lot of the presentation that we saw today, the PowerPoint slides about the pyramid of evidence, those might work very well in the case challenging Idaho's ban on gender-affirming care that Judge Winmill will be listening to. I don't think it really controls the outcome of this motion at all.

And finally, there is no nexus between what Dr. Cantor says and what S.B. 1100 does. S.B. 1100 does not bar transgender people from transitioning. Transgender people exist. People like A.J. exist. People like Rebecca Roe exist. And the question is, what are schools supposed to do with them? And as we've shown, the correct answer is to not ban them from using the same facilities that everyone else uses.

I'd like to make two final points, Your Honor. And I appreciate the generosity of your time.

The first is Mr. Wilson argued that this Court needs to decide the question of what sex means. And I think *Bostock* teaches us that you don't have to decide that question,

because even if you take sex at its most narrow form, which is all that *Bostock* did, it proceeded on the assumption but not the holding that sex was defined essentially as your birth assignment sex or what the Government calls biological sex.

But even if that is so, there's no question that transgender people are harmed as a result of that. Again, our position on Title IX and equal protection is that this law inflicts sex-based harm against transgender people even if you view sex as narrowly as the Government has.

But I do think that the expert testimony makes quite clear that sex is much more complicated than what the Government is suggesting. The Seventh Circuit in *A.C.*, for example, pointed out what about intersex people? The reality is there are -- there's a spectrum, and it's not the case that everyone falls neatly into these binary buckets of gender that the Government has articulated, and the Government has to grapple with that reality.

The final point that I want to make, Your Honor, is that I do think that the balance of equities have tipped sharply in plaintiffs' favor. Whatever might have been the case in the situation of the TRO, now that the Court has the full benefit of both sides' evidence, we are the only ones who have put forward evidence showing that the law is not substantially related to privacy or safety. And for that reason, we respectfully request the Court enter a preliminary

injunction and also deny the Government's motion to dismiss.

THE COURT: Thank you.

MR. RENN: Thank you, Your Honor.

THE COURT: Mr. Wilson.

MR. WILSON: It might be too late. Is it possible that we can get use of the ELMO? Or is that going to be --

THE COURTROOM DEPUTY: No.

MR. WILSON: Let's turn it on. I'm not going to use it quite yet.

And, Isaac, could you be ready with that one slide.

Thank you, Your Honor. I just have a few brief responses on this point. Mr. Renn said that S.B. 1100 was targeting people with gender dysphoria. It's not doing that. It's upholding a biological sex line that's a long-standing line that that's how the Eleventh Circuit treated the same standard in *Adams*; it's how this Court should treat it here. Nor is there evidence of targeting that Mr. Renn suggested.

The law provides an accommodation that Dr. Budge -- her own studies say is an adequate accommodation in support of gender-affirming care. That's not a law that's doing targeting.

This is not like *Hecox*, where there were other opportunities that could have been done for -- to allow different types of participation by people with gender dysphoria. It's a situation where the legislature has already

crafted that accommodation to make sure that it's addressing people in this situation. And the fact that it's done so I think speaks well to the character of the officials who wrote this law that they went out of their way to do that.

Isaac, do we have that slide there? I'm switching back and forth.

Mr. Renn says that the -- that the evidence of harms to people with gender dysphoria is unrebutted, all their psychological harms. Well, the problem is that the evidence that Dr. Budge is relying on to say that, it all comes from this low-tier survey evidence where Dr. Budge is talking about the psychological harms.

What Dr. Cantor explains is that those surveys are not adequate to show, on a systematic basis, the real harm. And why is that?

If we could switch over to the ELMO. I'll use that page from Dr. Cantor's report.

This is, over the last decade or so, the increase in depression among various age groups. And you see both in those 12-to-17 and 18-to-25 groups, depression and other mental health diagnoses have skyrocketed. This is page 58 of Dr. Cantor's report. And that's because there's a general mental health crisis among young people. And because of that general mental health crisis among young people, you can't tell from a survey of people with gender dysphoria whether

their health issues are attributable to their gender dysphoria or whether they're attributable to this general rise in mental health problems among young people.

What you need to do that is a controlled experiment. And the problem is that either those controlled experiments don't exist or the ones that do exist don't support what Dr. Budge is saying.

Now, to the extent that there's a battle of the experts on this point, which way does that cut? If there's a battle of the experts, we don't think Dr. Budge gets past go. We don't think her testimony would even be admissible.

But even if we take it to a battle of the experts, that favors the State because there's medical uncertainty on the question. And *Gonzales v. Carhart* says that in areas of medical uncertainty, there's deference to the State; they have wide discretion to legislate on those questions as they deem fit.

You also look at plaintiffs' efforts to discredit Dr. Cantor. They say, well, Dr. Cantor, he doesn't have clinical experience on this question. But on that hierarchy of evidence, that pyramid of evidence, clinical experience is at the very bottom. That's what Dr. Budge is relying on, and it's not sufficient to show harms on a population level. It's not something that's adequate evidence in this case.

Plaintiffs also point to Dr. Cantor's statement that

he believes that people with gender dysphoria should be able to use the rest room that aligns with their gender identity. That's on his website. This is an area where plaintiffs really would have benefited from taking Dr. Cantor's deposition; they chose not to.

But if they'd asked about that, what he would have clarified is that that statement relates entirely to adults. And you can tell that because the statement itself is nearly 20 years old and cites the WPATH sixth edition. There's been two editions of WPATH since that time. We're now up to the eighth edition. And that sixth edition of the WPATH guidelines, the criteria would have applied almost exclusively to adults.

And there wasn't this dramatic increase in people identifying as transgender that we've seen in the last few years at the time that Dr. Cantor wrote that. He stands by that statement for adults --

THE COURT: You're making an argument right now about what your expert would have said if he was deposed. Is that in the record anywhere? How can I rely on that?

MR. WILSON: What you can rely on in this case is certainly not my statement about what he would have said, but what you can rely on is what's apparent in the statement itself. The statement itself is citing the WPATH guidelines from 20 years ago that would have applied to adults. So it's

possible to infer from that statement exactly what's the case here.

THE COURT: Okay.

MR. WILSON: Two more notes very briefly.

Plaintiffs have said that, you know, *Adams* is the minority position on this issue. It kind of depends on how you count it, because most of the circuit opinions on these questions have been divided circuit opinions.

And, you know, if you look at the Fourth Circuit, you have two judges of a panel overturning a bathroom law and Judge Niemeyer with a very persuasive dissent. Seventh Circuit, you have two judges in their recent decision upholding the law, Judge Easterberg -- sorry -- Easterbrook concurring but noting that he had questions about the Title IX interpretation, and he thought the Eleventh Circuit got that right.

Adams in the Eleventh Circuit is a whole bunch of judges on either side of the question, but the majority carried the day on the en banc court.

And the Supreme Court of the United States has not spoken to the question, but it's held in *Bostock* specifically that it wasn't addressing bathrooms. And it's also held in its recent *Dobbs* and *Bruen* decisions that history is critical to the understanding of constitutional law.

So the courts of appeals are split. The Supreme

Court hasn't clearly spoken. But we think that where this issue is likely to go and the way the Court should look at it in the long term is that the Supreme Court is likely to uphold on a historical basis those long-standing definitions of sex.

Mr. Renn said at the end that it was not necessary for this Court to decide what does sex mean. Well, the reason it's not necessary for the Court to decide what sex means is because every authority other than Dr. Budge agrees what sex means.

The Supreme Court of the United States, in its equal protection jurisprudence, says sex is biological, binary, and immutable. *Bostock,* in a statutory context, adopts the same understanding. Every one of the medical organizations that Dr. Cantor referred to, they say sex is a biological construct. Only Dr. Budge says that it's not.

And that is -- as plaintiffs earlier conceded, that's fatal to their claims because it's critical to their notion of how they're conceiving of this dispute that they be treated as members of the sex with which they identify and being unlawfully excluded from that.

But if they are not in fact members of that sex, then the law that excludes them and especially one that provides them with an accommodation is not unlawful discrimination. It survives intermediate scrutiny for the same reasons as *Adams*.

And unless the Court has any further questions, that

concludes my argument.

THE COURT: No, I don't. Thank you.

MR. WILSON: Thank you.

THE COURT: Counsel, I do appreciate the arguments today. I always worry when we come into arguments that it's just going to regurgitate the briefs. This certainly did not. It gave me a lot of new things to think about, and I appreciate it.

Obviously, I'm taking the matter under advisement. I'll get a decision out as quickly as I can. I've said this before, but one of the greatest things about getting another district judge on the bench is my caseload went down by a hundred cases overnight. So I can move a lot quicker than I used to; at least that's my plan, and I will try to do it here.

I will tell you, for the first time in 16 years as a judge on the state and federal bench, I'm taking a two-week vacation. So that will slow me down just a little bit, but we'll have this out very quickly.

I appreciate the arguments here today. And unless there's anything else, we'll be in recess.

(Proceedings concluded at 10:34 a.m., September 13, 2023.)

C E R T I F I C A T E

I, ANNE BOWLINE, a Registered Merit Reporter and Certified Realtime Reporter, do hereby certify that I reported by machine shorthand the proceedings contained herein on the aforementioned subject on the date herein set forth, and that the foregoing 67 pages constitute a full, true and correct transcript.

Dated this 6th day of October, 2023.

/s/ Anne Bowline

ANNE BOWLINE
Registered Merit Reporter
Certified Realtime Reporter

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

Rebecca Roe, et al.,

Plaintiffs,

v. Case No. 1:23-cv-315

Debbie Critchfield, et al.,

Defendants.
_____/

DECLARATION OF JAMES M. CANTOR, PH.D

Expert Declaration of

James M. Cantor, PhD

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I. Credentials and Qualifications

A. Education and professional background

1. I am a sexual behavior scientist, with an internationally recognized record studying the development of human sexualities, and an expert in research methodology of sexuality. My curriculum vitae is attached as Appendix 1 to this report. My publication record includes both biological and non-biological influences on sexuality, ranging from pre-natal brain development, through adulthood, to senescence. The primary, but not exclusive, focus of my own research studies has been the development of atypical sexualities. In addition to the studies I myself have conducted, I am regularly consulted to evaluate the research methods, analyses, and proposals from sexual behavior scientists throughout the world. The methodologies I am qualified to assess span the neurochemical and neuroanatomic level, individual behavioral level, and social and interpersonal levels.

2. I am trained as a clinical psychologist and neuroscientist, and I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. Although I have studied many atypical sexualities, the most impactful of my work has been MRI and other biological studies of the origins of pedophilia. That work has revolutionized several aspects of the sex offender field, both with regard to the treatment of offenders and to the prevention of sexual abuse of children. In 2022, I received the Distinguished Contribution Award from the Association for the Treatment and Prevention of Sexual Abuse in recognition of my research and its integration into public policy. My efforts in this regard have been the subject of several documentary films.

3. Over my academic career, my posts have included Senior Scientist and Psychologist

at the Centre for Addiction and Mental Health (CAMH), and Head of Research for CAMH's Sexual Behaviour Clinic. I was on the Faculty of Medicine of the University of Toronto for 15 years and have served as Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment and Prevention of Sexual Abuse. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of *The Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. I am currently the Director of the Toronto Sexuality Centre in Canada. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

4. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

5. I have a decades-long, international, and award-winning history of advocacy for destigmatizing people with atypical sexualities. While still a trainee in psychology, I founded the

American Psychological Association's (APA) Committee for Lesbian, Gay, and Bisexual Graduate Students. Subsequently, I have served as the Chair for the Committee on Science Issues for APA's Division for the Psychology of Sexual Orientation and Gender Diversity and was appointed to its Task Force on Transgender Issues. Throughout my career, my writings and public statements have consistently supported rights for transgender populations and the application of science to help policy-makers best meet their diverse needs. Because my professional background also includes neurobiological research on the development of other atypical sexualities, I have become recognized as an international leader also in the destigmatizing of the broader range of human sexuality patterns.

6. I am highly experienced in the application of sex research to forensic proceedings: I have served as the Head of Research for the Law and Mental Health Program of the University of Toronto's psychiatric teaching hospital, the Centre for Addiction and Mental Health, where I was appointed to the Faculty of Medicine.

7. I have served as an expert witness in 21 cases in the past four years, as listed on my *curriculum vitae*. These cases included criminal, civil, and custody proceedings, preliminary injunction and Frye hearings, as well as trials. I have testified in courts in Canada and throughout the U.S., including Alabama, Arizona, Florida, Illinois, Indiana, Kansas, Kentucky, Massachusetts, New York, Texas, Utah, and West Virginia. I have provided expert testimony concerning the nature and origins of atypical sexualities, as well as concerning gender dysphoria and gender identity in children.

8. For my work in this case, I am being compensated at the hourly rate of $400 per hour. My compensation does not change based on the conclusions and opinions that I provide here or later in this case or on the outcome of this lawsuit.

B. Clinical expertise vs. scientific expertise

9. In clinical science, there are two kinds of expertise: Clinicians' expertise regards applying general principles to the care of an individual patient and the unique features of that case. A scientist's expertise is the reverse, accumulating information about many individual cases and identifying the generalizable principles that may be applied to all cases. Thus, different types of decisions may require different kinds of experts, such that questions about whether a specific patient represents an exception to the general rule might be better posed to a physician's expertise, whereas questions about establishing the general rules themselves might be better posed to a scientist's.

10. In legal matters, the most familiar situation pertains to whether a given clinician correctly employed relevant clinical standards. Often, it is other clinicians who practice in that field who will be best equipped to speak to that question. When it is the clinical standards that are themselves in question, however, it is the experts in the assessment of scientific studies who are the relevant experts.

C. The professional standard to evaluate treatment models is to rely on objective assessors, not treatment model users in a conflict of interest with its results.

11. I describe in a later section the well-recognized procedures for conducting reviews of literature in medical and scientific fields to evaluate the strength of evidence for particular procedures or treatments. Importantly, the standard procedure is for such evaluations to be conducted by objective assessors with expertise in the science of assessment, and not by those with an investment in the procedure being assessed. Because the people engaged in providing clinical services are necessarily in a conflict of interest when claiming that their services are effective, formal evaluations of evidence are routinely conducted by those *without* direct

professional involvement and thus without financial or other personal interest in whether services are deemed to be safe or effective. This routine practice standard is exemplified by all of the only three systematic, comprehensive research reviews that have been conducted concerning the safety and efficacy of puberty blockers and cross-sex hormones as treatments for gender dysphoria in children.

12. In 2020, England's National Health Service (NHS) commissioned a major review of the use of puberty blockers and cross-sex hormones in children and young people and appointed prominent pediatrician Dr. Hilary Cass to lead that review, explicating that "Given the increasingly evident polarization among clinical professionals, Dr. Cass was asked to chair the group as a senior clinician with *no prior involvement* or fixed views in this area." (Cass 2022 at 35, italics added.) Dr. Cass's committee in turn commissioned formal systematic reviews of evidence from the England National Institute for Health & Care Excellence (NICE), a government entity of England's Department of Health and Social Care, established to provide guidance to health care policy, such as by conducting systematic reviews of clinical research, but without direct involvement in providing treatment to gender dysphoric individuals. (https://www.nice.org.uk/.) Similarly, the Finnish health care council commissioned its systematic review to an external firm, Summaryx Oy. (Pasternack 2019.) Summaryx Oy is a "social enterprise" (a Finnish organization analogous to a non-profit think-tank) that conducts systematic research reviews and other analyses for supporting that nation's medical and social systems. Its reviews are conducted by assessment professionals, not by clinicians providing services. (www.summaryx.eu/en/.) The systematic review by Sweden's National Board of Health and Welfare (NBHW) included four experts. (SBU Scoping Review 2019.) In addition to their own research fields, they provided clinical services in areas adjacent to but apart from gender

dysphoric children, such as physical disorders of sexual development (Dr. Berit Kriström) or gender dysphoria in adults (Dr. Mikael Landén).

13. My own most-cited peer-reviewed paper relating to gender dysphoria in minors illustrates the expertise in the evaluation of scientific evidence that I have and am recognized for. That is, that paper provided not clinical advice or a clinical study, but rather a review and interpretation of the available evidence concerning desistance in children who suffer from gender dysphoria, as well as of evidence (and lack of evidence) concerning the safety and efficacy of medical transition to treat gender dysphoria in minors. (Cantor 2019.)

14. My extensive background in the assessment of sexuality research and in the development of human sexuality places me in exactly the position of objectivity and freedom from conflict-of-interest required by the universal standards of medical research science.

15. I do not offer opinions about the best public policy. Multiple jurisdictions have attempted multiple different means of implementing that science into various public policies. Although I accept as an axiom that good public policy must be consistent with the scientific evidence, science cannot objectively assess societal values and priorities. Therefore, my opinions summarize and assess the science on which public policy is based, but I can offer no opinion regarding which public policy mechanisms would be best in light of that science.

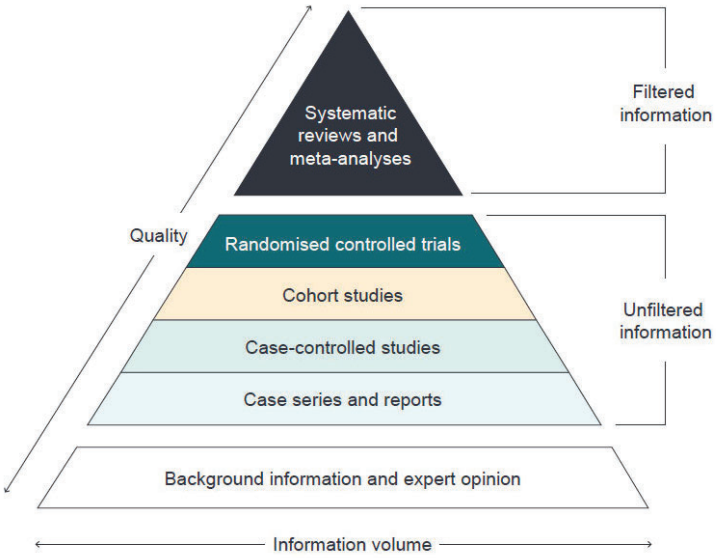
II. Clinical research has a standard *Pyramid of Evidence* that summarizes the relative strength of potential sources of information.

16. The widely accepted starting point in evidence-based medicine is the recognition that clinical experiences and recollections of individual practitioners (often called "expert opinion" or "clinical anecdote") do not and cannot provide a reliable, scientific basis for treatment decisions. Rather, in evidence-based medicine, clinical decision-making is based on objectively demonstrated evidence of outcomes from the treatment options. An essential first step in evidence-based medicine is identifying the relevant findings from among the immense flood of clinical journal articles published each year. Those studies and the evidence they report are then assessed according to the strength offered by the research methods used in each study. The research methods used in a study determine its reliability and generalizability, meaning the confidence one may have that using the same treatment again will have the same result again on other people. In this section, I explain the well-accepted criteria for evaluating the evidentiary value of clinical studies.

A. Clinical research comprises a standard *Pyramid of Evidence*, wherein studies from higher levels of evidence outrank even more numerous studies from lower levels of research.

17. The accepted hierarchy of reliability for assessing clinical outcomes research is routinely represented as a "Pyramid of Evidence" (Figure 1). Scientific questions are not resolved by the number of studies coming to one versus another conclusion. Studies representing higher levels of evidence outrank studies from lower levels. Even large numbers of lower-level studies cannot overcome a study representing a higher level of evidence. Indeed, because lower-level studies are generally faster and less expensive to conduct, it is typical for them to outnumber higher level studies. This is the property meant to be reflected by the pyramid's shape, which is larger at the base and smaller at the apex.

Figure 1: Pyramid of Standards of Evidence



Source: OpenMD. Retrieved from https://openmd.com/guide/levels-of-evidence.

B. The highest level of evidence for safety and effectiveness research is the systematic review of clinical experiments.

18. The most reliable and conclusive method of determining what is actually known or not known with respect to a particular treatment is the *systematic review.* Systematic reviews employ standardized procedures to assess comprehensively all available evidence on an issue, minimizing opportunities for bias in gathering and evaluating research evidence. As described by Dr. Gordon Guyatt, the internationally recognized pioneer in medical research who invented the term *evidence-based medicine,* "A fundamental principle to the hierarchy of evidence [is] that optimal clinical decision making requires systematic summaries of the best available evidence." (Guyatt 2015 at xxvi.)

1. Systematic reviews prevent the 'cherry-picking' of studies that favor a particular result.

19. Because systematic reviews are designed to prevent researchers from including only the studies they favor and other biases, systematic reviews are the routine starting point for

developing clinical practice guidelines. (Moher 2009.) The methods of a systematic review include:

- Define the scope, including the "PICO": Population/Patient, Intervention, Comparison/Control, and Outcome(s);
- Select and disclose the keywords used to search the (massive) available clinical research database(s) for potentially relevant articles, identify the databases they were applied to, and the date(s) of the searches, including any subsequent updates;
- Select and disclose the inclusion/exclusion criteria to be used to filter the "hits" from the keyword searches to identify research studies to be included in the detailed review;
- Review abstracts to select the final set of studies, using at least two independent reviewers to allow for measuring inter-rater reliability on the criteria;
- Code each study's results impacting the research question(s), disclosing the list of all studies and the results coded from each;
- Evaluate the reliability of the results [risk of bias] of each included study, applying uniform criteria across them all.

20. As detailed in Section V, several systematic reviews have been conducted of the outcomes of medicalized transition of gender in minors. Their conclusions are highly consistent with each other. Much of the expert testimony offered by plaintiffs' expert, however, depends on levels of evidence far lower on the pyramid of evidence (e.g., "expert opinion") or beneath the pyramid entirely (e.g., survey studies) while ignoring the thorough, high-quality systematic reviews available in the research literature. Doing so is in direct conflict with foundational principles of evidence-based medicine.

2. Systematic reviews prevent biased assessment of individual studies by uniformly applying standard criteria to each study reviewed. The most widely used criteria set is "GRADE."

21. In order to produce unbiased assessment of the studies within the systematic review, all the studies must be evaluated using the same evaluation criteria. Without such criteria, assessments can become influenced by researchers who, intentionally or not, hold the evaluative bar higher or lower for studies according to whether the studies' conclusions support or

challenge that researcher's perspective. Several such systems have been developed. The most widely used system is the "Grading of Recommendations, Assessment, Development and Evaluations" (GRADE). (Goldet & Howick 2013.) In the GRADE system, studies' findings are downgraded for:

- Risk of bias:[1]
    - Lack of clearly randomized allocation sequence,
    - Lack of blinding,
    - Lack of allocation concealment,
    - Failure to adhere to intention-to-treat analysis,
    - Trial is cut short,
    - Large losses to follow-up;
- Inconsistency;
- Indirectness of evidence;
- Imprecision; and
- Publication bias (when studies with 'negative' findings remain unpublished).

Studies' ratings are upgraded if their findings identify:

- A large effect of the treatment;
- A dose-response relationship (the size of the effect has a systematic association with the dose of the treatment given); or
- That all plausible biases only *reduce* the apparent effect of the treatment (necessarily making the estimated effect sizes conservative estimates).

22. GRADE assessments yield a four-point score representing the certainty that a reported treatment effect is true. These certainty scores are (GRADE Handbook, Section 5):

Certainty	**Meaning**
High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.

[1] In science, including in the GRADE system, the term "bias" refers to any external influence leading to a systematic over- or underreporting of the outcome being measured. That is, in this context "bias" is not used in the sociopolitical sense of personal values.

Very Low We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

C. The highest level experimental study of clinical safety and effectiveness is the Randomized Controlled Trial (RCT). RCTs can demonstrate that a given treatment causes (rather than only correlates with) a given outcome.

23. Randomized Controlled Trials are the gold standard method of assessing the effects caused by an experimental treatment. The great scientific weight of RCTs follows from the randomization: People do not pick which research group they are in—a treatment group or a control group. Without random group assignment, it is not possible to identify which, if any, changes are due to the treatment itself or to the factors that led to who did and did not receive treatment.

24. Levels of evidence lower than RCTs are unable to distinguish when changes are caused by the experimental treatment, or by factors that can mimic treatment effects, such as 'regression to the mean' and the placebo effect.

25. In the absence of evidence that X causes Y, it is a scientific error to use language indicating there is causal relationship. In the absence of evidence of causality, it is scientifically unsupportable to describe a correlation with terms such as: increases, improves, benefits, elevates, leads to, alters, influences, results in, is effective for, causes, changes, contributes to, yields, impacts, decreases, harms, and depresses. Scientifically valid terms for correlations include: relates to, is associated with, predicts, and varies with.

26. I note that the plaintiffs' expert repeatedly misrepresent studies using causal language to describe studies that are unable to demonstrate causality. Such language incorrectly asserts that the evidence is stronger than it actually is.

1. RCTs, but not lower levels of evidence, overcome biases representing 'regression to the mean' and other factors that can mimic clinical improvement.

27. 'Regression to the mean' arises when researching issues, such as mood, depression, or levels of emotional distress that typically fluctuate over time. People are more likely to seek out treatment during low points rather than high points in their emotional lives. Thus, when tracking emotional states over time, the average of a group of people in a treatment group may often show an increase; however, without an untreated control group to which to compare them, researchers cannot know whether the group average would have increased anyway, with only the passage of time.

28. Blinding or masking participants in an RCT from which group they are in has been described as a preferred strategy since the 1950s, in order to exclude the possibility that a person's expectations of change caused any changes observed (the "placebo effect"). In practice, however, it has often made little or no significant difference. For example, a study using very high quality methods—meta-analysis of meta-analysis research—has revealed no statistical difference in the sizes of the effects detected by blinded/placebo-controlled studies from non-blinded/non-placebo-controlled studies of depression. (Moustgaard 2019.) That is, the pre-/post-treatment differences found in placebo groups are not as attributable to participants' expectations of improvement as they are to expectable regression to the mean. (Hengartner 2020.)

2. When a 'no treatment control group' is untenable, RCTs use an 'active comparator' group instead.

29. It is not always possible to compare a group receiving a treatment to a group receiving only an inactive procedure, such as a placebo treatment or no treatment at all. In such situations, the standard, ethical, clinical research method is to compare two active treatments with each other.

30. The systematic reviews from England explicitly called for 'active comparator' studies to test whether medicalized transition of minors shows mental health benefits superior to those obtained from psychotherapy. (NICE 2020a at 40; NICE 2020b at 47.) Risk:benefit analysis cannot justify the greater risks associated with medicalization without evidence of correspondingly greater benefit.

D. Cohort studies are the highest level of evidence about medicalized transition currently available.

31. The highest-level study of medicalized transition of minors conducted thus far are cohort studies: gathering a sample of individuals who chose to undergo treatment and tracking them over time. Cohort studies are able to answer some questions that lower-level studies cannot, such as whether a high-functioning group improved over time versus having been composed of people who were already high-functioning. Cohort studies are, however, unable to demonstrate causality, to identify how much of any change was due to regression to the mean, or to detect any placebo effects.

E. Expert opinion represents the least reliable evidence.

32. As Figure 1 illustrates, in evidence-based medicine, opinion based on clinical experience is identified as the *least* reliable source of medical knowledge. Among other reasons, this is because non-systematic recollections of unstructured clinical experiences with self-selected clientele in an uncontrolled setting is the most subject to bias. Indeed, mere "clinical experience" was long the basis of most medical and mental health clinical decisions, and it was precisely the scientific and clinical inadequacy of this type of "knowledge" that led to the development and widespread acceptance of the importance of evidence-based medicine. As Dr. Guyatt has written, "EBM places the unsystematic observations of individual clinicians lowest on the hierarchy," both because EBM "requires awareness of the best available evidence," and

because "clinicians fall prey to muddled clinical reasoning and to neglect or misunderstanding of research findings." (Guyatt 2015 at 10, 15.)

F. Surveys and cross-sectional studies cannot demonstrate treatment effectiveness.

33. Surveys represent observational research rather than experimental research. (In science, experiments are studies involving a manipulation, not merely observation, by the researcher.) Surveys and cross-sectional studies can provide only correlational data and cannot demonstrate causality. (See Section III below). It is not possible for a survey to yield evidence that a treatment is effective. No number of surveys can test a treatment, advancing it from 'experimental' to 'established' status.

34. Survey studies do not even appear on the *pyramid of evidence.* In accordance with the routine standards, systematic reviews of treatment studies exclude surveys.

III. Methodological defects limit or negate the evidentiary value of many studies of treatments for gender dysphoria in minors.

A. In science, to be valid, a claim must be objective, testable, and falsifiable.

35. In behavioral science, people's self-reports do not represent objective evidence. It is when emotional and other pressures are strongest that the distinction between and need for objective over subjective evidence is greatest. Surveys do not represent objective evidence. This is especially true of non-random surveys and polls, recruited through online social networks of the like-minded.

B. Correlation does not imply causation.

36. Studies representing lower levels of evidence are often used because they are faster and less expensive than studies representing higher levels. A disadvantage, however, is that they are often limited to identifying which features are *associated* with which other features, but they cannot show which ones are *causing* which. It is a standard property of statistical science that when a study reports a correlation, there are necessarily three possible explanations. Assuming the correlation actually exists (rather than represents a statistical fluke or bias), it is possible that X causes Y, that Y causes X, or that there is some other variable, Z, that causes both X and Y. (More than one of these can be true at the same time.) To be complete, a research analysis of a correlation must explore all three possibilities.

37. For example, assuming a correlation between treatment of gender dysphoria in minors and mental health actually exists (rather than is a fluke): (1) It is *possible* that treatment causes improvement in mental health. (2) Yet, it is also possible that having good mental health is (part of) what enabled transition to occur in the first place. That is, because of gate-keeping procedures in the clinical studies, those with the poorest mental health are typically not permitted to transition, causing the higher mental health scores to be sorted into the transitioned group.

(See Section III.E on *Selection Bias*.) (3) It is also possible that a third factor, such as wealth or socioeconomic status, causes both the higher likelihood of transitioning (by being better able to afford it) and the likelihood of mental health (such as by avoiding the stresses of poverty or affording psychotherapy).

38. This principle of scientific evidence is why surveys do not (cannot) represent evidence of treatment effectiveness: Surveys are limited to correlations. (See Section II.F. on *Surveys*.)

C. When two or more treatments are provided at the same time, one cannot know which treatment caused observed changes (i.e., 'confounding').

39. Confounding is a well-known issue in clinical research design. As detailed in the present report, it applies throughout treatment studies of gender dysphoria. Patients who undergo medical transition procedures in research clinics routinely undergo mental health treatment (psychotherapy) at the same time. Without explicit procedures to distinguish them, it cannot be known which treatment produced which outcome (or in what proportions). Indeed, that mental health improvement came from mental health treatment is a more parsimonious (and therefore, scientifically superior) conclusion than is medicalized treatment causing mental health improvement.

D. Extrapolation to dissimilar populations and dissimilar conditions.

40. The purpose of clinical science is to establish from a finite sample of study participants information about the effectiveness and safety, or other variables, of a treatment that can be generalized to other people. Such extrapolation is only scientifically justified with populations matched on all relevant variables. The identification of those variables can itself be a complicated question, but when an experimental sample differs from another group on variables already known to be related, extrapolation cannot be assumed but must be demonstrated directly

and explicitly.

41. Each of the systematic reviews from the UK, Sweden, and Finland emphasized that the recently observed, greatly increased numbers of youth coming to clinical attention are a population different in important respects from the subjects of often-cited research studies. Conclusions from studies of adult-onset gender dysphoria and from childhood-onset gender dysphoria cannot be assumed to apply to the current patient populations of adolescent-onset gender dysphoria. The Cass Report correctly advised:

> It is also important to note that any data that are available do not relate to the current predominant cohort of later-presenting birth-registered female teenagers. This is because the rapid increase in this subgroup only began from around 2014-15. Since young people may not reach a settled gender expression until their mid-20s, it is too early to assess the longer-term outcomes of this group. (Cass 2022 at 36.)

The report also indicated:

> [I]t is important that it is not assumed that outcomes for, and side effects in, children treated for precocious puberty will necessarily be the same in children or young people with gender dysphoria. (Cass 2022 at 63.)

42. Finland's review repeated the observation of greatly (20 times) increased numbers, an entirely different demographic of cases, and increased proportions of psychiatric co-morbidities. (Finnish Palko Preparation Memo at 4-6.) The Swedish review highlighted "the uncertainty that follows from the yet unexplained increase in the number of care seekers, an increase particularly large among adolescents registered as females at birth." (Swedish Socialstyrelsen Support 2022 at 11.)

43. It is well known that males and females differ dramatically in the incidence of many mental health conditions and in their responses to treatments for mental health conditions. Thus, research from male-to-female transitioners (the predominant population until recent years) cannot be extrapolated to female-to-male transitioners (the predominant population presenting at clinics today). Outcomes from patients who experienced clear pre-pubertal childhood gender

dysphoria cannot be extrapolated to patients who first manifest diagnosable gender dysphoria well into puberty. Outcomes from clinics employing rigorous and openly reported gate-keeping procedures cannot be extrapolated to clinics or clinicians employing only minimal or perfunctory assessments without external review. Developmental trajectories and outcomes from before the social media era cannot be assumed to apply to those of the current era or the future. Research from youth with formal diagnoses and attending clinics cannot be extrapolated to self-identifying youth and those responding to surveys advertised on social media sites.

44. Further, treatment of gender dysphoria in children and adolescents presents novel-use cases very dissimilar to the contexts in which puberty blockers and cross-sex hormones have previously been studied. Whereas use of puberty blockers to treat precocious puberty *avoids* the medical risks caused by undergoing puberty growth before the body is ready (thus outweighing other risks), use of blockers to treat gender dysphoria in patients already at their natural puberty pushes them *away* from the mean age of the healthy population. Instead of avoiding an objective problem, one is created: Among other things, patients become subject to the issues and risks associated with being late-bloomers, *very* late-bloomers. This transforms the risk:benefit balance, where the offsetting benefit is primarily (however validly) cosmetic.

45. Similarly, administering testosterone to an adult male to treat testosterone deficiency addresses both a different condition and a different population than administration of that same drug to an adolescent female to treat gender dysphoria; the benefits and harms observed in the first case cannot be extrapolated to the second.

E. Mental health assessment used for gate-keeping medicalized transition establishes a *selection bias,* creating a statistical illusion of mental health improvement among the selected.

46. Importantly, clinics are expected to conduct mental health assessments of applicants

seeking medicalized transition, disqualifying from medical services patients with poor mental health. (The adequacy of the assessment procedures of specific clinics and clinicians remains under debate, however.) Such gate-keeping—which was also part of the original "Dutch Protocol" studies—can lead to misinterpretation of data unless care is explicitly taken. A side-effect of excluding those with significant mental health issues from medical transition is that when a researcher compares the average mental health of the gender dysphoric individuals first presenting to a clinic with the average mental health of those who completed medical transition, then the post-transition group would show better mental health—but only because of the *selection bias*, (Larzelere 2004; Tripepi 2010) even when the transition had no effect at all.

IV. Definitions of sex, gender identity, and gender dysphoria.

A. Sex and sex-assigned-at-birth represent objective features.

47. Sex is an *objective* feature: It can be ascertained regardless of any declaration by a person, such as by chromosomal analysis or visual inspection. Gender identity, however, is *subjective:* There exists no means of either falsifying or verifying people's declarations of their gender identities. In science, it is the objective factors—and only the objective factors—that matter to a valid definition. Objectively, sex can be ascertained, not only in humans or only in the modern age, but throughout the animal kingdom and throughout its long history in natural evolution.

48. I use the term "sex" in this report with this objective meaning, which is consistent with definitions articulated by multiple medical organizations:

> Endocrine Society (Bhargava 2021 at 220.)
>
> > "Sex is dichotomous, with sex determination in the fertilized zygote stemming from unequal expression of sex chromosomal genes."
>
> American Academy of Pediatrics (Rafferty 2018 at 2 Table 1.):
>
> > "An assignment that is made at birth, usually male or female, typically on the basis of external genital anatomy but sometimes on the basis of internal gonads, chromosomes, or hormone levels."
>
> American Psychological Association (APA Answers 2014):
>
> > "Sex is assigned at birth, refers to one's biological status as either male or female, and is associated primarily with physical attributes such as chromosomes, hormone prevalence, and external and internal anatomy."
>
> American Psychological Association (APA Resolution 2021 at 1):
>
> > "While gender refers to the trait characteristics and behaviors culturally associated with one's sex assigned at birth, in some cases, gender may be distinct from the physical markers of biological sex (e.g., genitals, chromosomes)."
>
> American Psychiatric Association (Am. Psychiatric Ass'n Guide):
>
> > "Sex is often described as a biological construct defined on an anatomical, hormonal, or genetic basis. In the U.S., individuals are assigned a sex at birth based on external genitalia."

49. The phrases "assigned male at birth" and "assigned female at birth" are increasingly

popular, but they lack any scientific merit. Science is the systematic study of natural phenomena, and nothing objective changes upon humans' labelling or re-labelling it. That is, the objective sex of a newborn was the same on the day before as the day after the birth. Indeed, the sex of a fetus is typically known by sonogram or amniocentesis many months before birth. The use of the term "assign" insinuates that the label is arbitrary and that it was possible to have been assigned a different label that is equally objective and verifiable, which is untrue. Infants were born male or female before humans invented language at all. Indeed, it is exactly because an expected child's sex is known before birth that there can exist the increasingly popular "gender reveal" events. Biologically, the sex of an individual (for humans and almost all animal species) as male or female is irrevocably determined at the moment it is conceived. Terms such as "assign" obfuscate rather than clarify the objective evidence.

B. Gender identity refers to subjective feelings that cannot be defined, measured, or verified by science.

50. It is increasingly popular to define gender identity as a person's "inner sense," however, neither "inner sense" nor any similar phrase is scientifically meaningful. In science, a valid construct must be both objectively measurable and falsifiable with objective testing. The concept of an "inner sense" fits none of these requirements.

V. Distinct mental health phenomena must not be—but frequently are—confused or conflated.

51. One of the most widespread public misunderstandings about people expressing gender dysphoria is that all such cases represent the same phenomenon; however, the clinical science has long and consistently demonstrated that prepubescent children expressing gender dysphoria represent a phenomenon distinct from that of adults starting to experience it. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in virtually every objective variable measured, including in their responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: these cases appear to have an onset in adolescence—after the onset of puberty and before adulthood—and occur in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or "rapid-onset" gender dysphoria (ROGD). Despite having only recently been observed, they have quickly and greatly outnumbered the better characterized types. Moreover, large numbers of adolescents are today self-identifying in surveys as "gender fluid" and "non-binary." These are not recognized mental health diagnoses, and do not relate in any known way to gender dysphoric groups that have been the subject of previous treatment outcome studies. Because each of these phenomena differ in multiple objective features, it is scientifically invalid to extrapolate findings from one type to the others.

A. Adult-Onset Gender Dysphoria consists predominantly of males sexually attracted to females.

52. Whereas Childhood-Onset Gender Dysphoria occurs in biological males and females and is strongly associated with later homosexuality (next section), Adult-Onset Gender Dysphoria consists primarily of biological males sexually attracted to females. (Lawrence 2010.) They typically report being sexually attracted to women and rarely showed gender atypical

(effeminate) behavior or interests in childhood (or adulthood). Some individuals express being sexually attracted to both men and women, and some profess asexuality, but very few indicate having a primary sexual interest only in men. (Blanchard 1998.) Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern involving themselves in female form (a paraphilia called autogynephilia). (Blanchard 1989a, 1989b, 1991.)

53. Because of the numerous objective differences between adult-, childhood-, and adolescent-onset gender dysphoria, it is not possible to extrapolate from these results to juvenile populations, which responsible authors are careful not to do.

B. Childhood-onset gender dysphoria (prepubertal-onset) is a distinct phenomenon characterized by high rates of desistance in the absence of social or medical transition.

54. For many decades, small numbers of prepubescent children have been brought to mental health professionals for help with their unhappiness with their sex and in the belief they would be happier living as the other sex. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female. (Cohen-Kettenis 2003; Steensma Evidence 2018; Wood 2013.)

1. Eleven cohort studies followed children not permitted social transition, all showing the majority to desist feeling gender dysphoric upon follow-up after puberty.

55. Currently, the studies of outcomes among children who experience gender dysphoria before puberty that provide the most evidentiary strength available are only "cohort studies," which follow people over time, recording the outcomes of the treatments they have undergone. Such studies supersede (i.e., overrule) the outcomes of surveys, which are much more prone to substantial error. As I have explained above, however, cohort studies can describe developmental pathways, but cannot provide evidence of causation.

56. In total, there have been 11 cohort studies showing the outcomes for these children, listed in Table 2. I first published this comprehensive list of studies in my own peer-reviewed article on the topic. (Cantor 2019.)

Table 2. Cohort studies of gender dysphoric, prepubescent children.

Count	Group	Study
2/16 4/16 10/16	gay trans-/crossdress straight/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19,* 363–369.
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
1/44 43/44	trans- cis-	Green, R. (1987). The "sissy boy syndrome" and the development of homosexuality. New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44*, 34–45.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.

17/139 122/139	trans- cis-	Singh, D., Bradley, S. J., Zucker, K. J. (2021). A follow-up study of boys with Gender Identity Disorder. *Frontiers in Psychiatry*, 12:632784.

*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.

57. The children in these studies were receiving professional mental health support during the study period, but did not "socially transition." In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, at various times across four decades, every study without exception has come to the identical conclusion: among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as "desisters," whereas children who continue to feel gender dysphoric are often called "persisters."

58. This interpretation of these studies is widely accepted, including by the Endocrine Society, which concluded:

> In most children diagnosed with GD/gender incongruence, it did not persist into adolescence. . . . [T]he large majority (about 85%) of prepubertal children with a childhood diagnosis did not remain GD/gender incongruent in adolescence. (Hembree 2017 at 3879.)

The developers of the Dutch Protocol, at the Vrije University gender clinic, likewise concluded based on these studies that "Although the persistence rates differed between the various studies…the results unequivocally showed that the gender dysphoria remitted after puberty in the vast majority of children." (Steensma & Cohen-Kettenis 2011 at 2.)

59. The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. That

is, it cannot be assumed that gender identity is immune to influence such as from psychotherapy. Such is an empirical question, and there has not yet been any such research.

60. These same studies are often vaguely cited to assert that the high desistance rates uniformly reported in these 11 studies do not apply to children who have persisted until "the start of puberty" (which is taken to mean Tanner Stage 2), or in an alternative phrasing, that children "who persist until the start of puberty" are likely to continue to persist into adulthood. But these studies taken together do not support that degree of precision. Rather, the studies do not specify at exactly what developmental stage the reported desistance occurred—what they report is that the subjects had desisted by late adolescence or early adulthood. I am aware of no systematic study that establishes that—in the absence of social and/or medical transition—children who experience gender dysphoria are unlikely to desist if they have not desisted by the start of Tanner Stage 2.

2. One cohort study followed children who were permitted social transition. In contrast with children not permitted to transition socially, most persisted in expressing gender dysphoria.

61. In contrast, Olson et al. have now published a single cohort study of prepubescent children, ages 3–12 (average of 8), who had already made a complete, binary (rather than intermediate) social transition, including a change of pronouns. (Olson 2022.) The study did not employ DSM-5 diagnosis, as "Many parents in this study did not believe that such diagnoses were either ethical or useful and some children did not experience the required distress criterion." (Olson 2022.) Unlike the prior research studies, only 7.3% of these (socially transitioned) children ceased to feel gender dysphoric.

62. Although the team publishing this cohort study did not discuss it, their finding matches the prediction of other researchers, that social transition itself represents an active

intervention, such that social transition may *cause* the persistence of gender dysphoria when it would have otherwise resolved, avoiding any need for subsequent medicalization and its attendant risks. Conversely stated, social transition seems to prevent desistance. (Singh 2021; Zucker 2018, 2020.)

63. As recognized by multiple authors, the potential impact of social transition on rates of desistance is pivotal. The Endocrine Society cautions that "social transition...has been found to contribute to the likelihood of persistence." (Hembree 2017 at 3879.) WPATH has stated that after social transition, "A change back to the original gender role can be highly distressing and [social transition can] even result in postponement of this second transition on the child's part." (Coleman 2012 at 176.) In 2013, prominent Vrije University researchers observed:

> Childhood social transitions were important predictors of persistence, especially among natal boys. Social transitions were associated with more intense GD in childhood, but have never been independently studied regarding the possible impact of the social transition itself on cognitive representation of gender identity or persistence. [Social transition] may, with the hypothesized link between social transitioning and the cognitive representation of the self, influence the future rates of persistence. (Steensma 2013 at 588-589.)

3. There is no reliable method for predicting for which children who present with gender dysphoria will persist versus desist.

64. The Endocrine Society Guidelines stated in 2017 that "With current knowledge, we cannot predict the psychosexual outcome for any specific child" (Hembree 2017 at 3876), and this remains true today. Research has not yet identified any reliable procedure for discerning which children who present with gender dysphoria will persist, as against the large majority who will desist, absent transition and "affirmation." Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can be weighted. Such "risk prediction" and "test construction" are standard components of applied statistics in the behavioral sciences. Multiple research teams have

reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of any particular child. (Singh 2021; Steensma 2013.)

65. In contrast, one research team (the aforementioned Olson group) claimed the opposite, asserting that they developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children's "peer preference, toy preference, clothing preference, gender similarity, and gender identity." (Rae 2019 at 671.) They reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they indicated, "Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability." (Rae 2019 at 673.) Although the Olson team declared that "social transitions may be predictable from gender identification and preferences" (Rae 2019 at 669), their actual results suggest the opposite: the gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75. (Rae 2019, Supplemental material at 6, Table S1.) Both of those are lower than the value of .75, so both of those would be more likely than not to desist, rather than to proceed to transition. That is, Olson's model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

66. Further, in the absence of long-term follow-up, it cannot be known what proportion of those who transition and persist through the early stages of puberty will later (for example as young adults) come to regret having transitioned and then *de*transition. Because only a minority

of gender dysphoric children persist in feeling gender dysphoric in the first place, "transition-on-demand" increases the probability of unnecessary transition and unnecessary medical risks.

4. Temple Newhook's attempts to dismiss evidence of high rates of desistance from childhood gender dysphoria are invalid.

67. The unanimous consistency across all 11 cohort studies of (non-transitioned) gender dysphoric children offers high confidence in the conclusion that most childhood-onset cases desist during the course of puberty. In 2018, however, a commentary was published, contesting that conclusion, criticizing four studies. (Temple Newhook 2018.) Multiple accomplished international researchers studying outcomes of gender dysphoric children responded (Zucker 2018; Steensma & Cohen-Kettenis 2018), to which the Temple Newhook team wrote a rejoinder. (Winters 2018.) I have reviewed each of these arguments, finding that the Temple Newhook comments rely on demonstrable falsehoods, whereas the responses remain consistent with the peer-reviewed evidence. The Temple Newhook commentary has not altered the consensus of the international medical community, which continues to cite and rely upon these cohort studies.

68. Before delineating each of their arguments, it should be noted that the Temple Newhook team based their analysis on the wrong research reports, attacking only a straw-person version of the contents of the research literature. Table 3 repeats the 11 cohort studies (on the left left) and the four studies Temple Newhook criticized (right):

Table 3.

• Lebovitz (1972)	
• Zuger (1978)	
• Money & Russo (1979)	
• Davenport (1986)	
• Green (1987)	
• Kosky (1987)	
• Wallien & Cohen-Kettenis (2008)	Wallien & Cohen-Kettenis (2008)
• Drummond, *et al.* (2008)	Drummond, *et al.* (2008)
• Steensma, *et al.* (2013)	Steensma, *et al.* (2011, 2013)

- Singh, 2012/Singh, *et al.* (2021)[2]

69. It should also be noted that the Temple Newhook 2018 commentary does not represent a systematic review. Temple Newhook did not indicate search strategies, inclusion/exclusion criteria, coding methods, reliability checks, or other standard procedures used for ensuring objective and unbiased assessment of all relevant studies. Rather, the Temple Newhook analysis targeted a small and selective subset of the research available—a scientifically invalid endeavor, which the systematic review process is meant to prevent. Not only did Temple Newhook skip most of the relevant science, but conversely, Temple Newhook inserted the Steensma 2011 study, which should have been rejected. (The data it reported was already included in Wallien & Cohen-Kettenis 2008.) The Temple Newhook commentary claimed it was "systematically engaging scholarly literature." (Temple Newhook 2018 at 2.) However, as the above reference lists demonstrate, that commentary involved no such systematic procedures.

70. Temple Newhook does not report any research evidence of its own. Rather, the commentary hypothesizes issues they assert could, theoretically, have affected the rates of desistance consistently detected. Scientifically, such a criticism is vacuous: In science, it is always possible for additional, external factors to have affected what was observed.

71. Also, as already detailed herein, the currently available level of evidence for outcomes of medicalized transition is the cohort study. The methodological issues highlighted by Temple Newhook are exactly why randomized, controlled trials (RCTs) need to be conducted, as such studies would be capable of resolving exactly those questions (in whichever direction). In the absence of randomized, controlled studies, however, the correct scientific process is to follow the results of the cohort studies (that is, the systematic reviews of the cohort studies).

[2] At the time of the 2018 Temple Newhook commentary, the Singh *et al.,* 2021 study was available as Singh, 2012.

72. In the science process, one cannot merely continue to retain a desired hypothesis, rejecting all counter-evidence until a perfect study emerges. This is especially important in clinical science, when the hypothesis relates to physical interventions, in children, with the potential to affect them for their entire lives. Rather, the scientific process proceeds by successive approximation, with results from the best available research replacing lesser quality research, increasing in confidence, but always with the possibility of changes imposed by future evidence.

73. By involving only a few of the full set of cohort studies, the Temple Newhook commentary removes one of the most compelling implications of the existing (cohort) studies: Their results are unanimous. However unlikely it might be for four studies to produce the same result randomly, it is even more unlikely for eleven studies all to come to the same result randomly.

74. Temple Newhook emphasized that gender identity issues differ across times and contexts/political environments, hypothesizing that children attending her clinic might differ from children attending the Toronto and the Amsterdam clinics. Returning once again to the full set of all studies, however, the evidence shows the very opposite: All studies yielded the same result, whether from the 1970s, 80s, 90s, 2000s, 2010s, and wherever in the world any clinic was. Acknowledging the possibility that future studies may lead to a different conclusion, the existing evidence shows majority desistance, constantly and across all time periods.

75. Consideration of the full set of studies also indicates that the contrast is not Toronto and Amsterdam versus whatever "reality" Temple Newhook perceives. Rather, they show the contrast is between Temple Newhook and every facility in every country ever reporting desistance data on childhood-onset gender dysphoria. Moreover, despite Temple Newhook's

mention of influences of political cultures, that commentary does not point out that Canada and the Netherlands are much more politically liberal than the U.S. Although the commentary offers the hypothesis that the Canadian and Dutch contexts might decrease persistence, the commentary does not include the inverse possibility: that these liberal environments might be *"iatrogenic"*—that is, causing dysphoria to continue when it might otherwise remit.

76. Also, the very evidence suggesting that gender dysphoria can be influenced by local environmental factors is itself evidence that gender identity is not, in fact, an innate and immutable feature, potentially amenable to change.

C. Adolescent-Onset Gender Dysphoria, the predominant clinical population today, is a distinct and largely unstudied phenomenon.

77. Concurrent with the advent of social media, a third profile began appearing clinically and socially, characteristically distinct from the two previously identified profiles. (Kaltiala-Heino 2015; Littman 2018.) Despite lacking any history before the current generation, this profile has now numerically overwhelmed the previously known and better characterized types in clinics and on Internet surveys. Unlike adult-onset or childhood-onset gender dysphoria, this group is predominately biologically female. This group typically presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is that feature which led to the term Rapid Onset Gender Dysphoria (ROGD). (Littman 2018.)[3] Cases commonly appear to occur within clusters of peers in association with increased social media use (Littman 2018), and among people with autism or other mental health issues. (Kaltiala-Heino 2015; Littman 2018; Warrier 2020.) (See section VII on Mental Health.)

78. There do not yet exist any cohort studies of people with adolescent-onset gender

[3] After initial criticism, the publishing journal conducted a reassessment of the article. The article was expanded with additional detail and republished. The relevant results were unchanged. Littman's paper as revised has been widely cited.

dysphoria undergoing medicalized transition. Current studies are limited to surveys typically of volunteers from activist and support groups on the Internet.

79. Moreover, no study has yet been organized in such a way as to allow for a distinct analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many published studies fail to distinguish between people who had childhood-onset gender dysphoria and have aged into adolescence versus people whose onset was not until adolescence. (Analogously, there are reports failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria.) Studies selecting groups according to their current age instead of their ages of onset produces confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

VI. Suicide and suicidality are distinct phenomena representing different mental health issues and indicating different clinical needs.

80. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male. (Freeman 2017.) *Suicidality* refers to *para*-suicidal behaviors, including suicidal ideation, threats, and gestures.

A. Rates of suicidality among all adolescents have skyrocketed with the advent of social media.

81. The CDC's 2019 Youth Risk Behavior Survey found that 24.1% of female and 13.3% of male high school students reported "seriously considering attempting suicide." (Ivey-Stephenson 2020 at 48.)

82. The CDC survey reported not only that these already alarming rates of suicide attempt were still increasing (by 8.1%–11.0% per year), but also that this increase was occurring only among female students. No such trend was observed among male students. That is, the demographic increasingly reporting suicidality is the same demographic increasingly reporting gender dysphoria. (Ivey-Stephenson 2020 at 51.)

83. The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) produces a series of evidence-based resource guides which includes their Treatment for Suicidal Ideation, Self-Harm, and Suicide Attempts Among Youth. It noted (italics added):

> [F]rom 1999 through 2018, the suicide death rate doubled for females aged 15 to 19 and 20 to 24. For youth aged 10 to 14, the suicide death rate more than tripled from 2001 to 2018. Explanations for the increase in suicide may include bullying, social isolation, increase in technology and *social media*, increase in *mental illnesses*, and economic recession. (SAMHSA 2020 at 5.)

The danger potentially posed by social media follows from suicidality spreading as a social contagion, as suicidality increases after media reports, occurs in clusters of social groups, and in

adolescents after the death of a peer. (Gould & Lake 2013.)

84. Social media voices today loudly advocate "hormones-on-demand" while issuing hyperbolic warnings that teens will commit suicide unless this is not granted. Both adolescents and parents are exposed to the widely circulated slogan that "I'd rather have a living son than a dead daughter," and such baseless threats or fears are treated as a justification for referring to affirming gender transitions as 'life-saving' or 'medically necessary'. Such claims grossly misrepresent the research literature, however. Indeed, they are unethical: Suicide prevention research and public health campaigns repeatedly warn against circulating messages that can be taken to publicize or even glorify suicide, due to the risk of copy-cat behavior they encourage. (Gould & Lake 2013.)

85. Systematic review of 44 studies of suicidal thoughts and behaviors in LGBTQ youth and suicidality found only a small association between suicidality and sexual minority stress. (Hatchel 2021.) The quantitative summary of the studies (an especially powerful type of systematic review called *meta-analysis*) found no statistically significant association between suicidality and any of having an unsupportive school climate, stigma and discrimination, or outness/openness. There were, however, significant associations between suicidality and indicators of social functioning problems, including violence from intimate partners, victimization from LGBT peers and from non-LGBT peers, and sexual risk taking.

B. *Suicidality* is substantially more common among females, and *suicide,* among males. Sexual orientation is strongly associated with suicidality, but much less associated with suicide.

86. Notwithstanding public misconceptions about the frequency of suicide and related behaviors, the highest rates of death by suicide are among middle-aged and elderly men in high income countries. (Turecki & Brent 2016 at 3.) Males are at three times greater risk of death by

suicide than are females, whereas suicidal ideation, plans, and attempts are three times more common among females. (Klonsky 2016; Turecki & Brent 2016.) In contrast with completed suicides, the frequency of suicidal ideation, plans, and attempts is highest during adolescence and young adulthood, with reported ideation rates spanning 12.1–33%. (Borges 2010; Nock 2008.) Relative to other countries, Americans report elevated rates of each of suicidal ideation (15.6%), plans (5.4%), and attempts (5.0%). (Klonsky 2016.) Suicide attempts occur up to 30 times more frequently than completed suicides. (Bachmann 2018.) The rate of completed suicides in the U.S. population is 14.5 per 100,000 people. (WHO 2022.)

87. There is substantial research associating sexual orientation with suicidality, but much less so with completed suicide. (Haas 2014.) More specifically, there is some evidence suggesting gay adult men are more likely to die by suicide than are heterosexual men, but there is less evidence of an analogous pattern among lesbian women. Regarding suicidality, surveys of self-identified LGB Americans repeatedly report rates of suicidal ideation and suicide attempts 2–7 times higher than their heterosexual counterparts. Because of this association of suicidality with sexual orientation, one must apply caution in interpreting findings allegedly about gender identity: because of the overlap between people who self-identify as non-heterosexual and as transgender or gender diverse, correlations detected between suicidality and gender dysphoria may instead reflect (be confounded by) sexual orientation. Indeed, other authors have made explicit their surprise that so many studies, purportedly of gender identity, entirely omitted measurement or consideration of sexual orientation, creating the situation where features that seem to be associated with gender identity instead reflect the sexual orientation of the members of the sample. (McNeil 2017.)

C. There is no evidence that medicalized transition reduces rates of suicide or suicidality.

88. It is repeatedly asserted that despite the known risks, despite the lack of research into the reality or severity of unquantified risks, it is essential and "the only ethical response" to provide medical transition to minors because medical transition is known to reduce the likelihood of suicide among minors who suffer from gender dysphoria. This is simply untrue. *No studies* have documented any reduction in suicide rates in minors (or any population) as a result of medical transition. No methodologically sound studies have provided meaningful evidence that medical transition reduces suicidality in minors. Instead, multiple studies show tragically high rates of suicide after medical transition, with that rate beginning to spike several years after medical transition.

89. Among post-transition adults, completed suicide rates remain elevated. (Wiepjes 2020.) Among post-operative transsexual adults in Sweden's highly tolerant society, death by suicide is 19 times higher than among the cisgendered. (Dhejne 2011.) Systematic review of 17 studies of suicidality in transsexual adults confirmed suicide rates remain elevated even after complete transition. (McNeil 2017.) Among post-operative patients in the Netherlands, long-term suicide rates of six times to eight times that of the general population were observed depending on age group. (Asscheman 2011 at 638.) Also studying patients in the Netherlands, Wiepjes et al. (2020) reported the "important finding" that "suicide occurs similarly" before and after medical transition. (Wiepjes 2020 at 490.) In other words, *transition did not reduce suicide*. A very large dataset from the U.K. GIDS clinic showed that those referred to the GIDS clinic for evaluation and treatment for gender dysphoria committed suicide at a rate five times that of the general population, both before and after commencement of medical transition (Biggs 2022). Finally, in a still-ongoing longitudinal study of U.S. patients, Chen *et al.* have reported a

shockingly high rate of completed suicide among adolescent subjects in the first two years *after* hormonal transition, although they provide no pre-treatment data for this population to compare against. (Chen 2023 at 245.)

90. WPATH's systematic review of the effectiveness of puberty blockers and cross-sex hormones on suicide in minors concluded that "It was impossible to draw conclusions about the effects of [either] hormone therapy on death by suicide." (Baker 2021 at 12.) In short, I am aware of no respected voice that asserts that medical transition reduces suicide among minors who suffer from gender dysphoria.

91. As to the separate and far more common phenomenon of suicidality, of course, that claim is widely made. McNeil's systematic review revealed, however, a complicated set of interrelated factors rather than supporting the common hypothesis that rates of suicidal ideation and suicidal attempts would decrease upon transition. Rates of suicidal ideation did not show the same pattern as suicide attempts, male-to-female transitioners did not show the same patterns as female-to-male transitioners, and social transition did not show the same patterns as medical transition. Importantly, the review included one study that reported "a positive relationship between higher levels of social support from leaders (e.g., employers or teachers) and increased suicide attempt, which they suggested may be due to attempts instigating increased support from those around the person, rather than causing it." (McNeil 2017 at 348.)

92. Moreover, the 2020 Kuper, *et al.* cohort study of minors receiving hormone treatment found *increases* in each of suicidal ideation (from 25% to 38%), attempts (from 2% to 5%), and non-suicidal self-injury (10% to 17%). (Kuper 2020 at Table 5.) Research has found social support to be associated with *increased* suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support. (Bauer 2015; Canetto 2021.)

93. Overall, the research evidence is only minimally consistent with the hypothesis that an absence of transition causes mental health issues and suicide, but very strongly consistent with the hypothesis that mental health issues, such as *Borderline Personality Disorder* (BPD), cause both suicidality and unstable identity formation (including gender identity confusion). (See section VII.) BPD is repeatedly documented to be greatly elevated among sexuality minorities (Reuter 2016; Rodriguez-Seiljas 2021; Zanarini 2021), and both suicidality and identity confusion are symptoms of that disorder. Thus, diverting distressed youth towards transition necessarily diverts youth away from receiving the psychotherapies designed for treating the issues actually causing their distress.

94. Despite the fact that mental health issues, including suicidality, are repeatedly required by clinical standards of care to be resolved before transition, threats of suicide are instead oftentimes used as the very justification for labelling transition a "medical necessity." However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence does not support that hypothesis.

VII. Mental health profiles differ across adult-, adolescent-, and childhood-onset gender dysphoria.

A. Mental health issues in Adult-Onset Gender Dysphoria.

95. Systematic review of all studies examining mental health issues in transgender adults identified 38 such studies. (Dhejne 2016.) The review indicated that many studies were methodologically weak, but nonetheless consistently found (1) that the average rate of mental health issues among adults is highly elevated both before *and after* transition, (2) but that the average was less elevated among adults who completed transition. It could not be concluded that transition improves mental health, however. Patients were commonly receiving concurrent psychotherapy, introducing a confound (meaning, again, that it cannot be determined whether the change was caused by the transitioning or the mental health treatment). Further, several studies showed more than 40% of patients to become "lost to follow-up." It remains unknowable to what extent the information from the remaining participants accurately reflects the whole population.

B. Mental health issues in Childhood-Onset Gender Dysphoria.

96. Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed that 52% fulfilled criteria for a formal DSM diagnosis of a clinical mental health condition other than Gender Dysphoria. (Wallien 2007 at 1307.) A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, and a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample satisfied the diagnostic criteria for one or more mental health conditions other than gender dysphoria. (Cohen-Kettenis 2003 at 46-47.)

97. A systematic review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. (Thrower 2020.) It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD youth with gender dysphoria. Studies reviewing medical records of children and adolescents referred to gender clinics showed 6–26% to have been diagnosed with ASD. (Thrower 2020 at 695.) Moreover, those authors gave specific caution on the "considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results." (Thrower 2020 at 703.) The rate of ADHD among children with GD was 8.3–11%. Conversely, data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported "gender variance." (Janssen 2016 at 63.)

98. As shown by the outcomes studies (see Section V), there is little reliable evidence that transition improves the mental well-being of children. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child experiencing depression from social isolation might develop the hope—and the unrealistic expectation—that transition will help them fit in, as a member of the other sex.

99. In cases where gender dysphoria is secondary to a different issue, efforts at transition

are aiming at the wrong target and leave the primary issue(s) unaddressed. Given the highly reliable, repeatedly replicated finding that childhood-onset gender dysphoria resolves with puberty for the large majority of children, the evidence indicates that blocking a child's puberty blocks the child's natural maturation that itself would resolve the dysphoria.

C. Mental health issues in Adolescent-Onset Gender Dysphoria (ROGD).

100. The literature varies in the range of gender dysphoric adolescents with co-occurring disorders. In addition to self-reported rates of suicidality (see Section VI), clinical assessments reveal elevated rates not only of depression (Holt 2016; Skagerberg 2013; Wallien 2007), but also anxiety disorders, disruptive behavior difficulties, Attention Deficit/Hyperactivity Disorder, Autism Spectrum Disorder, and personality disorders, especially Borderline Personality Disorder (BPD). (Anzani 2020; de Vries 2010; Jacobs 2014; Janssen 2016; May 2016; Strang 2014, 2016; Swedish Socialstyrelsen, Evolution 2020.)

101. Of particular concern in the context of adolescent-onset gender dysphoria is Borderline Personality Disorder (BPD; diagnostic criteria in Table 4 below). Symptoms of BPD overlap in important respects with symptoms commonly interpreted as signs of gender dysphoria, and it is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD. (E.g. Anzani 2020; Zucker 2019.) That is, some people may be misinterpreting their experiencing of the broader "identity disturbance" of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence, is three times more common in biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance, and focused that disturbance on gender identity resulting in transgender identification, they could

easily overwhelm the number of genuine cases of gender dysphoria.)

Table 4. DSM-5-TR Diagnostic Criteria for Borderline Personality Disorder.

> A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:
>
> 1. Frantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
> 2. A pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
> 3. *Identity disturbance: markedly and persistently unstable self-image or sense of self.*
> 4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
> 5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
> 6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
> 7. Chronic feelings of emptiness.
> 8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
> 9. Transient, stress-related paranoid ideation or severe dissociative symptoms.
>
> (Italics added.)

(American Psychiatric Association 2022 at 752-753.)

102. Mistaking cases of BPD for cases of Gender Dysphoria may prevent such youth from receiving the correct mental health services for their condition. A primary cause for concern is symptom Criterion 5: *recurrent suicidality.* (See Section VI on suicide and suicidality.) Regarding the provision of mental health care, the distinction between these conditions is crucial: A person with BPD going undiagnosed will not receive the appropriate treatments (the currently most effective of which is Dialectical Behavior Therapy). The problem was not about *gender* identity, but about having an *unstable* identity.

103. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. The scientific concern presented by BPD is that

it poses a potential confound: samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

D. Neuroimaging studies have associated brain features with sex and with sexual orientation, but not gender identity.

104. Claims that transgender identity is an innate property resulting from brain structure remain unproven. Neuroimaging and other studies of brain anatomy repeatedly identify patterns distinguishing male from female brains, but when analyses search for those patterns among transgender individuals, "gender identity and gender incongruence could not be reliably identified." (Baldinger-Melich 2020 at 1345.) Although much smaller than male/female differences, statistically significant neurological differences are repeatedly associated with sexual orientation (termed "homosexual" vs "nonhomosexual" in the research literature). Importantly, despite the powerful associations between transsexuality and homosexuality, as explicated by Blanchard, many studies analyzing gender identity failed to control for sexual orientation, representing a problematic and centrally important confound. I myself pointed this out in the research literature, noting that neuroanatomical differences attributed to gender dysphoria should instead be attributed to sexual orientation. (Cantor 2011, Cantor 2012.) A more recent review of the science, by Guillamon, et al. (2016), agreed, stating:

> Following this line of thought, Cantor (2011, 2012, but also see Italiano, 2012) has recently suggested that Blanchard's predictions have been fulfilled in two independent structural neuroimaging studies. Specifically, Savic and Arver (2011) using VBM on the cortex of untreated nonhomosexual MtFs and another study using DTI in homosexual MtFs (Rametti et al., 2011b) illustrate the predictions. *Cantor seems to be right*". (Guillamon 2016 at 1634, italics added; see also Italiano 2012.)

In addition to this confound, because snapshot neurobiological studies can provide only correlational data, it would not be possible for such studies to distinguish whether brain

differences cause gender identity or if gender atypical behavior modifies the brain over time, such as through neuroplasticity. As noted by one team of neuroscientists, "[I]t remains unclear if the differences in brain phenotype of transgender people may be the result of a sex-atypical neural development or of a lifelong experience of gender non-conformity." (Fisher 2020 at 1731.) In sum, at present assertions that transgender identity is caused by neurology represent faith, not science.

VIII. Assessment of expert declaration of Dr. Stephanie Budge.

105. In the body of my report above, I summarized the nature and strength of the published scientific evidence regarding the central issues pertaining to the medicalized transition of gender in minors. The present section provides additional remarks directed to specific evidentiary or logical defects in the opinions offered in the declaration of Dr. Stephanie Budge, which I have also reviewed.

106. Although she did not include them in her declaration, Dr. Budge has submitted expert witness declarations for the plaintiffs in *Bridge v Oklahoma Board of Education* and in *Doe v Horne* (Arizona). I submitted expert witness declarations for the defense in those cases.

107. Dr. Budge's opinions are not the product of principles and methods accepted as reliable by the fields of medical science, behavioral science, or psychology. As outlined in the body of the present report, the standard in these fields is to apply systematic reviews of the research evidence, a formal process which minimizes opportunities for bias, such as the cherry-picking of studies from only one side of an issue (see Section II.B *Systematic Reviews*) and holding different studies up to different levels of scrutiny according to which side of an issue they support. Dr. Budge's report excluded all mention of the relevant systematic reviews, instead engaging in exactly the biased analyses that the systematic review process was designed to prevent.

108. Very many of the sources Dr. Budge cited as the basis of her opinions represent surveys of convenience samples (including Barr et al., 2021;[4] Durwood et al., 2017; Fox et al., 2020; Galupo et al., 2020; Price-Feeney et al., 2020; Puckett et al., 2020; Olson et al., 2016; and

[4] Dr. Budge's citation referring to this study is outdated. The current (now permanent) citation is: Barr, S. M., Snyder, K. E., Adelson, J. L., & Budge, S. L. (2022). Posttraumatic stress in the trans community: The roles of anti-transgender bias, non-affirmation, and internalized transphobia. *Psychology of Sexual Orientation and Gender Diversity, 9*, 410–421.

Turban et al., 2021, among others). As outlined in the present report, surveys which record the replies of anyone who wants to respond are not systematic, do not yield reliable facts or data, and do not appear at all on the standard pyramid of evidence in clinical science. (See section II.A *Pyramid of Evidence.*)

109. Dr. Budge expressed opinions outside her expertise. Dr. Budge indicated no educational background or training in neuroscience or sexually related offenses and their prevention, but expressed (misinformed) opinions on the neuroanatomic basis of gender dysphoria (Budge decl ¶20); the associations of gender identity with the propensity to commit sex offenses (Budge decl ¶67), a field of forensic psychology called *risk assessment;* and the association of gender identity with paraphilic behavior (Budge decl ¶68), identified in the DSM-5-TR as *Exhibitionistic Disorder* and *Voyeuristic Disorder.*

110. Dr. Budge claimed gender identity to be an "internal or psychological sense" (Budge ¶19). Such a claim is scientifically invalid. To be scientifically valid, a construct must be each of objective, testable, and falsifiable. (See Section III.A *Subjective feelings.*)

111. Dr. Budge referred to gender identity as "a well-established concept in psychology and medicine" (Budge ¶19). The claim does not reflect the status of the field. Indeed, the DSM-5-TR indicates the very opposite: "The area of sex and gender is highly controversial and has led to a proliferation of terms who meanings vary over time and within and between disciplines" (APA, 2022 at 511).

112. Consistent with the scientific method, sex is defined in science solely in terms of its objective, verifiable, biological features. Dr. Budge, however, adds *gender identity* to those biological features that define sex:

> Every individual's sex is multifaceted and composed of many distinct biologically influenced characteristics, including, but not limited to, chromosomal makeup,

> hormones, internal and external reproductive organs, secondary sex characteristics, *and gender identity.* (Budge decl ¶22, italics added)

Section IV.A of the present report quotes the definitions of sex from the Endocrine Society, the American Academy of Pediatrics, and the American Psychiatric Association, all of which explicitly define sex solely in terms of biological features, excluding gender identity. Dr. Budge's report repeatedly cites these same sources regarding other issues, but Dr. Budge provides no source or other documentation supporting her addition of gender identity to the definition of sex. The definition of sex as a purely biological feature without gender identity is what appears in the DSM-5-TR:[5]

> Sex refers to factors attributable to an individual's reproductive organs and XX or XY chromosomal complement" (American Psychiatric Association, 2022, p. 19).
>
> This chapter employs constructs and terms as they are widely used by clinicians from various disciplines with specialization in treating gender dysphoria. In this chapter, *sex* and *sexual* refer to the biological indicators of male and female (understood in the context of reproductive capacity), such as in sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia" (American Psychiatric Association, 2022, p. 511, italics in original).

The same is true of the definition from the World Health Organization:

> Sex refers to the biological characteristics that define humans as female or male (WHO, undated, available from https://www.who.int/health-topics/sexual-health#tab=tab_2)

and the Institute of Medicine:

> *Sex* is understood here as a biological construct, referring to the genetic, hormonal, anatomical, and physiological characteristics on whose basis one is labeled at birth as either male or female (Institute of Medicine, 2011 at 25, italics in original)
>
> Generally understood as a biological construct, referring to the genetic, hormonal, anatomical, and physiological characteristics of males or females. Sex is typically assigned at birth based on the appearance of the external genitalia. Only when this appearance is ambiguous are other indicators of sex assessed to determine the most appropriate sex assignment. (2) All phenomena associated with erotic arousal or

[5] Dr. Budge report cites the DSM-5-TR, but the reference section of her report includes only the DSM-5.

> sensual stimulation of the genitalia or other erogenous zones, usually (but not always) leading to orgasm (Institute of Medicine, 2011, at 319)

as well as the Endocrine Society Clinical Practice Guideline for gender dysphoric/gender incongruent persons:

> *Sex:* This refers to attributes that characterize biological maleness or femaleness. The best known attributes include the sex-determining genes, the sex chromosomes, the H-Y antigen, the gonads, sex hormones, internal and external genitalia, and secondary sex characteristics (Hembree, 2017).

113. Dr. Budge also adds the dramatic claim that:

> Where there is a divergence between these characteristics, gender identity is the most important and determinative factor (Budge decl ¶ 22).

Her report provides no citation to justify that claim nor the criteria by which such a claim might be distinguished from mere rhetoric.

114. Dr. Budge's definitions and descriptions of gender identity are mutually inconsistent and contradictory. Her report claims on the one hand that gender dysphoria "*is* the psychiatric diagnosis for the distress associated with gender incongruence" (Budge decl ¶25), and yet that gender "incongruence can *cause* serious emotional distress" (Budge decl ¶24). It is not possible in science for something to be its own cause.

115. The process of diagnosing Gender Dysphoria provided by Dr. Budge (¶29) is sorely incomplete, leaving out one of its most pivotal components, called *differential diagnosis.* That is, Dr. Budge described only part of the diagnostic process: She included the search for symptoms of gender dysphoria, but omitted entirely any search for any other symptoms that would better explain the complete clinical profile. This error in clinical assessment is called the *confirmation bias.* For example, as already outlined in the present report, unstable identity is a symptom of Borderline Personality Disorder (section VII.C). A clinical assessment including only gender identity issues, such as Dr. Budge describes, would mistakenly identify Gender

Dysphoria, whereas a proper assessment must simultaneously rule-out all other possible explanations of the client/patient's distress, of which gender dysphoria represents only one possibility.

116. In ¶20, Dr. Budge claimed that "Neuroimaging data demonstrate strong evidence to indicate biological factors related to transgender identity." As noted above, Dr. Budge is not an expert in neuroscience, and she misinterprets the neuroimaging evidence. As detailed in the present report (section VII.D. *Neuroimaging*), the neuroimaging data demonstrate that brain features are associated with sexual orientation rather than with gender identity; studies that seemed to associate brain structure with gender identity did so because they confounded gender identity with sexual orientation; and other neuroscientists studying this topic have indicated my publishing exactly this observation to be correct. All four of the studies cited by Dr. Budge presenting neuroimaging data repeat the same error, confounding gender identity with sexual orientation:

- Carrillo et al. (2010) compared *homosexual* transsexuals (also called "early-onset" transsexuals) with *heterosexual* cissexuals.
- Nota et al. (2017) compared children and adolescents with early onset gender dysphoria (who mostly grow up into either *homosexual* transsexuals or *homosexual* cissexuals) with non-dysphoric youth (who mostly grow up into *heterosexual* cissexuals).
- Spizzirri et al. (2018) compared *homosexual* transsexuals with *heterosexual* cissexuals. The differences found between them are better attributable to sexual orientation than to gender identity (as per the 'principle of parsimony' in science).
- Berglund et al. (2008) did compare *heterosexual* transsexuals with *heterosexual* cissexuals. In theory, such a design could be consistent with a difference attributable to gender identity distinct from sexual orientation; however, because only male-to-female transsexuals were tested (and not female-to-male transsexuals), and because these same researchers have also showed cissexual lesbians to have the corresponding neurological feature,[6] the results are necessarily ambiguous.

[6] Berglund et al., 2006.

117. Dr. Budge provided the unsourced claim that the WPATH standards are "based on systematic review of the evidence-based research on transgender health" (¶30). The falsity of her assertion is readily documented. That review was published as Baker (2021), and its contents are included in the table below, together with the reviews provided by the other organizations doing so. As is apparent, WPATH did not include, nor did it attempt to include, any studies regarding safety at all.

Table 1. Cohort studies of effectiveness and safety of puberty-blockers and cross-sex hormones in minors.

	Finland (2019)	NICE (2020a,b)	Sweden (2022)	E.S. (2017)	AAP (2018)	Baker (2021) (WPATH)
Effectiveness GnRHa	Costa et al, 2015 de Vries et al, 2011	Costa et al, 2015 de Vries et al, 2011	Becker-Hebly et al, 2020 Carmichael et al, 2021 Costa et al, 2015 *** Hisle-Gorman et al, 2021			de Vries et al, 2011
Effectiveness Sex Hormones	de Vries et al, 2014*	Achille et al, 2020 Allen et al, 2019 Kaltiala et al, 2020 Lopez de Lara et al, 2020	*** *** Cantu et al, 2020* de Vries et al, 2014* ***			Achille et al, 2020 de Vries et al, 2014* López de Lara et al, 2020
Safety (Bones) GnRHa		Brik et al, 2020 Joseph et al, 2019 Khatchadourian et al, 2014 Klink et al, 2015 Vlot et al, 2017	Joseph et al, 2019 Klink et al, 2015 Navabi et al, 2021 Schagen et al, 2020 Stoffers et al, 2019 Vlot et al, 2017 Lee et al, 2020 van der Loos et al, 2021			
Safety (Bloods) GnRHa		Klaver et al, 2020 Schagen et al, 2016	Klaver et al, 2018 Klaver et al, 2020 Nokoff et al, 2020 Perl et al, 2020 Schagen et al, 2016 Schulmeister et al, 2021			
Safety (Bones) Sex Hormones	****	Khatchadourian et al, 2014 Klaver et al, 2020 Klink et al, 2015 Kuper et al, 2020 Stoffers et al, 2019 Vlot et al, 2017		Klink et al, 2015		
Safety (Bloods) Sex Hormones			Jarin, 2017 Mullins et al, 2021 Tack et al, 2016			

*Included both puberty-blockers and cross-sex hormones.
**The Endocrine Society review included bone/skeletal health, but did not explicate whether the scope included minors.
***Sweden explicitly excluded due to high risk of bias: Achille, *et al.,* (2020), Allen, *et al.* (2019), de Vries, *et al.,* (2011), and López de Lara, *et al.,* (2020).
****The Finnish review adopted the Endocrine Society review, but did not indicate whether minors were included.

118. Dr. Budge repeatedly claimed, without evidence, that the WPATH Standards of Care are widely accepted protocols for the treatment of gender dysphoria" (Budge decl ¶¶15, 30) and noted that "WPATH has published several iterations of the SOC since 1979" (Budge decl ¶31). Missing from Dr. Budge's declaration was that the WPATH standards have been dramatically lowered with each successive version and that findings suggesting success when using the prior versions do not pertain to the current version.

119. For reference, WPATH released version 6 of its "Standards of Care" in 2001, version 7 in 2012, and version 8 in 2022. The criteria of WPATH version 6 included: a DSM diagnosis, indications that hormones will be used responsibly, three months of either psychotherapy or a "real life test" of living as the new sex, increasing consolidation of gender identity during that period, progress in solving life problems, and (for genital surgery) two clinical approval letters, one of which must be a comprehensive psychosocial assessment. These criteria of version 6 were the subject of a systematic assessment, comparing them against the research evidence, in preparation for the development of version 7 of WPATH's standards (De Cuypere & Vercrusse, 2009). The review included an exhaustive search of the research evidence:

> For follow-up studies between 1991 and the present we searched Medline and Embase using the following keywords: "transsexual, gender identity disorder, sex reassignment surgery, follow-up study, regret, standards of care, eligibility criteria." We made a selection of these follow-up studies, retaining only those papers that contained information "on whom and under what circumstances SRS is effective." (De Cuypere & Vercrusse, 2009, p. 195)

The results were peer-reviewed, published in the *International Journal of Transgenderism*, included the conclusion that "inadequate diagnosis and major psychiatric co-morbidity are the major indicators for regret" (De Cuypere & Vercrusse, 2009, p. 197), and reiterated the consensus that "Most authors agree that a careful differential diagnosis and screening for co-morbidity is imperative for good clinical practice" (De Cuypere & Vercrusse, 2009, p. 200).

120. In contrast with that assessment, WPATH version 7 did the opposite. Rather than follow the evidence base in the research literature, version 7 *lowered* the criteria that had been preventing regretful cases and instead adopted the "informed consent model." Comprehensive psychosocial assessment was reduced to an assessment demonstrating only the capacity to provide informed consent. The requirement for psychotherapy or real life test time was reduced to the requirement that any significant mental health concerns (left undefined) be reasonably well-controlled (left undefined).

121. The lowering of criteria with version 7 was not based on any research findings indicating methods yielding superior outcomes, but justified with changes in ideology. The ideological shift departed from evidence-based care focused on medical safety to what was described as a rights-based, informed-consent model. Instead of assessing patients' needs and directing them towards the corresponding treatment(s), the patients' requests were assumed to be correct and fulfilled whenever medically possible.

122. Importantly, whereas version 6 included:

> The SOC are intended to provide flexible direction for the treatment of persons with gender identity disorders. When eligibility requirements are stated they are meant to be *minimum requirements.* (WPATH, 2002, pp. 1–2, italics added)

version 7 instead included:

> As for all previous versions of the SOC, the criteria put forth in this document for hormone therapy and surgical treatments for gender dysphoria are clinical guidelines; individual health professionals and programs may modify them. (Coleman, 2012, p. 2)

This contrast is remarkable for two reasons. First, whereas version 6 permitted clinicians only to move criteria up, version 7 removed the words "minimum requirements," thus permitting clinicians to move criteria up *or down.* Second, version 7 added the words "As for all previous versions," which is a demonstrable falsehood. The change to this single passage, embedded in

introductory text, allowing clinicians to change any criterion, removes any claim the document might have to being called "standards" at all.

123. A systematic assessment of version 7 was conducted in the lead-up to WPATH's release of version 8 (Dahlen et al., 2021). The evaluation followed a standardized assessment method, called the Appraisal of Guidelines for Research and Evaluation ("AGREE II") method. Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that "[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research" (Dahlen et al., 2021, p. 6). The WPATH guidelines received unanimous ratings of *"Do not recommend"* (Dahlen et al., 2021, p. 7).

124. WPATH's version 8 also included the language again allowing clinicians to change any criterion up or down:

> The SOC-8 guidelines are intended to be flexible to meet the diverse health care needs of TGD people globally….As in all previous versions of the SOC, the criteria put forth in this document for gender-affirming interventions are clinical guidelines; individual health care professionals and programs may modify them in consultation with the TGD person. (Coleman, 2022, p. S6)

125. Even before the removal of safeguards from the WPATH SOCs, clinics providing medical transition services were already indicating that WPATH guidelines provided insufficient protection. A 1995 survey of such centers found 74% of clinics did not adhere to WPATH standards, instead applying *more conservative* standards (Petersen & Dickey, 1995).

126. In her list naming professional associations expressing support for WPATH or Endocrine Society guidelines, Dr. Budge included that these were "organizations *within the United States"* (Budge decl ¶31). Dr. Budge did not include, however, that these same guidelines are repeatedly rejected *outside* the United States, or that the public health care systems outside the United States have conducted systematic reviews of the safety and effectiveness

research, whereas the American professional associations have not. By relating the situation only within the United States, Dr. Budge falsely suggests a consensus instead of the complete situation wherein the United States increasingly represents an outlier. Notably, the stark contrast between the public health care systems internationally and the medical professional associations in the United States correspond to their political purposes: The mandate of public health care systems is to protect the public, whereas the role of medical professional associations is to protect the medical professionals.

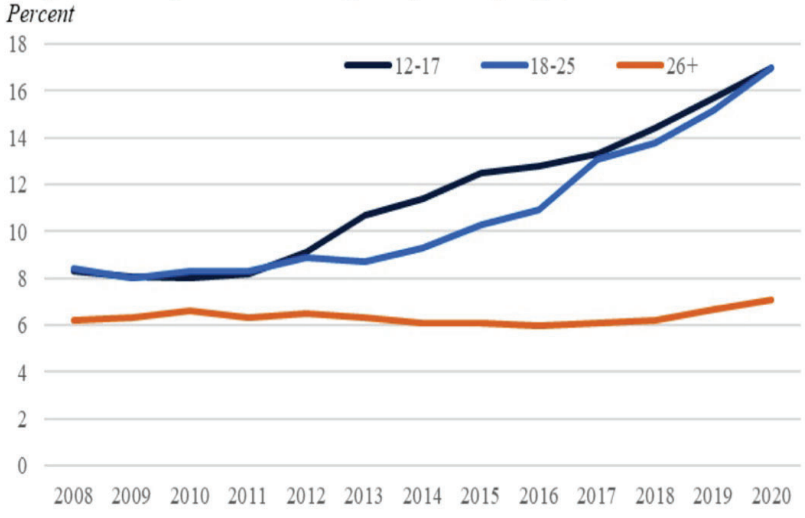
127. The remainder of Dr. Budge's declaration consists of her providing one of the several possible interpretations of (some of the) correlations reported in in the research literature. Specifically, Dr. Budge cites correlations between gender dysphoria and mental health issues, repeatedly inferring the causal conclusion that the mental health issues are caused by transphobia and failures to support transition. As noted already in the present report, correlations are ambiguous and open to interpretation: They can be explained in more than one way. Dr. Budge does not consider, mention, or provide any evidence to rule out any of the other potential explanations of the correlations among these constructs.

128. Missing entirely from Dr Budge's interpretation of the correlations is that high rates of mental distress are not unique to gender dysphoric minors. Signs of distress are increasing throughout the current generation of youth, especially adolescent females, and these indicators all began their exponential increases at the same time—upon the introduction of social media. The great increases in each of gender dysphoria, mental illness, and suicide and suicidality, all are primarily affecting the same demographic group—adolescent females, the same demographic most vulnerable to negative social influence on body image and self-perception.

129. U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) data

show the rapid rise in depressive episodes, more than doubling, accompanying the social media age, and mostly affecting youth under 25.

Figure 1. Percent of the population with a major depressive episode in the past year by age, 2008-2020



Source: Substance Abuse and Mental Healthh Services Administration

Available from https://www.whitehouse.gov/cea/written-materials/2022/05/31/reducing-the-economic-burden-of-unmet-mental-health-needs/

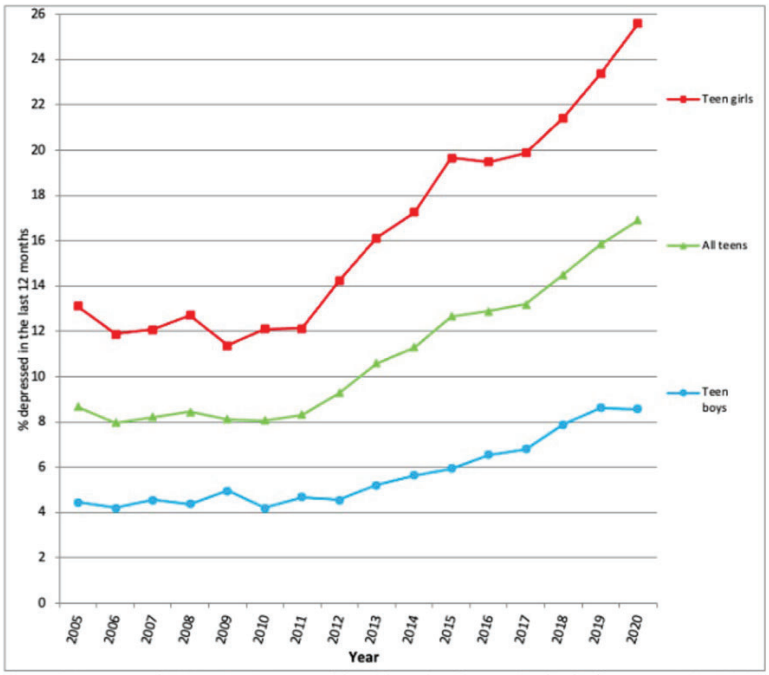
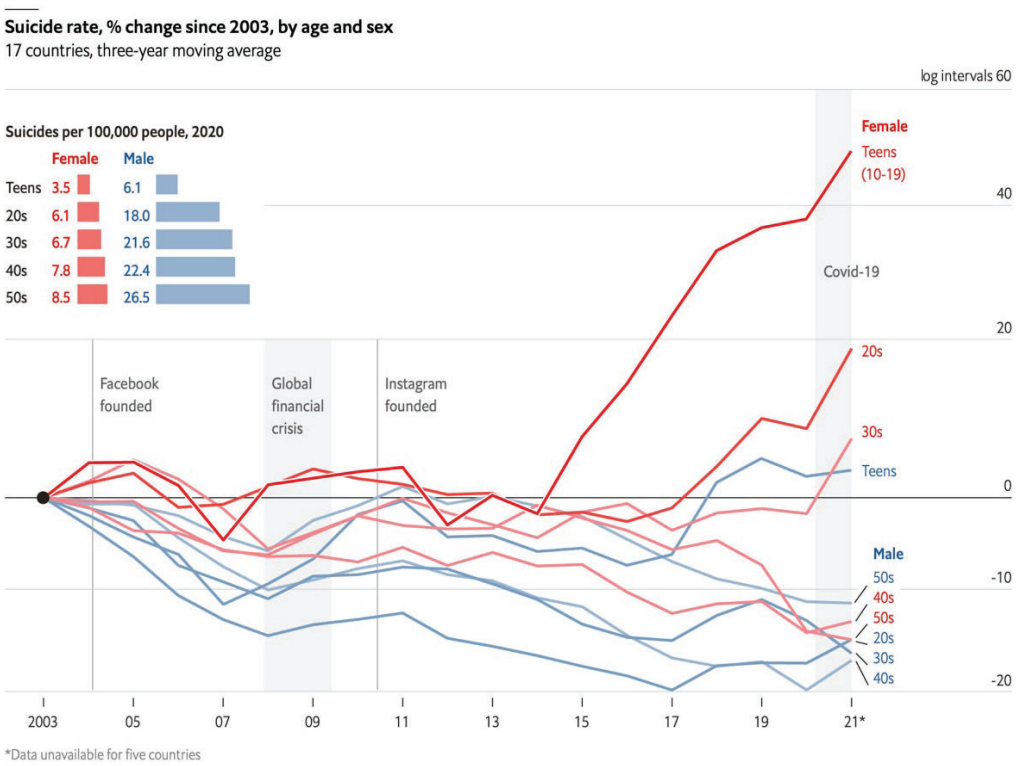


Figure 2: Percent of U.S. 12- to 17-year-olds with major depression in the last year, 2005-2020
Source: National Study of Drug Use and Health. NOTE: Depression assessed using DSM criteria.

Twenge, J. Institute for Family Studies. Available from https://ifstudies.org/blog/how-much-is-social-media-to-blame-for-teens-declining-mental-health

The indicators of increasing distress include also suicide and suicidality: In 2020, the U.S. Centers for Disease Control (CDC) reported "[A]pproximately 18.8 percent of high school students reported suicidal ideation in the past year, and 8.9 percent of high school students reported a suicide attempt in the past year" (Ivey-Stephenson et al., 2020). The increases include rates of suicide and suicidality with the greatest increases among adolescent females.

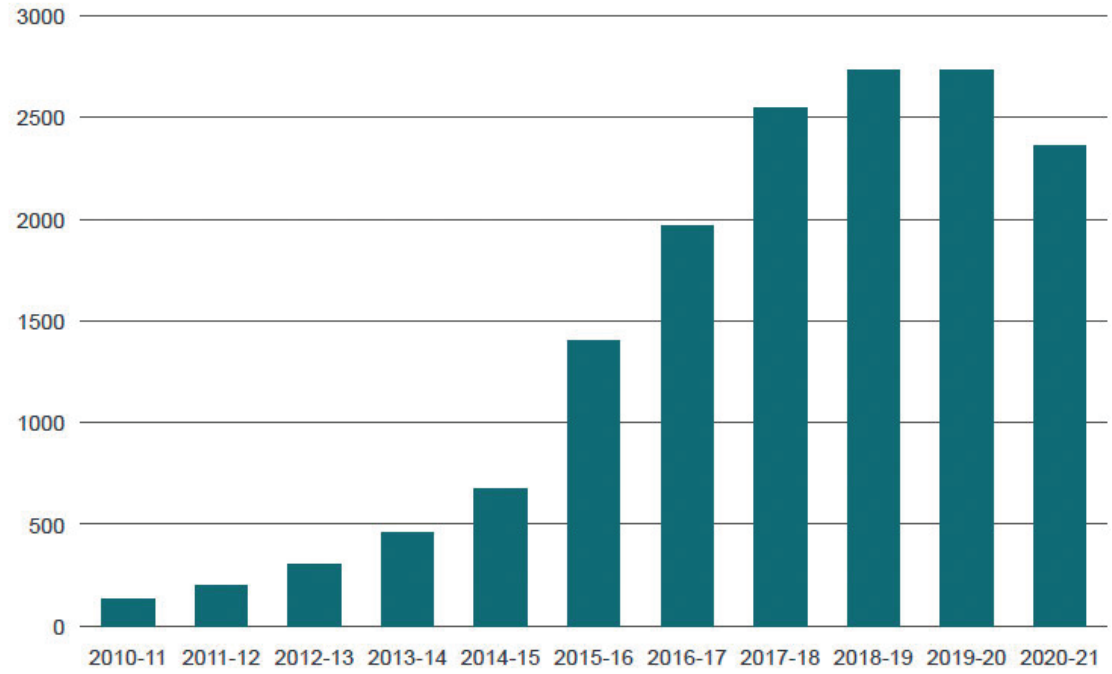


Available from https://www.economist.com/graphic-detail/2023/05/03/suicide-rates-for-girls-are-rising-are-smartphones-to-blame

SAMHSA reported "[F]rom 1999 through 2018, the suicide death rate doubled for females aged 15 to 19 and 20 to 24. For youth aged 10 to 14, the suicide death rate more than tripled from 2001 to 2018" (SAMHSA, 2020). Peer reviewed research published in the *American Journal of Public Health* reported rates of high school students reporting purposefully hurting themselves without wanting to die over the past 12 months ranged from 6.4 to 14.8 percent for males and 17.7 to 30.8 percent for females in 2015 (Monto et al., 2018).

130. The timeline of these large, sudden increases in multiple indicators of psychological distress coincides with the large, sudden increase in cases of youth expressing gender dysphoria, again, primarily among adolescent females:

Figure 2: Referrals to GIDS, 2010-11 to 2020-21



Available from Cass (2022).

The correlations among mental health, sex, gender dysphoria, and treatment are potentially explained as individual facets of mental health brought on by social media. The treatments associated with improvement are those that include psychotherapy. Dr. Budge's explanation for these correlations is not an explanation at all: It leaves the conspicuous simultaneity of these phenomena, the consistent demographic repeatedly the most affected, and the ubiquity of social perception and attachment needs across them all as merely coincidental.

131. Adolescents use social media for social comparison and feedback, and social media use is associated with decreased mental health (Nesi & Prinstein, 2015). Social media exposure to ideals of beauty and appearance reduces body image, especially in adolescent females (Kleeman et al., 2018). The demographic most vulnerable to social comparison use social media as the basis of their self-image (Fioravanti et al., 2022), especially those with co-morbid mental illnesses that interfere with social functioning. They are disproportionately influenced negatively

by social media (Maheux et al., 2022). The mental illness profiles shown by this group are unlike those shown by better- and longer-established types of gender dysphoria by their overrepresentation of disorders such as Autism Spectrum Disorder, which reflects problems in social functioning. The mental illness profile associated with sexual minority stress is anxiety and depression: Sexual minority stress does not cause Autism Spectrum Disorder, but it can increase vulnerability to social identity development. Although these data are still only correlational, they potentially suggest that supporting the belief of these youth is to reinforce their belief that they are not real women and men because they do fit the exaggerated and perfected social images of femaleness and maleness now flooding their virtual social environments.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 20 Aug 2023.

James M. Cantor, Ph.D.

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List of Appendices

Appendix 1

Curriculum Vita

Appendix 2

Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481

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EDUCATION

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Doctor of Philosophy — Sep., 1993–Jun., 2000
Psychology • McGill University • Montréal, Canada

Master of Arts — Sep., 1990–Jan., 1992
Psychology • Boston University • Boston, MA

Bachelor of Science — Sep. 1984–Aug., 1988
Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY
Concentrations: Computer science, mathematics, physics

EMPLOYMENT HISTORY

Director — Feb., 2017–Present
Toronto Sexuality Centre • Toronto, Canada

Senior Scientist (Inaugural Member) — Aug., 2012–May, 2018
Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health • Toronto, Canada

Senior Scientist — Jan., 2012–May, 2018
Complex Mental Illness Program
Centre for Addiction and Mental Health • Toronto, Canada

Head of Research — Nov., 2010–Apr. 2014
Sexual Behaviours Clinic
Centre for Addiction and Mental Health • Toronto, Canada

Research Section Head — Dec., 2009–Sep. 2012
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Psychologist — May, 2004–Dec., 2011
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Clinical Psychology Intern Sep., 1998–Aug., 1999
Centre for Addiction and Mental Health • Toronto, Canada

Teaching Assistant Sep., 1993–May, 1998
Department of Psychology
McGill University • Montréal, Canada

Pre-Doctoral Practicum Sep., 1993–Jun., 1997
Sex and Couples Therapy Unit
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Pre-Doctoral Practicum May, 1994–Dec., 1994
Department of Psychiatry
Queen Elizabeth Hospital • Montréal, Canada

ACADEMIC APPOINTMENTS

Associate Professor Jul., 2010–May, 2019
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Aug. 2013–Jun., 2018
Graduate Program in Psychology
York University • Toronto, Canada

Associate Faculty (Hon) Oct., 2017–Dec., 2017
School of Behavioural, Cognitive & Social Science
University of New England • Armidale, Australia

Assistant Professor Jun., 2005–Jun., 2010
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Sep., 2004–Jun., 2010
Clinical Psychology Residency Program
St. Joseph's Healthcare • Hamilton, Canada

PUBLICATIONS

1. Cantor, J. M. (2023). Paraphilia, gender dysphoria, and hypersexuality. In R. F. Krueger & P. H. Blaney (Eds.), *Oxford textbook of psychopathology* (4th ed.) (pp. 549–575). New York: Oxford University Press.
2. Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481
3. Shirazi, T., Self, H., Cantor, J., Dawood, K., Cardenas, R., Rosenfield, K., Ortiz, T., Carré, J., McDaniel, M., Blanchard, R., Balasubramanian, R., Delaney, A., Crowley, W., S Marc Breedlove, S. M., & Puts, D. (2020). Timing of peripubertal steroid exposure predicts visuospatial cognition in men: Evidence from three samples. *Hormones and Behavior, 121, 104712*.
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5. McPhail, I. V., Hermann, C. A., Fernane, S., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2019). Validity in phallometric testing for sexual interests in children: A meta-analytic review. *Assessment, 26,* 535–551. doi: 10.1177/1073191117706139
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65. Pilkington, N. W., & Cantor, J. M. (1996). Perceptions of heterosexual bias in professional psychology programs: A survey of graduate students. *Professional Psychology: Research and Practice*, *27*, 604–612.

PUBLICATIONS

LETTERS AND COMMENTARIES

1. Cantor, J. M. (2015). Research methods, statistical analysis, and the phallometric test for hebephilia: Response to Fedoroff [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2499–2500. doi: 10.1111/jsm.13040
2. Cantor, J. M. (2015). In his own words: Response to Moser [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2502–2503. doi: 10.1111/jsm.13075
3. Cantor, J. M. (2015). Purported changes in pedophilia as statistical artefacts: Comment on Müller et al. (2014). *Archives of Sexual Behavior, 44,* 253–254. doi: 10.1007/s10508-014-0343-x
4. McPhail, I. V., & Cantor, J. M. (2015). Pedophilia, height, and the magnitude of the association: A research note. *Deviant Behavior, 36,* 288–292. doi: 10.1080/01639625.2014.935644
5. Soh, D. W., & Cantor, J. M. (2015). A peek inside a furry convention [Letter to the Editor]. *Archives of Sexual Behavior, 44,* 1–2. doi: 10.1007/s10508-014-0423-y
6. Cantor, J. M. (2012). Reply to Italiano's (2012) comment on Cantor (2011) [Letter to the Editor]. *Archives of Sexual Behavior, 41,* 1081–1082. doi: 10.1007/s10508-012-0011-y
7. Cantor, J. M. (2012). The errors of Karen Franklin's *Pretextuality* [Commentary]. *International Journal of Forensic Mental Health, 11,* 59–62. doi: 10.1080/14999013.2012.672945
8. Cantor, J. M., & Blanchard, R. (2012). White matter volumes in pedophiles, hebephiles, and teleiophiles [Letter to the Editor]. *Archives of Sexual Behavior, 41, 749–752.* doi: 10.1007/s10508-012-9954-2
9. Cantor, J. M. (2011). New MRI studies support the Blanchard typology of male-to-female transsexualism [Letter to the Editor]. *Archives of Sexual Behavior, 40*, 863–864. doi: 10.1007/s10508-011-9805-6
10. Zucker, K. J., Bradley, S. J., Own-Anderson, A., Kibblewhite, S. J., & Cantor, J. M. (2008). Is gender identity disorder in adolescents coming out of the closet? *Journal of Sex and Marital Therapy, 34,* 287–290.
11. Cantor, J. M. (2003, Summer). Review of the book *The Man Who Would Be Queen* by J. Michael Bailey. *Newsletter of Division 44 of the American Psychological Association, 19*(2), 6.
12. Cantor, J. M. (2003, Spring). What are the hot topics in LGBT research in psychology? *Newsletter of Division 44 of the American Psychological Association, 19*(1), 21–24.
13. Cantor, J. M. (2002, Fall). Male homosexuality, science, and pedophilia. *Newsletter of Division 44 of the American Psychological Association, 18*(3), 5–8.
14. Cantor, J. M. (2000). Review of the book *Sexual Addiction: An Integrated Approach. Journal of Sex and Marital Therapy, 26*, 107–109.

EDITORIALS

1. Cantor, J. M. (2012). Editorial. *Sexual Abuse: A Journal of Research and Treatment, 24*.

2. Cantor, J. M. (2011). Editorial note. *Sexual Abuse: A Journal of Research and Treatment, 23,* 414.
3. Barbaree, H. E., & Cantor, J. M. (2010). Performance indicates for *Sexual Abuse: A Journal of Research and Treatment* (SAJRT) [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 22,* 371–373.
4. Barbaree, H. E., & Cantor, J. M. (2009). *Sexual Abuse: A Journal of Research and Treatment* performance indicators for 2007 [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 21,* 3–5.
5. Zucker, K. J., & Cantor, J. M. (2009). Cruising: Impact factor data [Editorial]. *Archives of Sexual Research, 38,* 878–882.
6. Barbaree, H. E., & Cantor, J. M. (2008). Performance indicators for *Sexual Abuse: A Journal of Research and Treatment* [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 20,* 3–4.
7. Zucker, K. J., & Cantor, J. M. (2008). The *Archives* in the era of online first ahead of print[Editorial]. *Archives of Sexual Behavior, 37,* 512–516.
8. Zucker, K. J., & Cantor, J. M. (2006). The impact factor: The *Archives* breaks from the pack [Editorial]. *Archives of Sexual Behavior, 35,* 7–9.
9. Zucker, K. J., & Cantor, J. M. (2005). The impact factor: “Goin’ up” [Editorial]. *Archives of Sexual Behavior, 34,* 7–9.
10. Zucker, K., & Cantor, J. M. (2003). The numbers game: The impact factor and all that jazz [Editorial]. *Archives of Sexual Behavior, 32,* 3–5.

FUNDING HISTORY

Principal Investigators:	Doug VanderLaan, Meng-Chuan Lai
Co-Investigators:	James M. Cantor, Megha Mallar Chakravarty, Nancy Lobaugh, M. Palmert, M. Skorska
Title:	*Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Behavioural Sciences-B-2
Funds:	$650,250 / 5 years (July, 2018)

Principal Investigator:	Michael C. Seto
Co-Investigators:	Martin Lalumière , James M. Cantor
Title:	*Are connectivity differences unique to pedophilia?*
Agency:	University Medical Research Fund, Royal Ottawa Hospital
Funds:	$50,000 / 1 year (January, 2018)

Principal Investigator:	Lori Brotto
Co-Investigators:	Anthony Bogaert, James M. Cantor, Gerulf Rieger
Title:	*Investigations into the neural underpinnings and biological correlates of asexuality*
Agency:	Natural Sciences and Engineering Research Council (NSERC), Discovery Grants Program
Funds:	$195,000 / 5 years (April, 2017)

Principal Investigator:	Doug VanderLaan
Co-Investigators:	Jerald Bain, James M. Cantor, Megha Mallar Chakravarty, Sofia Chavez, Nancy Lobaugh, and Kenneth J. Zucker
Title:	*Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Transitional Open Grant Program
Funds:	$952,955 / 5 years (September, 2015)

Principal Investigator:	James M. Cantor
Co-Investigators:	Howard E. Barbaree, Ray Blanchard, Robert Dickey, Todd A. Girard, Phillip E. Klassen, and David J. Mikulis
Title:	*Neuroanatomic features specific to pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$1,071,920 / 5 years (October, 2008)

Principal Investigator:	James M. Cantor
Title:	*A preliminary study of fMRI as a diagnostic test of pedophilia*
Agency:	Dean of Medicine New Faculty Grant Competition, Univ. of Toronto
Funds:	$10,000 (July, 2008)

Principal Investigator:	James M. Cantor
Co-Investigator:	Ray Blanchard
Title:	*Morphological and neuropsychological correlates of pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$196,902 / 3 years (April, 2006)

KEYNOTE AND INVITED ADDRESSES

1. Cantor, J. M. (2022, December 5). The science of gender dysphoria and transgenderism. Lund University, Latvia. https://files.fm/f/4bzznufvb
2. Cantor, J. M. (2021, September 28). *No topic too tough for this expert panel: A year in review.* Plenary Session for the 40th Annual Research and Treatment Conference, Association for the Treatment of Sexual Abusers.
3. Cantor, J. M. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
4. Cantor, J. M. (2018, August 29). *Neurobiology of pedophilia or paraphilia? Towards a 'Grand Unified Theory' of sexual interests.* Keynote address to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
5. Cantor, J. M. (2018, August 29). *Pedophilia and the brain: Three questions asked and answered.* Preconference training presented to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
6. Cantor, J. M. (2018, April 13). *The responses to* I, Pedophile *from We, the people.* Keynote address to the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
7. Cantor, J. M. (2018, April 11). *Studying atypical sexualities: From vanilla to* I, Pedophile. Full day workshop at the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
8. Cantor, J. M. (2018, January 20). *How much sex is enough for a happy life?* Invited lecture to the University of Toronto Division of Urology Men's Health Summit, Toronto, Canada.
9. Cantor, J. M. (2017, November 2). Pedophilia as a phenomenon of the brain: Update of evidence and the public response. Invited presentation to the 7th annual SBC education event, Centre for Addiction and Mental Health, Toronto, Canada.
10. Cantor, J. M. (2017, June 9). Pedophilia being in the brain: The evidence and the public's reaction. Invited presentation to *SEXposium at the ROM: The science of love and sex,* Toronto, Canada.
11. Cantor, J. M., & Campea, M. (2017, April 20). *"I, Pedophile" showing and discussion.* Invited presentation to the 42nd annual meeting of the Society for Sex Therapy and Research, Montréal, Canada.
12. Cantor, J. M. (2017, March 1). *Functional and structural neuroimaging of pedophilia: Consistencies across methods and modalities.* Invited lecture to the Brain Imaging Centre, Royal Ottawa Hospital, Ottawa, Canada.
13. Cantor, J. M. (2017, January 26). *Pedophilia being in the brain: The evidence and the public reaction.* Inaugural keynote address to the University of Toronto Sexuality Interest Network, Toronto, Ontario, Canada.
14. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
15. Cantor, J. M. (2016, September 15). *Evaluating the risk to reoffend: What we know and what we don't.* Invited lecture to the Association of Ontario Judges, Ontario Court of Justice Annual Family Law Program, Blue Mountains, Ontario, Canada. [Private link only: https://vimeo.com/239131108/3387c80652]
16. Cantor, J. M. (2016, April 8). *Pedophilia and the brain: Conclusions from the second*

generation of research. Invited lecture at the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.

17. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole.* Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
18. Cantor, J. M. (2015, November). *No one asks to be sexually attracted to children: Living in Daniel's World.* Grand Rounds, Centre for Addiction and Mental Health. Toronto, Canada.
19. Cantor, J. M. (2015, August). *Hypersexuality: Getting past whether "it" is or "it" isn't.* Invited address at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
20. Cantor, J. M. (2015, July). *A unified theory of typical and atypical sexual interest in men: Paraphilia, hypersexuality, asexuality, and vanilla as outcomes of a single, dual opponent process.* Invited presentation to the 2015 Puzzles of Sexual Orientation conference, Lethbridge, AL, Canada.
21. Cantor, J. M. (2015, June). *Hypersexuality.* Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
22. Cantor, J. M. (2015, May). *Assessment of pedophilia: Past, present, future.* Keynote Address to the International Symposium on Neural Mechanisms Underlying Pedophilia and Child Sexual Abuse (NeMUP). Berlin, Germany.
23. Cantor, J. M. (2015, March). *Prevention of sexual abuse by tackling the biggest stigma of them all: Making sex therapy available to pedophiles.* Keynote address to the 40th annual meeting of the Society for Sex Therapy and Research, Boston, MA.
24. Cantor, J. M. (2015, March. *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
25. Cantor, J. M. (2015, February). *Hypersexuality.* Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
26. Cantor, J. M. (2015, January). *Brain research and pedophilia: What it means for assessment, research, and policy.* Keynote address to the inaugural meeting of the Netherlands Association for the Treatment of Sexual Abusers, Utrecht, Netherlands.
27. Cantor, J. M. (2014, December). *Understanding pedophilia and the brain: Implications for safety and society.* Keynote address for The Jewish Community Confronts Violence and Abuse: Crisis Centre for Religious Women, Jerusalem, Israel.
28. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain.* Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
29. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications.* Invited lecture presented to the Mental Health and Addition Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
30. Cantor, J. M. (2014, June). *An evening with Dr. James Cantor.* Invited lecture presented to the Ontario Medical Association, District 11 Doctors' Lounge Program, Toronto, Ontario, Canada.
31. Cantor, J. M. (2014, April). *Pedophilia and the brain.* Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
32. Cantor, J. M. (2014, February). *Pedophilia and the brain: Recap and update.* Workshop presented at the 2014 annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Cle Elum, WA.

33. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, February). *Functional connectivity in pedophilia.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario, Canada.
34. Cantor, J. M. (2013, November). *Understanding pedophilia and the brain: The basics, the current status, and their implications.* Invited lecture to the Forensic Psychology Research Centre, Carleton University, Ottawa, Canada.
35. Cantor, J. M. (2013, November). *Mistaking puberty, mistaking hebephilia.* Keynote address presented to the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
36. Cantor, J. M. (2013, October). *Understanding pedophilia and the brain: A recap and update.* Invited workshop presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
37. Cantor, J. M. (2013, October). *Compulsive-hyper-sex-addiction: I don't care what we all it, what can we* do*?* Invited address presented to the Board of Examiners of Sex Therapists and Counselors of Ontario, Toronto, Ontario, Canada.
38. Cantor, J. M. (2013, September). *Neuroimaging of pedophilia: Current status and implications.* McGill University Health Centre, Department of Psychiatry Grand Rounds presentation, Montréal, Québec, Canada.
39. Cantor, J. M. (2013, April). *Understanding pedophilia and the brain.* Invited workshop presented at the 2013 meeting of the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, MN.
40. Cantor, J. M. (2013, April). *The neurobiology of pedophilia and its implications for assessment, treatment, and public policy.* Invited lecture at the 38th annual meeting of the Society for Sex Therapy and Research, Baltimore, MD.
41. Cantor, J. M. (2013, April). *Sex offenders: Relating research to policy.* Invited roundtable presentation at the annual meeting of the Academy of Criminal Justice Sciences, Dallas, TX.
42. Cantor, J. M. (2013, March). *Pedophilia and brain research: From the basics to the state-of-the-art.* Invited workshop presented to the annual meeting of the Forensic Mental Health Association of California, Monterey, CA.
43. Cantor, J. M. (2013, January). *Pedophilia and child molestation.* Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
44. Cantor, J. M. (2012, November). *Understanding pedophilia and sexual offenders against children: Neuroimaging and its implications for public safety.* Invited guest lecture to University of New Mexico School of Medicine Health Sciences Center, Albuquerque, NM.
45. Cantor, J. M. (2012, November). *Pedophilia and brain research.* Invited guest lecture to the annual meeting of the Circles of Support and Accountability, Toronto, Ontario, Canada.
46. Cantor, J. M. (2012, January). *Current findings on pedophilia brain research.* Invited workshop at the San Diego International Conference on Child and Family Maltreatment, San Diego, CA.
47. Cantor, J. M. (2012, January). *Pedophilia and the risk to re-offend.* Invited lecture to the Ontario Court of Justice Judicial Development Institute, Toronto, Ontario, Canada.
48. Cantor, J. M. (2011, November). *Pedophilia and the brain: What it means for assessment, treatment, and policy.* Plenary Lecture presented at the Association for the Treatment of Sexual Abusers, Toronto, Ontario, Canada.

49. Cantor, J. M. (2011, July). *Towards understanding contradictory findings in the neuroimaging of pedophilic men.* Keynote address to 7th annual conference on Research in Forensic Psychiatry, Regensberg, Germany.
50. Cantor, J. M. (2011, March). *Understanding sexual offending and the brain: Brain basics to the state of the art.* Workshop presented at the winter conference of the Oregon Association for the Treatment of Sexual Abusers, Oregon City, OR.
51. Cantor, J. M. (2010, October). *Manuscript publishing for students.* Workshop presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
52. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
53. Cantor, J. M. (2010, March). *Understanding sexual offending and the brain: From the basics to the state of the art.* Workshop presented at the annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Blaine, WA.
54. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
55. Cantor, J. M. (2008, April). *Is pedophilia caused by brain dysfunction?* Invited address to the University-wide Science Day Lecture Series, SUNY Oswego, Oswego, NY.
56. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, September). *MRIs of pedophilic men.* Invited presentation at the 25th annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
57. Cantor, J. M., Blanchard, R., & Christensen, B. K. (2003, March). *Findings in and implications of neuropsychology and epidemiology of pedophilia.* Invited lecture at the 28th annual meeting of the Society for Sex Therapy and Research, Miami.
58. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, July). *Neuropsychological functioning in pedophiles.* Invited lecture presented at the 27th annual meeting of the International Academy of Sex Research, Bromont, Canada.
59. Cantor, J. M., Blanchard, R., Christensen, B., Klassen, P., & Dickey, R. (2001, February). *First glance at IQ, memory functioning and handedness in sex offenders.* Lecture presented at the Forensic Lecture Series, Centre for Addiction and Mental Health, Toronto, Ontario, Canada.
60. Cantor, J. M. (1999, November). *Reversal of SSRI-induced male sexual dysfunction: Suggestions from an animal model.* Grand Rounds presentation at the Allan Memorial Institute, Royal Victoria Hospital, Montréal, Canada.

PAPER PRESENTATIONS AND SYMPOSIA

1. Cantor, J. M. (2020, April). "I'd rather have a trans kid than a dead kid": Critical assessment of reported rates of suicidality in trans kids. *Paper presented at the annual meeting of the Society for the Sex Therapy and Research.* Online in lieu of in person meeting.
2. Stephens, S., Lalumière, M., Seto, M. C., & Cantor, J. M. (2017, October). *The relationship between sexual responsiveness and sexual exclusivity in phallometric profiles.* Paper presented at the annual meeting of the Canadian Sex Research Forum, Fredericton, New Brunswick, Canada.
3. Stephens, S., Cantor, J. M., & Seto, M. C. (2017, March). *Can the SSPI-2 detect hebephilic sexual interest?* Paper presented at the annual meeting of the American-Psychology Law Society Annual Meeting, Seattle, WA.
4. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Victim choice polymorphism and recidivism.* Symposium Presentation. Paper presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
5. McPhail, I. V., Hermann, C. A., Fernane, S. Fernandez, Y., Cantor, J. M., & Nunes, K. L. (2014, October). *Sexual deviance in sexual offenders against children: A meta-analytic review of phallometric research.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
6. Stephens, S., Seto, M. C., Cantor, J. M., & Goodwill, A. M. (2014, October). *Is hebephilic sexual interest a criminogenic need?: A large scale recidivism study.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
7. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. (2014, October). *Development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI–2).* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, September). *Pedophilia and the brain: White matter differences detected with DTI.* Paper presented at the 13th annual meeting of the International Association for the Treatment of Sexual Abusers, Porto, Portugal.
9. Stephens, S., Seto, M., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2014, March). *The role of hebephilic sexual interests in sexual victim choice.* Paper presented at the annual meeting of the American Psychology and Law Society, New Orleans, LA.
10. McPhail, I. V., Fernane, S. A., Hermann, C. A., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2013, November). *Sexual deviance and sexual recidivism in sexual offenders against children: A meta-analysis.* Paper presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
11. Cantor, J. M. (2013, September). *Pedophilia and the brain: Current MRI research and its implications.* Paper presented at the 21st annual World Congress for Sexual Health, Porto Alegre, Brazil. [Featured among Best Abstracts, top 10 of 500.]
12. Cantor, J. M. (Chair). (2012, March). *Innovations in sex research.* Symposium conducted at the 37th annual meeting of the Society for Sex Therapy and Research, Chicago.
13. Cantor, J. M., & Blanchard, R. (2011, August). fMRI versus phallometry in the diagnosis of pedophilia and hebephilia. In J. M. Cantor (Chair), *Neuroimaging of men's object*

preferences. Symposium presented at the 37th annual meeting of the International Academy of Sex Research, Los Angeles, USA.

14. Cantor, J. M. (Chair). (2011, August). *Neuroimaging of men's object preferences.* Symposium conducted at the 37th annual meeting of the International Academy of Sex Research, Los Angeles.
15. Cantor, J. M. (2010, October). A meta-analysis of neuroimaging studies of male sexual arousal. In S. Stolerú (Chair), *Brain processing of sexual stimuli in pedophilia: An application of functional neuroimaging.* Symposium presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
16. Chivers, M. L., Seto, M. C., Cantor, J. C., Grimbos, T., & Roy, C. (April, 2010). *Psychophysiological assessment of sexual activity preferences in women.* Paper presented at the 35th annual meeting of the Society for Sex Therapy and Research, Boston, USA.
17. Cantor, J. M., Girard, T. A., & Lovett-Barron, M. (2008, November). *The brain regions that respond to erotica: Sexual neuroscience for dummies.* Paper presented at the 51st annual meeting of the Society for the Scientific Study of Sexuality, San Juan, Puerto Rico.
18. Barbaree, H., Langton, C., Blanchard, R., & Cantor, J. M. (2007, October). *The role of age-at-release in the evaluation of recidivism risk of sexual offenders.* Paper presented at the 26th annual meetingof the Association for the Treatment of Sexual Abusers, San Diego.
19. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, July). *Pedophilia and brain morphology.* Abstract and paper presented at the 32nd annual meeting of the International Academy of Sex Research, Amsterdam, Netherlands.
20. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006, March). *Child pornography offending is a diagnostic indicator of pedophilia*. Paper presented at the 2006 annual meeting of the American Psychology-Law Society Conference, St. Petersburg, Florida.
21. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2005, August). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and paper presented at the International Behavioral Development Symposium, Minot, North Dakota.
22. Cantor, J. M., & Blanchard, R. (2005, July). *Quantitative reanalysis of aggregate data on IQ in sexual offenders.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
23. Cantor, J. M. (2003, August). *Sex reassignment on demand: The clinician's dilemma.* Paper presented at the 111th annual meeting of the American Psychological Association, Toronto, Canada.
24. Cantor, J. M. (2003, June). *Meta-analysis of VIQ–PIQ differences in male sex offenders.* Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
25. Cantor, J. M. (2002, August). *Gender role in autogynephilic transsexuals: The more things change…* Paper presented at the 110th annual meeting of the American Psychological Association, Chicago.

26. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, June). *IQ, memory functioning, and handedness in male sex offenders.* Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
27. Cantor, J. M. (1998, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 106th annual meeting of the American Psychological Association.
28. Cantor, J. M. (1997, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 105th annual meeting of the American Psychological Association.
29. Cantor, J. M. (1997, August). *Convention orientation for lesbian, gay, and bisexual students*. Paper presented at the 105th annual meeting of the American Psychological Association.
30. Cantor, J. M. (1996, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 104th annual meeting of the American Psychological Association.
31. Cantor, J. M. (1996, August). *Symposium: Question of inclusion: Lesbian and gay psychologists and accreditation*. Paper presented at the 104th annual meeting of the American Psychological Association, Toronto.
32. Cantor, J. M. (1996, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 104th annual meeting of the American Psychological Association.
33. Cantor, J. M. (1995, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 103rd annual meeting of the American Psychological Association.
34. Cantor, J. M. (1995, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 103rd annual meeting of the American Psychological Association.
35. Cantor, J. M. (1994, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 102nd annual meeting of the American Psychological Association.
36. Cantor, J. M. (1994, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 102nd annual meeting of the American Psychological Association.
37. Cantor, J. M., & Pilkington, N. W. (1992, August). *Homophobia in psychology programs: A survey of graduate students.* Paper presented at the Centennial Convention of the American Psychological Association, Washington, DC. (ERIC Document Reproduction Service No. ED 351 618)
38. Cantor, J. M. (1991, August). *Being gay and being a graduate student: Double the memberships, four times the problems*. Paper presented at the 99th annual meeting of the American Psychological Association, San Francisco.

POSTER PRESENTATIONS

1. Klein, L., Stephens, S., Goodwill, A. M., Cantor, J. M., & Seto, M. C. (2015, October). *The psychological propensities of risk in undetected sexual offenders.* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
2. Pullman, L. E., Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Why are incest offenders less likely to recidivate?* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
3. Seto, M. C., Stephens, S. M., Cantor, J. M., Lalumiere, M. L., Sandler, J. C., & Freeman, N. A. (2015, August). *The development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI-2).* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
4. Soh, D. W., & Cantor, J. M. (2015, August). *A peek inside a furry convention.* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
5. VanderLaan, D. P., Lobaugh, N. J., Chakravarty, M. M., Patel, R., Chavez, S. Stojanovski, S. O., Takagi, A., Hughes, S. K., Wasserman, L., Bain, J., Cantor, J. M., & Zucker, K. J. (2015, August). *The neurohormonal hypothesis of gender dysphoria: Preliminary evidence of cortical surface area differences in adolescent natal females.* Poster presentation at the 31st annual meeting of the International Academy of Sex Research. Toronto, Canada.
6. Cantor, J. M., Lafaille, S. J., Moayedi, M., Mikulis, D. M., & Girard, T. A. (2015, June). *Diffusion tensor imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Harvey Stancer Research Day, Toronto, Ontario Canada.
7. Newman, J. E., Stephens, S., Seto, M. C., & Cantor, J. M. (2014, October). *The validity of the Static-99 in sexual offenders with low intellectual abilities.* Poster presentation at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Lykins, A. D., Walton, M. T., & Cantor, J. M. (2014, June). *An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior.* Poster presentation at the 30th annual meeting of the International Academy of Sex Research, Dubrovnik, Croatia.
9. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, November). *The utility of phallometry in the assessment of hebephilia.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
10. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, October). *The role of hebephilic sexual interests in sexual victim choice.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
11. Fazio, R. L., & Cantor, J. M. (2013, October). *Analysis of the Fazio Laterality Inventory (FLI) in a population with established atypical handedness.* Poster presented at the 33rd annual meeting of the National Academy of Neuropsychology, San Diego.
12. Lafaille, S., Hannah, J., Soh, D., Kucyi, A., Girard, T. A., Mikulis, D. M., & Cantor, J. M. (2013, August). *Investigating resting state networks in pedohebephiles.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.

13. McPhail, I. V., Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2013, August). *Effects of prescription medication on volumetric phallometry output.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
14. Murray, M. E., Dyshniku, F., Fazio, R. L., & Cantor, J. M. (2013, August). *Minor physical anomalies as a window into the prenatal origins of pedophilia.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
15. Sutton, K. S., Stephens, S., Dyshniku, F., Tulloch, T., & Cantor, J. M. (2013, August). *Pilot group treatment for "procrasturbation."* Poster presented at 39th annual meeting of the International Academy of Sex Research, Chicago.
16. Sutton, K. S., Pytyck, J., Stratton, N., Sylva, D., Kolla, N., & Cantor, J. M. (2013, August). *Client characteristics by type of hypersexuality referral: A quantitative chart review.* Poster presented at the 39th annual meeting of the International Academy of Sex Research, Chicago.
17. Fazio, R. L., & Cantor, J. M. (2013, June). *A replication and extension of the psychometric properties of the Digit Vigilance Test.* Poster presented at the 11th annual meeting of the American Academy of Clinical Neuropsychology, Chicago.
18. Lafaille, S., Moayedi, M., Mikulis, D. M., Girard, T. A., Kuban, M., Blak, T., & Cantor, J. M. (2012, July). *Diffusion Tensor Imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Lisbon, Portugal.
19. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010, July). *Sexual arousal to female children in gynephilic men.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Prague, Czech Republic.
20. Cantor, J. M., Girard, T. A., Lovett-Barron, M., & Blak, T. (2008, July). *Brain regions responding to visual sexual stimuli: Meta-analysis of PET and fMRI studies.* Abstract and poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
21. Lykins, A. D., Blanchard, R., Cantor, J. M., Blak, T., & Kuban, M. E. (2008, July). *Diagnosing sexual attraction to children: Considerations for DSM-V.* Poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
22. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, October). *Physical height in pedophilia and hebephilia.* Poster presented at the 26th annual meeting of the Association for the Treatment of Sexual Abusers, San Diego.
23. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, August). *Physical height in pedophilia and hebephilia.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
24. Puts, D. A., Blanchard, R., Cardenas, R., Cantor, J., Jordan, C. L., & Breedlove, S. M. (2007, August). *Earlier puberty predicts superior performance on male-biased visuospatial tasks in men but not women.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
25. Seto, M. C., Cantor, J. M., & Blanchard, R. (2005, November). *Possession of child pornography is a diagnostic indicator of pedophilia.* Poster presented at the 24th annual meeting of the Association for the Treatment of Sexual Abusers, New Orleans.

26. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove. S. M., & Ellis, L. (2005, July). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
27. Cantor, J. M., & Blanchard, R. (2003, July). *The reported VIQ–PIQ differences in male sex offenders are artifactual?* Abstract and poster presented at the 29th annual meeting of the International Academy of Sex Research, Bloomington, Indiana.
28. Christensen, B. K., Cantor, J. M., Millikin, C., & Blanchard, R. (2002, February). *Factor analysis of two brief memory tests: Preliminary evidence for modality-specific measurement.* Poster presented at the 30th annual meeting of the International Neuropsychological Society, Toronto, Ontario, Canada.
29. Cantor, J. M., Blanchard, R., Paterson, A., Bogaert, A. (2000, June). *How many gay men owe their sexual orientation to fraternal birth order?* Abstract and poster presented at the International Behavioral Development Symposium, Minot, North Dakota.
30. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, November). *Fluoxetine inhibition of male rat sexual behavior: Reversal by oxytocin*. Poster presented at the 26th annual meeting of the Society for Neurosciences, Washington, DC.
31. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, June). *An animal model of fluoxetine-induced sexual dysfunction: Dose dependence and time course*. Poster presented at the 28th annual Conference on Reproductive Behavior, Montréal, Canada.
32. Cantor, J. M., O'Connor, M. G., Kaplan, B., & Cermak, L. S. (1993, June). *Transient events test of retrograde memory: Performance of amnestic and unimpaired populations*. Poster presented at the 2nd annual science symposium of the Massachusetts Neuropsychological Society, Cambridge, MA.

EDITORIAL AND PEER-REVIEWING ACTIVITIES

Editor-in-Chief

Sexual Abuse: A Journal of Research and Treatment	Jan., 2010–Dec., 2014

Editorial Board Memberships

Journal of Sexual Aggression	Jan., 2010–Dec., 2021
Journal of Sex Research, The	Jan., 2008–Aug., 2020
Sexual Abuse: A Journal of Research and Treatment	Jan., 2006–Dec., 2019
Archives of Sexual Behavior	Jan., 2004–Present
The Clinical Psychologist	Jan., 2004–Dec., 2005

Ad hoc Journal Reviewer Activity

American Journal of Psychiatry
Annual Review of Sex Research
Archives of General Psychiatry
Assessment
Biological Psychiatry
BMC Psychiatry
Brain Structure and Function
British Journal of Psychiatry
British Medical Journal
Canadian Journal of Behavioural Science
Canadian Journal of Psychiatry
Cerebral Cortex
Clinical Case Studies
Comprehensive Psychiatry
Developmental Psychology
European Psychologist
Frontiers in Human Neuroscience
Human Brain Mapping
International Journal of Epidemiology
International Journal of Impotence Research
International Journal of Sexual Health
International Journal of Transgenderism
Journal of Abnormal Psychology
Journal of Clinical Psychology
Journal of Consulting and Clinical Psychology
Journal of Forensic Psychology Practice
Journal for the Scientific Study of Religion
Journal of Sexual Aggression
Journal of Sexual Medicine
Journal of Psychiatric Research
Nature Neuroscience
Neurobiology Reviews
Neuroscience & Biobehavioral Reviews
Neuroscience Letters
Proceedings of the Royal Society B (Biological Sciences)
Psychological Assessment
Psychological Medicine
Psychological Science
Psychology of Men & Masculinity
Sex Roles
Sexual and Marital Therapy
Sexual and Relationship Therapy
Sexuality & Culture
Sexuality Research and Social Policy
The Clinical Psychologist
Traumatology
World Journal of Biological Psychiatry

GRANT REVIEW PANELS

2017–2021 Member, College of Reviewers, *Canadian Institutes of Health Research,* Canada.

2017 Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.

2017 Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

2016 Reviewer. National Science Center [*Narodowe Centrum Nauki*], Poland.

2016 Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.

2015 Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.

2015 Reviewer. *Czech Science Foundation,* Czech Republic.

2015 Reviewer, "Off the beaten track" grant scheme. *Volkswagen Foundation,* Germany.

2015 External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada

2015 Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.

2014 Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.

2014 External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada.

2014 Panel Member, Dean's Fund—Clinical Science Panel. *University of Toronto Faculty of Medicine*, Canada.

2014 Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.

2013 Panel Member, Grant Miller Cancer Research Grant Panel. *University of Toronto Faculty of Medicine*, Canada.

2013 Panel Member, Dean of Medicine Fund New Faculty Grant Clinical Science Panel. *University of Toronto Faculty of Medicine,* Canada.

2012 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence (2nd round). *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

2012 External Reviewer, University of Ottawa Medical Research Fund. *University of Ottawa Department of Psychiatry*, Canada.

2012 External Reviewer, Behavioural Sciences—B. *Canadian Institutes of Health Research*, Canada.

2011 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

TEACHING AND TRAINING

PostDoctoral Research Supervision
Law & Mental Health Program, Centre for Addiction and Mental Health, Toronto, Canada

Dr. Katherine S. Sutton	Sept., 2012–Dec., 2013
Dr. Rachel Fazio	Sept., 2012–Aug., 2013
Dr. Amy Lykins	Sept., 2008–Nov., 2009

Doctoral Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Michael Walton • University of New England, Australia	Sept., 2017–Aug., 2018
Debra Soh • York University	May, 2013–Aug, 2017
Skye Stephens • Ryerson University	April, 2012–June, 2016

Masters Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Nicole Cormier • Ryerson University	June, 2012–present
Debra Soh • Ryerson University	May, 2009–April, 2010

Undergraduate Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Kylie Reale • Ryerson University	Spring, 2014
Jarrett Hannah • University of Rochester	Summer, 2013
Michael Humeniuk • University of Toronto	Summer, 2012

Clinical Supervision (Doctoral Internship)
Clinical Internship Program, Centre for Addiction and Mental Health, Toronto, Canada

Katherine S. Sutton • Queen's University	2011–2012
David Sylva • Northwestern University	2011–2012
Jordan Rullo • University of Utah	2010–2011
Lea Thaler • University of Nevada, Las Vegas	2010–2011
Carolin Klein • University of British Columbia	2009–2010
Bobby R. Walling • University of Manitoba	2009–2010

TEACHING AND TRAINING

Clinical Supervision (Doctoral- and Masters- level practica)
Centre for Addiction and Mental Health, Toronto, Canada

Tyler Tulloch • Ryerson University	2013–2014
Natalie Stratton • Ryerson University	Summer, 2013
Fiona Dyshniku • University of Windsor	Summer, 2013
Mackenzie Becker • McMaster University	Summer, 2013
Skye Stephens • Ryerson University	2012–2013
Vivian Nyantakyi • Capella University	2010–2011
Cailey Hartwick • University of Guelph	Fall, 2010
Tricia Teeft • Humber College	Summer, 2010
Allison Reeves • Ontario Institute for Studies in Education/Univ. of Toronto	2009–2010
Helen Bailey • Ryerson University	Summer, 2009
Edna Aryee • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Iryna Ivanova • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Jennifer Robinson • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Zoë Laksman • Adler School of Professional Psychology	2005–2006
Diana Mandelew • Adler School of Professional Psychology	2005–2006
Susan Wnuk • York University	2004–2005
Hiten Lad • Adler School of Professional Psychology	2004–2005
Natasha Williams • Adler School of Professional Psychology	2003–2004
Lisa Couperthwaite • Ontario Institute for Studies in Education/Univ. of Toronto	2003–2004
Lori Gray, née Robichaud • University of Windsor	Summer, 2003
Sandra Belfry • Ontario Institute for Studies in Education/Univ. of Toronto	2002–2003
Althea Monteiro • York University	Summer, 2002
Samantha Dworsky • York University	2001–2002
Kerry Collins • University of Windsor	Summer, 2001
Jennifer Fogarty • Waterloo University	2000–2001
Emily Cripps • Waterloo University	Summer, 2000
Lee Beckstead • University of Utah	2000

PROFESSIONAL SOCIETY ACTIVITIES

OFFICES HELD

2018–2019	Local Host. Society for Sex Therapy and Research.
2015	Member, International Scientific Committee, World Association for Sexual Health.
2015	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2012–2013	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2012–2013	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2011–2012	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2010–2011	Scientific Program Committee, International Academy of Sex Research
2002–2004	Membership Committee • APA Division 12 (Clinical Psychology)
2002–2003	Chair, Committee on Science Issues, APA Division 44
2002	Observer, Grant Review Committee • Canadian Institutes of Health Research Behavioural Sciences (B)
2001–2009	Reviewer • APA Division 44 Convention Program Committee
2001, 2002	Reviewer • APA Malyon-Smith Scholarship Committee
2000–2005	Task Force on Transgender Issues, APA Division 44
1998–1999	Consultant, APA Board of Directors Working Group on Psychology Marketplace
1997	Student Representative • APA Board of Professional Affairs' Institute on TeleHealth
1997–1998	Founder and Chair • APA/APAGS Task Force on New Psychologists' Concerns
1997–1999	Student Representative • APA/CAPP Sub-Committee for a National Strategy for Prescription Privileges
1997–1999	Liaison • APA Committee for the Advancement of Professional Practice
1997–1998	Liaison • APA Board of Professional Affairs
1993–1997	Founder and Chair • APA/APAGS Committee on LGB Concerns

PROFESSIONAL SOCIETY ACTIVITIES

MEMBERSHIPS

2017–2021 Member • *Canadian Sex Research Forum*

2009–Present Member • *Society for Sex Therapy and Research*

2007–Present Fellow • *Association for the Treatment and Prevention of Sexual Abuse*

2006–Present Full Member (elected) • *International Academy of Sex Research*

2006–Present Research and Clinical Member • *Association for the Treatment and Prevention of Sexual Abuse*

2003–2006 Associate Member (elected) • *International Academy of Sex Research*

2002 Founding Member • CPA Section on Sexual Orientation and Gender Identity

2001–2013 Member • *Canadian Psychological Association* (CPA)

2000–2015 Member • *American Association for the Advancement of Science*

2000–2015 Member • *American Psychological Association* (APA)

APA Division 12 (Clinical Psychology)

APA Division 44 (Society for the Psychological Study of LGB Issues)

2000–2020 Member • *Society for the Scientific Study of Sexuality*

1995–2000 Student Member • *Society for the Scientific Study of Sexuality*

1993–2000 Student Affiliate • *American Psychological Association*

1990–1999 Member, American Psychological Association of Graduate Students (APAGS)

CLINICAL LICENSURE/REGISTRATION

Certificate of Registration, Number 3793
College of Psychologists of Ontario, Ontario, Canada

AWARDS AND HONORS

2022 Distinguished Contribution Award
Association for the Treatment and Prevention of Sexual Abuse (ATSA)

2011 Howard E. Barbaree Award for Excellence in Research
Centre for Addiction and Mental Health, Law and Mental Health Program

2004 fMRI Visiting Fellowship Program at Massachusetts General Hospital
American Psychological Association Advanced Training Institute and NIH

1999–2001 CAMH Post-Doctoral Research Fellowship
Centre for Addiction and Mental Health Foundation and Ontario Ministry of Health

1998 Award for Distinguished Contribution by a Student
American Psychological Association, Division 44

1995 Dissertation Research Grant
Society for the Scientific Study of Sexuality

1994–1996 McGill University Doctoral Scholarship

1994 Award for Outstanding Contribution to Undergraduate Teaching
"TA of the Year Award," from the McGill Psychology Undergraduate Student Association

MAJOR MEDIA

(Complete list available upon request.)

Feature-length Documentaries

Vice Canada Reports. *Age of Consent.* 14 Jan 2017.
Canadian Broadcasting Company. *I, Pedophile.* Firsthand documentaries. 10 Mar 2016.

Appearances and Interviews

11 Mar 2020. Ibbitson, John. It is crucial that Parliament gets the conversion-therapy ban right. *The Globe & Mail.*
25 Jan 2020. Ook de hulpvaardige buurman kan verzamelaar van kinderporno zin. *De Morgen.*
3 Nov 2019. Village of the damned. *60 Minutes Australia.*
1 Nov 2019. HÅKON F. HØYDAL. Norsk nettovergriper: – Jeg hater meg selv: Nordmannen laster ned overgrepsmateriale fra nettet – og oppfordrer politiet til å gi amnesti for slike som ham.
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29 Apr 2019. Mathieu, Isabelle. La poupée qui a troublé les Terre-Neuviens. *La Tribune.*
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12 Dec 2018. Child sex dolls: Illegal in Canada, and dozens seized at the border. Ontario Today with Rita Celli. *CBC.*
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25 Apr 2018. Yang, J. Number cited in cryptic Facebook post matches Alek Minassian's military ID: Source. *Toronto Star.*
24 Ap 2018 Understanding 'incel'. *CTV News.*
27 Nov 2017. Carey, B. Therapy for Sexual Misconduct? It's Mostly Unproven. *New York Times.*
14 Nov 2017. Tremonti, A. M. The Current. *CBC.*
9 Nov2017. Christensen, J. Why men use masturbation to harass women. *CNN.* http://www.cnn.com/2017/11/09/health/masturbation-sexual-harassment/index.html
7 Nov 2017. Nazaryan, A. Why is the alt-right obsessed with pedophilia? *Newsweek.*
15 Oct 2017. Ouatik, B. Déscouvre. Pédophilie et science. *CBC Radio Canada.*
12 Oct 2017. Ouatik, B. Peut-on guérir la pédophilie? *CBC Radio Canada.*
11 Sep 2017. Burns, C. The young paedophiles who say they don't abuse children. *BBC News.*
18 Aug 2017. Interview. *National Post Radio.* Sirius XM Canada.
16 Aug 2017. Blackwell, Tom. Man says he was cured of pedophilia at Ottawa clinic: 'It's like a weight that's been lifted': But skeptics worry about the impact of sending pedophiles into the world convinced their curse has been vanquished. *National Post.*
26 Apr 2017. Zalkind, S. Prep schools hid sex abuse just like the catholic church. *VICE.*
24 Apr 2017. Sastre, P. Pédophilie: une panique morale jamais n'abolira un crime. *Slate France.*
12 Feb 2017. Payette, G. Child sex doll trial opens Pandora's box of questions. *CBC News.*
26 Nov 2016. Det morke uvettet ["The unknown darkness]". *Fedrelandsvennen.*
13 July 2016. Paedophilia: Shedding light on the dark field. *The Economist.*

1 Jul 2016. Debusschere, B. Niet iedereen die kinderporno kijkt, is een pedofiel: De mythes rond pedofilie ontkracht. *De Morgen.*
12 Apr 2016. O'Connor, R. Terence Martin: The Tasmanian MP whose medication 'turned him into a paedophile'. *The Independent.*
8 Mar 2016. Bielski, Z. 'The most viscerally hated group on earth': Documentary explores how intervention can stop pedophiles. *The Globe and Mail.*
1 Mar 2016. Elmhirst, S. What should we do about paedophiles? *The Guardian.*
24 Feb 2016. The man whose brain tumour 'turned him into a paedophile'. *The Independent.*
24 Nov 2015. Byron, T. The truth about child sex abuse. *BBC Two.*
20 Aug 2015. The Jared Fogle case: Why we understand so little about abuse. *Washington Post.*
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2 Aug 2015. Menendez, J. BBC News Hour. *BBC World Service.*
13 Jul 2015. The nature of pedophilia. *BBC Radio 4.*
9 Jul 2015. The sex-offender test: How a computerized assessment can help determine the fate of men who've been accused of sexually abusing children. *The Atlantic.*
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10 Feb 2015. Savage, D. "The ethical sadist." In Savage Love. *The Stranger.*
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1 Dec 2014. Singal, J. Can virtual reality help pedophiles? *New York Magazine.*
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4 Sep 2014. Born that way? *Ideas, with Paul Kennedy.* CBC Radio One.
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21 Jul 2013. Miller, L. The turn-on switch: Fetish theory, post-Freud. *New York Magazine.*
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1 Mar 2013. Kay, J. The mobbing of Tom Flanagan is unwarranted and cruel. *National Post.*
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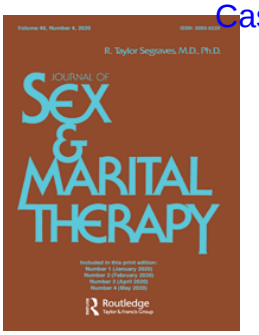
EXPERT WITNESS TESTIMONY

1.	2023	Van Garderen v Montana	Missoula County, MT
2.	2023	Noe v Parson	Cole County, MO
3.	2023	Loe v Texas	Travis County, TX
4.	2023	Roe v Critchfield	Southern Division, ID
5.	2023	Poe v Labrador	Southern Division, ID
6.	2023	Koe v Noggle	Northern District, GA
7.	2023	Doe v Medical Licensing Board of Kentucky	Western District, KY
8.	2023	Poe v Drummond	Northern District, OK
9.	2023	L.W. v Skrmetti	Middle District, TN
10.	2023	K.C. v Medical Licensing Board of Indiana	Southern District, IN
11.	2023	Doe v Horne	District of Arizona, AZ
12.	2022	Bridge v Oklahoma State Dept of Education	Western District, OK
13.	2022	Dekker, et al. v Florida Agency for Health Care Admin	Tallahassee, FL
14.	2022	Roe v Utah High School Activities Assn.	Salt Lake County, UT
15.	2022	A.M. v Indiana Public Schools	Southern District, IN
16.	2022	Ricard v Kansas	Geery County, KS
17.	2022	Re Commitment of Baunee	Syracuse, NY
18.	2022	Hersom & Doe v WVa Health & Human Services	Southern District, WV
19.	2022	Boe, Eknes-Tucker v Alabama	Montgomery Cnty, AL
20.	2022	Lopez v Texas	TX
21.	2022	PFLAG, et al. v Texas	Travis County, TX
22.	2022	Doe v Texas	Travis County, TX
23.	2022	BPJ v West Virginia Board of Education	Southern District, WV
24.	2021	Cross et al. v Loudoun School Board	Loudoun, VA
25.	2021	Cox v Indiana Child Services	Child Services, IN
26.	2021	Josephson v University of Kentucky	Western District, KY
27.	2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, IL
28.	2021	Arizona v Arnett Clifton	Maricopa County, AZ
29.	2019	US v Peter Bright	Southern District, NY
30.	2019	Spiegel-Savoie v Savoie-Sexten (Custody Hearing)	Boston, MA
31.	2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, IL
32.	2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
33.	2019	Canada vs John Fitzpatrick (Sentencing Hearing)	Toronto, ON, Canada
34.	2018	Re Commitment of Little (Frye Hearing)	Utica, NY
35.	2017	Re Commitment of Nicholas Bauer (Frye Hearing)	Lee County, IL
36.	2017	US vs William Leford (Presentencing Hearing)	Warnock, GA
37.	2015	Florida v Jon Herb	Naples, FL
38.	2010	Re Detention of William Dutcher	Seattle, WA



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Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

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ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents*. Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation.* That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.

The AAP statement was also remarkable in what it left out—namely, the actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

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whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

> "[C]onversion" or "reparative" treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender diverse expressions. … Reparative approaches have been proven to be not only unsuccessful[38] but also deleterious and are considered outside the mainstream of traditional medical practice.[29,39 42]

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol.* 1994;62(2):221 227.

29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2012;51(9):957 974.

39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health.* 2016;3(2):97 99.

40. Cohen Kettenis PT, Delemarrevan de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med.* 2008;5(8):1892 1897.

41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy.* 2006;3(3):23 39.

42. World Professional Association for Transgender Health. *WPATH De Psychopathologisation Statement.* Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP's claims struck me as odd because *there are no studies of conversion therapy for gender identity.* Studies of conversion therapy have been limited to *sexual orientation,* and, moreover, to the sexual orientation *of adults,* not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only.* Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: "The practice and ethics of *sexual orientation* conversion therapy" [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP's citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP's sources *did* repeatedly emphasize was that:

A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced "conversion": The majority of children "convert" to cisgender or "desist" from transgender

regardless of any attempt to change them. "Conversion" only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that "gender identity is not synonymous with 'sexual orientation'" (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.

To return to checking AAP's fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity*, AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: "Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through 'reparative therapy' *in adults* have found little or no change in *sexual orientation,* while causing significant risk of harm to self-esteem" (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP's actual view was decidedly neutral, noting the lack of evidence: "Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed" (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: "In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood" (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP's actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: "Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*" (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic's lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the "mainstream of traditional medical practice" consists of (the logic being that conversion therapy falls outside what an 'ideal' clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach

espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: "[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved" (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: "An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the DSM and not unique to GIDC)" (Bryant, 2006, p. 35). How this article supports AAP's claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association's (APA's) update of the DSM, the statement asserted simply that "The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide." Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the DSM as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the DSM revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH's urging. This makes AAP's logic entirely backwards: That WPATH's request to depathologize gender dysphoria was *rejected* suggests that it is *WPATH's* view—and therefore the AAP policy—which fall "outside the mainstream of traditional medical practice." (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used "to prevent children and adolescents from identifying as transgender" (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP's sources is "delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity" in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP's stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it "outdated." The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

> [G]ender affirmation is in contrast to the outdated approach in which a child's gender diverse assertions are held as "possibly true" until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed "watchful waiting." This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow up on children who identified as TGD and, by adolescence, did not seek further treatment ("desisters").[45,47]

The citations from AAP's reference list are:

45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo Meier C. Prepubertal social gender transitions: what we know; what we can learn a view from a gender affirmative lens. *Int J Transgend.* 2018;19(2):251 268

47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry.* 2016;55(3):155 156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence,* this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as

cases of "persistence-after-interruption." Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistence instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is "outdated" either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: "Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *favored by the standards,* we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5" (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: "When a child's gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child" (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summaries the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, "This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population"; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, "Current available research and expert opinion from clinical and research leaders … will serve as the basis for recommendations" (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP's statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP's recommendations are *despite* the existing evidence.

Disclosure statement

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Appendix

Count	Group	Study
2/16 4/16 10/16	gay* trans /crossdress straight*/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283 1289.
2/16 2/16 12/16	trans uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow up. *Comprehensive Psychiatry, 19,* 363 369.
0/9 9/9	trans gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow up. *Journal of Pediatric Psychology, 4,* 29 41.
2/45 10/45 33/45	trans /crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90 97.
1/10 2/10 3/10 4/10	trans gay uncertain straight	Davenport, C. W. (1986). A follow up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511 517.
1/44 43/44	trans cis	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality.* New Haven, CT: Yale University Press.
0/8 8/8	trans cis	Kosky, R. J. (1987). Gender disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565 569.
21/54 33/54	trans cis	Wallien, M. S. C., & Cohen Kettenis, P. T. (2008). Psychosexual outcome of gender dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413 1423.
3/25 6/25 16/25	trans lesbian/bi straight	Drummond, K. D., Bradley, S. J., Badali Peterson, M., & Zucker, K. J. (2008). A follow up study of girls with gender identity disorder. *Developmental Psychology, 44*, 34 45.
17/139 122/139	trans cis	Singh, D. (2012). *A follow up study of boys with gender identity disorder*. Unpublished doctoral dissertation, University of Toronto.
47/127 80/127	trans cis	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582 590.

*For brevity, the list uses "gay" for "gay and cis ", "straight" for "straight and cis ", etc.