

Attachments to
Alliance Defending Freedom Comments
On HHS's Proposed Rule
On Section 1557

Factual Evidence

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

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

Plaintiff,

v.

**WEST VIRGINIA STATE BOARD OF
EDUCATION, HARRISON COUNTY BOARD
OF EDUCATION, et al.,**

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Civil Action No: 2:21-cv-00316

**THE HONORABLE
JOSEPH R. GOODWIN**

DECLARATION OF JAMES M. CANTOR, PHD.

I, Dr. James Cantor, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of James M. Cantor, Ph.D., in the Case of *B.P.J. v. West Virginia State Board of Education*, dated February 23, 2022, attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.



Executed February 23, 2022

Dr. James M. Cantor, PhD.

Expert Report of
James M. Cantor, PhD.

In the case of *B.P.J. vs. West Virginia State Board of Education*.

February 23, 2022

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I. Background & Credentials

1. I am a clinical psychologist and Director of the Toronto Sexuality Centre in Canada. 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.

2. Over my academic career, my posts have included Psychologist and Senior Scientist at the Centre for Addiction and Mental Health (CAMH) and Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and 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 of Sexual Abusers. 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*. 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.

3. My scientific expertise spans the biological and non-biological development of human sexuality, the classification of sexual interest patterns, the assessment and

treatment of atypical sexualities, and the application of statistics and research methodology in sex research. 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*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4. I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment of treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5. I have served as an expert witness in a total of 14 cases, which are listed in my *curriculum vitae*, attached here as Appendix 1, which includes a list of cases in which I have recently testified.

6. A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. I was a member of the hospital's adult forensic program. However, I was in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple projects.

7. 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.

II. Introduction

8. The principal opinions that I offer and explain in detail in this report are:
- a. Biological sex is a clear, scientifically valid, and well-defined category. The existence of disorders of sexual development in an extremely small proportion of individuals does not change this.
 - b. Neither early-onset (childhood) gender dysphoria nor adolescent-onset gender dysphoria can be assumed to reflect a fixed aspect of a person's psychological make-up or self-perception.
 - c. No study has demonstrated that "affirming" the transgender identity of a child or adolescent produces better mental health outcomes or reduced suicidality relative to psychotherapy and mental health support.
 - d. On the contrary, the contemporary studies have failed to find improved mental health in teens and young adults after administration of puberty blockers and/or cross-sex hormones.
 - e. Affirmation of a transgender identity in minors who suffer from early-onset or adolescent-onset gender dysphoria is not an accepted "standard of care."

In addition, I have been asked to provide an expert opinion on how relevant professional organizations have addressed these questions and whether any of them have taken any meritorious position that would undermine West Virginia's Protect Women's Sports Act (H.B. 3292) ("Act"). As I explain in detail in this report, it is my opinion that Plaintiffs' expert reports display a wide variety of flaws that call their conclusions into question and that no professional organization has articulated a meritorious position that calls into question the basis for the Act.

9. To prepare the present report, I reviewed the following resources related to this litigation:

- a. West Virginia’s Protect Women’s Sports Act, H.B. 3293.
- b. The Amended Complaint in this litigation.
- c. Ms. Armistead’s Declaration, Doc. 95-1.
- d. Declaration and Expert Report of Deanna Adkins, MD.
- e. Expert Report and Declaration of Joshua D. Safer, MD, FACP, FACE.

III. Clarifying Terms

10. Most scientific discussions begin with the relevant vocabulary and definitions of terms. In the highly polarized and politicized debates surrounding transgender issues, that is less feasible: Different authors have used terms in differing, overlapping ways. Activists and the public (especially on social media) will use the same terms, but to mean different things, and some have actively misapplied terms so that original documents appear to assert something they do not.

11. “Gender expression” is one such term. For another example, the word “child” is used in some contexts to refer specifically to children before puberty; in some contexts, to refer to children before adolescence (thus including ages of puberty); in still other contexts, to refer to people under the legal age of consent, which is age sixteen in the Netherlands (where much of the research was conducted) or age eighteen in much of North America. Thus, care should be taken in both using and interpreting the word “child” in this field.

12. Because the present document is meant to compare the claims made by others, it is the definitions used by those specific authors in those specific contexts which are relevant. Thus, definitions to my own uses of terms are provided where appropriate, but primarily explicate how terms were defined and used in their original contexts.

IV. Evidence Cited by Plaintiffs' Expert Reports

13. Dr. Adkins claimed a person's gender identity cannot be voluntarily changed. In actual clinical practice, that is rarely the relevant issue. The far more typical situation is youth who are *mistaken* about their gender identity. These youth are misinterpreting their experiences to indicate they are transgender, or they are exaggerating their descriptions of their experiences in service of attention-seeking or other psychological needs. Dr. Adkins' claim is not merely lacking any science to support it; the claim itself defies scientific thinking. In science, it is not possible to know that gender identity cannot be changed: We can know only that we lack evidence of such a procedure. In the scientific method, it remains eternally possible for evidence of such a treatment to emerge, and unlike sexual orientation's long history with conversion therapy, there have not been systematic attempts to change gender identity.

14. Dr. Adkins claimed that untreated gender dysphoria can result in several mental health issues, including suicidality. The relevant research on suicidality is summarized in its own section to follow. Nonetheless, Dr. Adkins' claim is a misleading half-truth: Missing is that people with gender dysphoria continue to experience those mental health symptoms even after they do transition, including a 19 times greater risk of death from suicide.¹ This is why clinical guidelines repeatedly indicate that mental health issues should be resolved *before* any transition, as indicated in multiple sets of clinical guidelines, summarized in their own section to follow. As emphasized even by authorities Dr. Adkins cites herself: Transition should not be relied upon itself to improve mental health status.

15. Adkins' support for the claim that untreated gender dysphoria lessens mental health consisted of two articles: Olson, *et al.* (2016) and Spack (2012). Such is a terrible misrepresentation of the state of the scientific literature. Although Olson,

¹ Dhejne, *et al.*, 2011.

et al., did indeed report that gender dysphoric children showed no mental health differences from the non-transgender control groups, Olson's report turned out to be incorrect. The Olson data were reanalyzed, and after correcting for statistical errors in the original analysis, the data instead showed that the gender dysphoric children under Olson's care *did*, in fact, exhibit significantly lower mental health.²

16. I conducted an electronic search of the research literature to identify any responses from the Olson team regarding the Schumm and Crawford re-analysis of the Olson data and was not able to locate any. I contacted Professor Schumm by email on August 22, 2021 to verify that conclusion, to which he wrote there has been: "No response [from Olson]."³

17. Adkins also misrepresented the views of Dr. Norman Spack. The article Adkins cited—Spack, 2012—repeatedly emphasized that children with gender dysphoria exhibit very many symptoms of mental illnesses. Spack asserted unambiguously that "Gender dysphoric children who do not receive *counseling* have a high risk of behavioural and emotional problems and psychiatric diagnoses."⁴ The wording of Dr. Adkins' report ("gender dysphoria . . . if left untreated") misrepresents Spack so as to suggest Spack was advocating for medical transition to treat the gender dysphoria rather than counseling to treat suicidality and any other mental health issues. Moreover still, missing from Adkins' report was Spack's conclusion that "[m]ental health intervention should persist for the long term, even after surgery, as patients continue to be at mental health risk, including for suicide. While the causes of suicide are multifactorial, the possibility cannot be ruled out that some patients unrealistically believe that surgery(ies) solves their psychological distress."⁵ Whereas

² Schumm & Crawford, 2020; Schumm, *et al.*, 2019.

³ Schumm, email communication, Aug. 22, 2021 (on file with author).

⁴ Spack, *et al.*, 2012, at 422, italics added.

⁵ Spack, *et al.*, 2013, at 484, italics added

Adkins (selectively) cited Spack to support her insinuation that transition relieves distress, Spack instead explicitly warned against drawing exactly that conclusion.

18. Next, Adkins claimed to have achieved levels of success in her professional clinical practice unlike those reported by anyone anywhere else in the world: “All of my patients have suffered from persistent gender dysphoria, which has been alleviated through clinical appropriate treatment.”⁶ It is difficult to evaluate such a bold self-assessment of success. No clinic has published success rates even approximating this. By contrast, the peer-reviewed research literature repeatedly indicates that clients misrepresent themselves to their care-providers, engaging in “image management” so as to appear as having better mental health than they actually do.⁷ In the absence of objective evidence, it is not possible to differentiate Adkins’ claims of success from the simpler explanation that she and her patients are telling each other what they want and expect to hear.

19. Adkins referred to the clinical practice guidelines (CPG’s) of three professional societies: the American Association of Pediatrics (AAP), the World Professional Association for Transgender Health (WPATH), and the Endocrine Society. This provides only an incomplete and inaccurate portrayal of the field. I am aware of six rather than three professional societies providing clinical guidelines for the care of gender dysphoric children. They are detailed more fully in their own section of this report. Nonetheless, with the broad exception of the AAP, their statements repeatedly noted:

- Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Puberty-blocking medication is an experimental, not a routine, treatment.

⁶ Adkins Report at 5.

⁷ Anzani, *et al.*, 2020; Lehmann, *et al.*, 2021.

- Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

20. Although Adkins referred to them as “widely accepted,” the WPATH and the Endocrine Society guidelines have both been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation (“AGREE II”) method, as part of an appraisal of all published CPGs regarding sex and gender minority healthcare.⁸ 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.”⁹ Neither the Endocrine Society’s or WPATH’s guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of “Do not recommend.”¹⁰

21. Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. See Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, “Has the AAP responded to Dr Cantor? If not, have you any response now?” The AAP Media Relations Manager, Lisa Black, responded: “We do not have anyone available for comment.”

⁸ Dahlen, *et al.*, 2021.

⁹ Dahlen, *et al.*, 2021, at 6.

¹⁰ Dahlen, *et al.*, 2021, at 7.

22. Finally, the clinical guidelines from all these associations have become largely outdated. As detailed in the *Studies of Transition Outcomes* section of this report, there was some reason, circa 2010, to expect positive outcomes among children who transition, owing to optimistic findings reported from the Netherlands.¹¹ Early positive findings, however, have been retracted after statistical errors were identified,¹² or shown to be more attributable to mental health counseling rather than to medical transition.¹³ The professional societies' statements were produced during that earlier phase.

23. In contrast with these U.S.-based associations, public healthcare systems throughout the world have instead been withdrawing their earlier support for childhood transition, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition. These have included Sweden^{14, 15}, Finland^{16, 17}, and the United Kingdom¹⁸, and the Royal Australian and New Zealand College of Psychiatrists.¹⁹

24. Adkins repeatedly claimed success on the basis of what her patients tell her. In the absence of any systematic method, however, it is not possible to evaluate to what extent such a conclusion reflects human recall bias, cases of negative outcomes dropping out of treatment thus becoming invisible to Adkins, the aforementioned impression management efforts of clients, psychotherapy that they were receiving at the same time, or simple maturation during which the patients

¹¹ de Vries, et al., 2011.

¹² Kalin, 2020.

¹³ c.f., Carmichael, et al., 2021; Biggs, 2019; Biggs, 2020.

¹⁴ Swedish Agency of Health Technology Assessment and Assessment of Social Services, 2019.

¹⁵ Nainggolan, 2021.

¹⁶ Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 11.

¹⁷ Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 16.

¹⁸ United Kingdom National Health Service (NHS), 2021, March 11.

¹⁹ McCall, 2021.

would have experienced improved mental health regardless of transition. Indeed, the very purpose of engaging in systematic, peer-reviewed research instead of relating anecdotal recollections is to rule out exactly these biases.

25. Adkins referred to disorders of sexual development (DSDs) and intersex variations to claim that the very notion of there being two sexes is inherently flawed (*i.e.*, challenging “singular biological sex”). Although they both potentially involve medical alteration of genitalia, these are not comparable issues. DSDs and intersex conditions develop before birth, and objective medical testing is capable of confirming diagnoses. Her claims not only misrepresent the research literature on DSDs, but also failed to engage the relevant scientific concept, “construct validity.” Adkins claimed DSD prevalences of 1 in 1000 live births and 1 in 300 people in the world (Adkins Report at 11), leaving unclear how there could be a larger proportion of such people living in the world than are born in the first place. The scientific literature, however, shows that DSDs are much rarer than this²⁰ and that the very large majority of DSDs are the hypospadias—mislocations of the urethra on the penis.²¹ Because of the biological processes involved in causing them, hypospadias are classified as disorders of sexual development. That some boys are born with mislocated urethra is falsely taken by Adkins to demonstrate that ‘there are more than just boys and girls’.

26. Overall, Adkins’ argument was that, because there exist exceptions among features which distinguish male from female, the distinction itself is entirely moot. Although she did not use the term, Adkins is claiming that the existence of these exceptions demonstrates that sex lacks “construct validity.” Her argument does not, however, follow from how construct validity is determined in science—very many scientific classification systems include exceptions. Scientific constructs are not

²⁰ Sax, 2002.

²¹ Bancroft, 2009.

determined by any one of the components it reflects, in this case being each of the sex chromosomes, sex hormones, sexually dimorphic genitalia, etc. Rather, such constructs are represented by the generalizable interrelationships among its multiple components. Notwithstanding exceptions in an individual component in an individual case, the interrelationships among the network of components remains intact. The existence of people born with a clubfoot or undeveloped leg does not challenge the classification of humans as a bipedal species.

27. Similarly to Dr. Adkins, Dr. Safer claimed that “gender identity is durable and cannot be changed by medical intervention,” providing no evidence or reference to the research literature. It is not at all apparent upon what basis such a statement about durability can be made, however. It has been the unanimous conclusion of every follow-up study of gender dysphoric children ever conducted, not only that gender identity does change, but also that it changes in the large majority of cases, as documented below. This is, of course, very different from what is reported by transgender adults—they are the very people for whom gender dysphoria did endure. Regarding responses to clinical intervention, I am not aware of, and Safer did not cite any research reports of medical interventions attempting to change gender identity, regardless of outcome. It is not clear whether Safer intended this comment to apply also to psychological/non-medical interventions.

V. Evidence Missing from Plaintiffs’ Expert Reports

28. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria

(cases of *late-onset* gender dysphoria),²² merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to 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 in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or “rapid-onset” gender dysphoria (ROGD).

29. In the context of school athletics, the adult-onset phenomenon would not seem relevant; however, very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to the other. For example, there exist only very few cases of transition regret among adult transitioners, whereas the research has unanimously shown that the majority of children with gender dysphoria desist—that is, cease to experience such dysphoria by or during puberty. A brief summary of the adult-onset phenomenon is included, to facilitate distinguishing features which are unique to childhood gender dysphoria.

A. Adult-Onset Gender Dysphoria

30. People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively male.²³ They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.²⁴ Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.²⁵

²² Blanchard, 1985.

²³ Blanchard, 1990, 1991.

²⁴ Blanchard, 1988.

²⁵ Blanchard 1989a, 1989b, 1991.

1. Outcome Studies of Transition in Adult-Onset Gender Dysphoria

31. Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,²⁶ Sweden,²⁷ and the Netherlands.²⁸

32. Importantly, each of the Canadian, Swedish, and Dutch clinics for adults with gender dysphoria all performed “gate-keeping” procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

2. Mental Health Issues in Adult-Onset Gender Dysphoria

33. The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.²⁹ A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.³⁰ There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless concluded (1) that rates of mental health issues among people are highly elevated both before and after transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients

²⁶ Blanchard, *et al.*, 1989.

²⁷ Dhejneberg, *et al.*, 2014.

²⁸ Wiepjes, *et al.*, 2018.

²⁹ See, *e.g.*, Hepp, *et al.*, 2005.

³⁰ Dhejne, *et al.*, 2016.

becoming “lost to follow-up.” With attrition rates that high, it is unclear to what extent the information from the available participants genuinely reflects the whole sample. The very high “lost to follow-up” rate leaves open the possibility of considerably more negative results overall.

34. An important caution applies to interpreting these results: These very high proportions of mental health issues come from people who are attending a clinic for the first time and are undergoing assessment. Clinics serving a “gate-keeper” role divert candidates with mental health issues away from medical intervention. The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

35. The long-standing and consistent finding that gender dysphoric adults have high rates of mental health issues both before and after transition and the finding that those mental health issues cause the gender dysphoria (the epiphenomenon) rather than the other way around indicate a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition. Mental health issues should be resolved before any transition.

B. Childhood Onset (Pre-Puberty) Gender Dysphoria

1. Prospective Studies of Childhood-Onset Gender Dysphoria Show that Most Children Desist in the “Natural Course” by Puberty

36. 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.³¹

37. Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. Projects following-up and reporting on such cases began being published in the 1970s, with subsequent generations of research employing increasingly sophisticated methods studying the outcomes of increasingly large samples. In total, there have now been a total of 11 such outcomes studies. *See the appendix to Appendix 2 (listing these studies).*

38. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning 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 dysphoria are often called “persisters.”

39. Notably, in most cases, these children were receiving professional psychosocial support across the study period aimed not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: That is, it is not possible to know to what extent the observed outcomes (predominant desistance, with a small but consistent occurrence of persistence) were

³¹ Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.*, 2018; Wood, *et al.*, 2013.

influenced by the psychosocial support, or would have emerged regardless. It can be concluded only that prepubescent children who suffer gender dysphoria and receive psychosocial support focused on issues other than “affirmation” of cross-gender identification do in fact desist in suffering from gender dysphoria, at high rates, over the course of puberty.

40. While the absolute number of those who present as prepubescent children with gender dysphoria and “persist” through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, the clinician cannot take either outcome for granted.

41. It is because of this long-established and invariably consistent research finding that desistance is probable, but not inevitable, that the “watchful waiting” method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

42. 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. Such is an empirical question, and there has not yet been any such study.

43. It is also important to note that research has not yet identified any reliable procedure for discerning which children who present with gender dysphoria will persist, as against the 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 behavioral “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 a particular child.³²

44. In contrast, a single research team, led by Dr. Kristina Olson, claimed the opposite, asserting to have 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.”³³ That team reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they described their result, “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.”³⁴ Although the authors declared that “social transitions may be predictable from gender identification and preferences,”³⁵ 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 .75.³⁶ 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. Thus, Olson’s model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

³² Singh, *et al.* (2021); Steensma *et al.*, 2013.

³³ Rae, *et al.*, 2019, at 671.

³⁴ Rae, *et al.*, 2019, at 673.

³⁵ Rae, *et al.*, 2019, at 669.

³⁶ Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.

45. Although it remains possible for some future finding to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *detransition*. 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.

2. “Watchful Waiting” and “The Dutch Approach”

46. It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, often called “The Dutch Approach” (referring to The Netherlands clinic where it was developed) including “Watchful Waiting” periods. Internationally, the Dutch Approach is currently the most widely respected and utilized method for treatment of children who present with gender dysphoria.

47. The purpose of these methods was to compromise the conflicting needs among: clients’ desires upon assessment, the long-established and repeated observation that those preferences will change in the majority of (but not all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

48. The Dutch Approach (also called the “Dutch Protocol”) was developed over many years by the Netherlands’ child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach* (de Vries & Cohen-Kettenis, 2012).

The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

49. For youth under age 12, “the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty.”³⁷

50. The age cut-offs of the Dutch Approach authors were not based on any research demonstrating their superiority over other potential age cut-off's. Rather, they were chosen to correspond to ages of consent to medical procedures under Dutch law. But whatever their original rationale, the data from this clinic simply contains no information about safety or efficacy of these measures at younger ages.

51. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child's parents.

52. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. “Watchful Waiting” refers to a child's developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Such children and families typically present with substantial distress involving both gender and non-gender issues. It is during the watchful waiting period that a child (and other family members as appropriate) would undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, “[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly

³⁷ de Vries & Cohen-Kettenis, 2012, at 301.

seen by one of the clinic’s psychologists or psychiatrists.”³⁸ One is actively treating the person, while carefully “watching” the dysphoria.

53. The inclusion of psychotherapy and support during the watchful waiting period is, clinically, a great benefit to the gender dysphoric children and their parents. The inclusion of psychotherapy and support poses a scientific complication, however: It becomes difficult to know to what extent the outcomes of these cases might be related to receiving psychotherapy received versus being “spontaneous” desistance, which would have occurred on its own anyway. This situation is referred to in science as a “confound.”

3. Studies of Transition Outcomes: Overview

54. Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many authors have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. Seemingly contradictory findings are common in science with on-going research projects. When considered together, however, the full set of relevant reports show that a coherent pattern and conclusion has emerged over time, as detailed in the following sections. Initial optimism was suggested by reports of improvements in mental health.³⁹ Upon continued analysis, these seeming successes turned out to be illusory, however: The Bränström and Pachankis (2019) finding has been retracted.⁴⁰ The greater mental health among transitioners reported by Costa, *et al.* (2015) was noted to be because the control group consisted of cases excluded from hormone eligibility exactly because they showed poor mental health to begin with.⁴¹ The improvements reported by the

³⁸ de Vries, *et al.*, 2011, at 2280-81.

³⁹ Bränström & Pachankis 2019; Costa, *et al.*, 2015; de Vries, *et al.*, 2011; de Vries, *et al.*, 2014.

⁴⁰ Kalin, 2020.

⁴¹ Biggs, 2019.

de Vries studies from the Dutch Clinic themselves appear genuine; however, because that clinic also provides psychotherapy to all cases receiving puberty-blockers, it remains entirely plausible that the psychotherapy and not the puberty blockers caused the improvements.⁴² New studies continued to appear at an accelerating rate, repeatedly reporting deteriorations or lack of improvement in mental health⁴³ or lack of improvement beyond psychotherapy alone,⁴⁴ and other studies continue to report on only the combined effect of both psychotherapy and hormone treatment together.⁴⁵

a. Outcomes of The Dutch Approach (studies from before 2017): Mix of positive, negative, and neutral outcomes

55. The research confirms that some, but not all, adolescents improve on some, but not all, indicators of mental health and that those indicators are inconsistent across studies. Thus, the balance of potential benefits to potential risks differs across cases, and thus suggests different courses of treatment across cases.

56. The Dutch clinical research team followed up 70 youth undergoing puberty suppression at their clinic.⁴⁶ The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.⁴⁷

57. As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the

⁴² Biggs, 2020.

⁴³ Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020.

⁴⁴ Achille, *et al.*, 2020.

⁴⁵ Kuper, *et al.*, 2020; van der Miesen, *et al.*, 2020, at 703.

⁴⁶ de Vries, *et al.* 2011.

⁴⁷ Biggs, 2020.

improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other, representing a confound. The authors of the study were explicit in noting this themselves: “All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents.”⁴⁸

58. The authors were careful not to overstate the implications of their results, “We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria.”⁴⁹

59. Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.⁵⁰ As those authors concluded, “Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence.”⁵¹ Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function), one cannot justify taking on the greater risks of social transition, puberty blockers or surgery

⁴⁸ de Vries, *et al.* 2011, at 2281.

⁴⁹ de Vries, *et al.* 2011, at 2282, italics added.

⁵⁰ Costa, *et al.*, at 2212 Table 2.

⁵¹ Costa, *et al.*, at 2206.

without evidence of such treatment producing superior results. Such evidence does not exist.

b. Clinicians and advocates have invoked the Dutch Approach while departing from its protocols in important ways.

60. The reports of partial success contained in de Vries, *et al.* 2011 called for additional research, both to confirm those results and to search for ways to maximize beneficial results and minimize negative outcomes. Instead, many other clinics and clinicians proceeded on the basis of the positives only, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, one and a half years⁵²) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

61. Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."⁵³ Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

⁵² de Vries, *et al.*, 2011.

⁵³ Tetelepta, 2021.

c. Studies by other clinicians in other countries have failed to reliably replicate the positive components of the results reported by the Dutch clinicians in de Vries et al. 2011.

62. The indications of potential benefit from puberty suppression in at least some cases has led some clinicians to attempt to replicate the positive aspects of those findings. These efforts have not succeeded.

63. The Tavistock and Portman clinic in the U.K. recently released its findings, attempting to replicate the outcomes reported by the Dutch clinic.⁵⁴ Study participants were ages 12–15 (Tanner stages 3 for natal males, Tanner 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (e.g., psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

64. A multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.⁵⁵ (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to “Endocrine Society Clinical Practice Guidelines.”⁵⁶ Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.⁵⁷ (Although the authors reported detecting some improvements, these were only found when the large group undergoing cross-sex hormone treatment were added in.) Although the Dutch

⁵⁴ Carmichael, *et al.*, 2021.

⁵⁵ Kuper, *et al.*, 2020, at 5.

⁵⁶ Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.

⁵⁷ Kuper, *et al.*, 2020, at Table 2.

Approach includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).⁵⁸

65. Achille, *et al.* (2020) at Stony Brook Children’s Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, “Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional.”⁵⁹ The puberty blockers themselves “were introduced in accordance with the Endocrine Society and the WPATH guidelines.”⁶⁰ Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, “*most predictors did not reach statistical significance.*”⁶¹ That is, puberty blockers did not improve mental health any more than did mental health care on its own.

66. In a recent update, the Dutch clinic reported continuing to find improvement in transgender adolescents’ psychological functioning, reaching age-typical levels, “after the start of specialized transgender care involving puberty suppression.”⁶² Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors themselves noted, “The present study can, therefore, not provide

⁵⁸ Kuper, *et al.*, 2020, at 4.

⁵⁹ Achille, *et al.*, 2020, at 2.

⁶⁰ Achille, *et al.*, 2020, at 2.

⁶¹ Achille, *et al.*, 2020, at 3 (italics added).

⁶² van der Miesen, *et al.*, 2020, at 699.

evidence about the direct benefits of puberty suppression over time and long-term mental health outcomes.”⁶³

67. It has not yet been determined why the successful outcomes reported by the Dutch child gender clinic a decade ago failed to emerge when applied by others more recently. It is possible that:

- (1) The Dutch Approach itself does *not* work and that their originally successful results were a fluke;
- (2) The Dutch Approach *does* work, but only in the Netherlands, with local cultural, genetic, or other unrecognized factors that do not generalize to other countries;
- (3) The Dutch Approach itself *does* work, but other clinics and individual clinicians are removing safeguards and adding short-cuts to the approach, and those changes are hampering success.
- (4) The Dutch Approach *does* work, but the cause of the improvement is the psychosocial support, rather than any medical intervention, which other clinics are *not* providing.

68. The failure of other clinics to repeat the already very qualified success of the Dutch clinic demonstrates the need for still greater caution before endorsing transition and the greater need to resolve potential mental health obstacles before doing so.

4. Mental Health Issues in Childhood-Onset Gender Dysphoria

69. As shown by the outcomes studies, there is no statistically significant evidence that transition reduces the presence of mental illness among transitioners. 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

⁶³ van der Miesen, *et al.*, 2020, at 703.

isolation might develop hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

70. If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but yet still retains the opportunity to do so later.

71. 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 52% fulfilled criteria for a DSM axis-I disorder.⁶⁴ A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but 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 the average score was in the clinical rather than healthy range, among children in both clinics.⁶⁵ When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

72. A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD I youth with gender dysphoria. Studies reviewing medical records of children and adolescents referred to gender clinics showed 5–26% to have been diagnosed with ASD.⁶⁶

⁶⁴ Wallien, *et al.*, 2007.

⁶⁵ Cohen-Kettenis, *et al.*, 2003, at 46.

⁶⁶ Thrower, *et al.*, 2020.

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.”⁶⁷ When two or more issues are present at the same time (in this case, gender dysphoria present at the same time as ADHD or ASD), researchers cannot distinguish when a result is associated with or caused by the issue of interest (gender dysphoria itself) or one of the side issues, called *confounds* (ADHD or ASD, in the present case).⁶⁸ The rate of ADHD among children with GD was 8.3–11%. Conversely, in 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.”⁶⁹

C. Adolescent-Onset Gender Dysphoria

1. Features of Adolescent-Onset Gender Dysphoria

73. A third profile has begun to present to clinicians or socially, characteristically distinct from the previously identified ones.⁷⁰ Unlike adult-onset gender dysphoria (and also unlike childhood-onset, *see supra* Part IV.B.2), this group is predominately biologically female. This group first presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is this feature which led to the term Rapid Onset Gender Dysphoria (ROGD).⁷¹ The majority of cases appear to occur within clusters of peers and in association with increased social media use⁷² and especially among people with autism or other neurodevelopmental or mental health issues.⁷³

⁶⁷ Thrower, *et al.*, 2020, at 703.

⁶⁸ Cohen-Kettenis *et al.*, 2003, at 51; Skelly *et al.*, 2012.

⁶⁹ Janssen, *et al.*, 2016.

⁷⁰ Kaltiala-Heino, *et al.*, 2015; Littman, 2018.

⁷¹ Littman, 2018.

⁷² Littman, 2018.

⁷³ Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.

74. It cannot be easily determined whether the self-reported gender dysphoria is a result of other underlying issues or if those mental health issues are the result of the stresses of being a stigmatized minority, as some writers are quick to assume.⁷⁴ See *infra* Part VI.E (discussing the minority stress hypothesis). Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.⁷⁵ Although long-term outcomes have not yet been reported, these distinctions argue against generalizing findings from the other types of gender dysphoria to this one. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to rapid-onset (aka adolescent-onset) gender dysphoria. That is, the group differences already observed argue against the conclusion that any given feature would be present, in general, throughout all types of gender dysphoria.

2. Prospective Studies of Social Transition and Puberty Blockers in Adolescence

75. There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics systematically tracking and reporting on their case results) fail to distinguish between people who had childhood-

⁷⁴ Boivin, *et al.*, 2020.

⁷⁵ Biggs, 2020; Littman, 2018.

onset gender dysphoria and have aged into adolescence and people whose onset was not until adolescence. Similarly, there are clinics 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 can produce only confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

3. Mental Illness in Adolescent-Onset Gender Dysphoria

76. In 2019, a Special Section of the *Archives of Sexual Behavior* was published: “Clinical Approaches to Adolescents with Gender Dysphoria.” It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University:⁷⁶ The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,⁷⁷ with suicide attempts ranging 10 to 45%.⁷⁸ Self-injurious thoughts and behaviors range 14–39%.⁷⁹ Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.⁸⁰ Gender dysphoria also overlaps with Autism Spectrum Disorder.⁸¹

77. Of particular concern in the context of adolescent onset gender dysphoria is *Borderline Personality Disorder* (BPD). The DSM criteria for BPD are:

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.)

⁷⁶ Janssen, *et al.*, 2019.

⁷⁷ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.

⁷⁸ Reisner, *et al.*, 2015.

⁷⁹ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.

⁸⁰ de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.

⁸¹ de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.

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.)

78. It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria are actually cases of BPD.⁸² That is, some people may be misinterpreting their experiences to represent a gender identity issue, when it instead represents the “identity disturbance” noted in symptom Criterion 3. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence, is substantially more common among biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people (*i.e.*, 0.02%). Thus, if even only a portion of people with BPD had an ‘identity disturbance’ that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.

79. A primary cause for concern is symptom Criterion 5: recurrent suicidality. Regarding the provision of mental health care, this is a crucial distinction: A person with BPD going undiagnosed will not receive the appropriate treatments (the

⁸² E.g., Zucker, 2019.

currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality. One would predict also that misdiagnoses would occur more often if one reflexively dismissed or discounted symptoms of BPD as responses to “minority stress.” *See infra* Part VI.D (discussing minority stress).

80. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. *See infra* Part VI.C. 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.

VI. Alleged Scientific Claims Assessed

A. Conversion Therapy

81. Activists and social media increasingly, but erroneously, apply the term “conversion therapy” moving farther and farther from what the research has reported. “Conversion therapy” (or “reparative therapy” and other names) was the attempt to change a person’s sexual orientation; however, with the public more frequently accustomed to “LGB” being expanded to “LGBTQ+”, the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only rarely mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as shown unanimously by every follow-up study ever published. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is

mislabeled “conversion therapy.”⁸³ Indeed, even actions of non-therapists, unrelated to any therapy have been labelled conversion therapy, including the very prohibition of biological males competing on female teams.⁸⁴

B. Claims that All Childhood Outcome Studies Are Wrong

82. As already indicated, the follow-up studies of gender dysphoric children are unanimous in their conclusion that gender dysphoria desists in the large majority of cases. Nonetheless, some authors assert that the entire set of prospective outcomes studies on prepubescent children is wrong; that desistance is not, in fact, the usual outcome for gender dysphoric children; and that results from various retrospective studies are the more accurate picture.⁸⁵ As indicated in the responses published from authors of several prospective outcomes studies (and as summarized below), the detractors’ arguments are invalid.⁸⁶

83. There have been accusations that some of the prospective outcome studies are old. This criticism would be valid only if newer studies showed different results from the older studies; however, the findings of desistance are the same, indicating that age of the studies is not, in fact, a factor.

84. There have been accusations that some studies failed to use a DSM diagnosis, and should therefore be rejected. That would be a valid criticism only if studies using the DSM showed different results from studies not using the DSM. Because both kinds of studies showed the same results, one may conclude that DSM status was not a factor, even if using a DSM diagnosis would have been a preferred method.

⁸³ D’Angelo, R., Syrulnik, E., Ayad, S., Marchiano, L., Kenny, D. T., & Clarke, P. (2021). One size does not fit all: In support of psychotherapy for gender dysphoria. *Archives of Sexual Behavior*, 50, 7–16.

⁸⁴ Turban, J. (2021, March 16). Trans girls belong on girls’ sports teams. *Scientific American*. www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/

⁸⁵ Temple Newhook, *et al.*, 2018; Winters, *et al.*, 2018.

⁸⁶ Steensma, *et al.*, 2018a; Zucker, *et al.* 2018.

85. There have been criticisms that some studies are too small to provide a reliable result. It is indeed true that if larger studies showed different results from the smaller studies, we would tend to favor the results of the larger studies. Because the smaller studies came to the same conclusion as the larger studies, however, the criticism is, once again, entirely moot.

86. There have been accusations that studies did not use the current DSM-5 as their method of diagnosing gender dysphoric children. This criticism would be valid only if there existed any studies using the DSM-5 against which to compare the existing studies. The DSM-5 is still too recent for there yet to have been long-term follow-up studies. It can be seen, however, that the outcome studies are the same across the DSM-III, DSM-III-R, DSM-IV, and DSM-IV-TR.

87. In science, there cannot be any such thing as a perfect study. Especially in medical research, where we cannot manipulate people in ways that would clear up difficult questions, all studies will have a fault. In science, we do not, however, reject every study with any identifiable short-coming—rather, we gather a diversity of observations, made with their diversity of compromises to safety and ethics (and time and cost, etc.), and tentatively accept the most parsimonious (simplest) explanation of the full set, weighting each study according to their individual strengths and weaknesses.

C. Assessing Claims of Suicidality

88. In the absence of scientific evidence associating improvement with transition among youth, demands for transition are increasingly accompanied by hyperbolic warnings of suicide should there be delay or obstacle to affirmation-on-demand. Social media circulate claims of extreme suicidality accompanied by declarations that “I’d rather have a trans daughter than a dead son.” Such claims convey only grossly misleading misrepresentations of the research literature, however.

89. Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with differing clinical needs. *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.⁸⁷ *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified in “If you leave me, I will kill myself.” Professing suicidality is also used for attention-seeking or for the support or sympathy it evokes from others, indicating distress much more frequently than an intent to die.

90. The scientific study of suicide is inextricably linked to that of mental illness. For example, as noted in the preceding, suicidality is a well-documented symptom of Borderline Personality Disorder (as are chronic identity issues), and personality disorders are highly elevated among transgender populations, especially adolescent-onset. Thus, the elevations of suicidality among gender dysphoric adolescents may not be a result of anything related to transition (or lack of transition), but to the overlap with mental illness of which suicidality is a substantial part. Conversely, improvements in suicidality reported in some studies may not be the result of anything related to transition, but rather to the concurrent general mental health support which is reported by the clinical reported prospective outcomes. Studies that include more than one factor at the same time without accounting for each other represent a “confound,” and it cannot be known which factor (or both) is the one causing the effects observed. That is, when a study provides both mental health

⁸⁷ Freeman, *et al.*, 2017.

services and medical transition services at the same time, it cannot be known which (or both) is what caused any changes.

91. A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve upon transition and integration into an affirming environment. Dr. Adkins makes it explicit in her report that the purpose of “the medical treatment for gender dysphoria is to eliminate the clinically significant distress.” (Adkins, p. 5.)

92. Despite that relevant professional association statements repeatedly call for mental health issues, including suicidality, to be resolved before transition (see *infra* Section VI), 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 indicates that hypothesis to be incorrect: Suicide rates remain elevated even after complete transition, as shown by a comprehensive review of 19 studies of suicidality in gender dysphoria.⁸⁸

93. Of particular relevance in the present context is suicidality as a well-documented symptom of Borderline Personality Disorder (BPD) and that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD. [See full DSM-5 criteria already listed herein.] 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 and occurs in 2–3% of the

⁸⁸ McNeil, et al., 2017.

population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

94. Rates of completed suicide are elevated among post-transition transsexuals, but are nonetheless rare,⁸⁹ and BPD is repeatedly documented to be greatly elevated among sexual minorities⁹⁰. Overall, rates of suicidal ideation and suicidal attempts appear to be related—not to transition status—but to the social support received: The research evidence shows that support decreases suicidality, but that transition itself does not. Indeed, in some situations, social support was associated with increased suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.⁹¹

D. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.

95. Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

96. Referring to “affirmation” as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the

⁸⁹ Wiepjes, *et al.*, 2020.

⁹⁰ Reuter, *et al.*, 2016; Rodriguez-Seiljas, *et al.*, 2021; Zanarni, *et al.*, 2021.

⁹¹ Bauer, *et al.*, 2015; Canetto, *et al.*, 2021.

term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word “affirmation” refers to entirely different actions.

97. It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

98. Formal clinical approaches to helping children expressing gender dysphoria employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as “the affirmation approach.” The most extreme decision-tree would be accurately called *affirmation-on-demand*, involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

99. Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding affirmation-on-demand with children. Although there have been claims that affirmation-on-demand causes mental health or other improvement, these have been the result only of “retrospective” rather than “prospective” studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and

regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

100. Olson and colleagues employed exactly such a retrospective study. They offered their survey to children in the TransYouth Project—people who have socially transitioned, their families, and any contacts they had, by word of mouth. This method is referred to as “convenience sampling,” and differs from genuinely representative samples in applying to means of ensuring study participants accurately represent the population being studied. There were three groups of children for comparison: (i) children who had already socially transitioned, (ii) their siblings, and (iii) children in a university database of families interested in participating in child development research. As noted by the study authors, “For the first time, this article reports on socially transitioned gender children’s mental health as reported by the children.”⁹² Reports from parents were also recorded.⁹³ In contrast, no reports or ratings were provided by any mental health care professional or researcher at all. That is, although adding self-assessments to the professional assessments might indeed provide novel insights, this project did not add self-assessment to professional assessment. Rather, it replaced professional assessment with self-assessment. Moreover, as already noted, Olson’s data did not show what the Olson team claimed.⁹⁴ The dataset was subsequently re-analyzed, and “[T]o the contrary, the transgender children, even when supported by their parents, had significantly lower average scores on anxiety and self-worth.”⁹⁵

⁹² Durwood, *et al.*, 2017, at 121 (italics added).

⁹³ See Olson, *et al.*, 2016.

⁹⁴ Schumm, *et al.*, 2019.

⁹⁵ Schumm & Crawford, 2020, p. 9

101. It is well established in the field of psychology that participant self-assessment can be severely unreliable for multiple reasons. For example, one well-known phenomenon in psychological research is known as “socially desirable responding”—the tendency of subjects to give answers that they believe will make themselves look good, rather than accurate answers. Specifically, subjects’ reports that they are enjoying good mental health and functioning well could reflect the subjects’ desire to be *perceived* as healthy and as having made good choices, rather than reflecting their actual mental health.

102. In their analyses, the study reported finding no significant differences between the transgender children, their non-transgender siblings, or the community controls. As the authors noted, “[t]hese findings are in striking contrast to previous work with gender-nonconforming children who had not socially transitioned, which found very high rates of depression and anxiety.”⁹⁶ The authors are correct to note that their result contrasts with the previous research, but they do not discuss that this could reflect a problem with the novel research design they used: The subjective self-reports of the children and their parents’ reports may not be reflecting reality objectively, as careful professional researchers would. Because the study did not employ any method to detect and control for participants indulging in “socially desirable responding” or acting under other biasing motivations, this possibility cannot be assessed or ruled out.

103. Because this was a single-time study relying on self-reporting, rather than a before-and-after transition study relying on professional evaluation, it is not possible to know if the children reported as well-functioning are in fact well-functioning, nor if so whether they are well-functioning because they were permitted to transition, or whether instead the fact is that they were already well-functioning

⁹⁶ Durwood, *et al.*, 2017, at 116.

and therefore permitted to transition. Finally, because the TransYouth project lacks a prospective design, it cannot be known how many cases attempted transition, reacted poorly, and then detransitioned, thus never having entered into the study in the first place.

E. Assessing the “Minority Stress Hypothesis”

104. The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.⁹⁷ The association is not entirely straight-forward, however. For example, although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

105. Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

106. Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with

⁹⁷ Meyer, 2003.

those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.⁹⁸ The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

VII. Assessing Statements from Professional Associations

A. Understanding the Value of Statements from Professional Associations

107. The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

⁹⁸ Meyer, 2003.

108. Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

B. Misrepresentations of statements of professional associations.

109. In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

110. Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

1. World Professional Association for Transgender Health (WPATH)

111. The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

[I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).⁹⁹

112. That is, “In most children, gender dysphoria will disappear before, or early in, puberty.”¹⁰⁰

113. Although WPATH does not refer to puberty blocking medications as “experimental,” the document indicates the non-routine, or at least inconsistent availability of the treatment:

Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre, van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).¹⁰¹

114. WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families’ decisions:

Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.¹⁰²

115. It does caution, however, “Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria.”¹⁰³

⁹⁹ Coleman, *et al.*, 2012, at 172.

¹⁰⁰ Coleman, *et al.*, 2012, at 173.

¹⁰¹ Coleman, *et al.*, 2012, at 173.

¹⁰² Coleman, *et al.*, 2012, at 176.

¹⁰³ Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

2. Endocrine Society (ES)

116. The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

117. The document acknowledged the frequency of desistance among gender dysphoric children:

Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called “desisters”). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.¹⁰⁴

118. The statement similarly acknowledges inability to predict desistance or persistence, “With current knowledge, we cannot predict the psychosexual outcome for any specific child.”¹⁰⁵

119. Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, “In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues.”¹⁰⁶ This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

¹⁰⁴ Hembree, *et al.*, 2017, at 3876.

¹⁰⁵ Hembree, *et al.*, 2017, at 3876.

¹⁰⁶ Hembree, *et al.*, 2017, at 3877.

120. The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: “We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional.”¹⁰⁷

121. The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician “provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable psychological and social outcomes.”¹⁰⁸

3. Pediatric Endocrine Society and Endocrine Society (ES/PES)

122. In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.¹⁰⁹ Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.¹¹⁰

123. It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society “recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance.”¹¹¹ However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: “If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an

¹⁰⁷ Hembree, *et al.*, 2017, at 3872.

¹⁰⁸ Hembree, *et al.*, 2017, at 3877.

¹⁰⁹ PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.

¹¹⁰ Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.

¹¹¹ Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.

antiandrogen that directly suppresses androgen synthesis or action.”¹¹² Despite the PES asserting it as “medically necessary,” the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: “We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient’s overall health and/or well-being.”¹¹³

4. American Academy of Child & Adolescent Psychiatry (AACAP)

124. The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression, suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.¹¹⁴

125. The AACAP’s language repeats the description of the use of puberty blockers only as an exception: “For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible*, one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues.”¹¹⁵

126. The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: “In follow-up studies of 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,”¹¹⁶ adding that “[c]linicians should be aware of current evidence on the natural course of gender

¹¹² Hembree, *et al.* 2017, at 3883.

¹¹³ Hembree, *et al.*, 2017 at 3872, 3894.

¹¹⁴ Adelson & AACAP, 2012, at 969.

¹¹⁵ Adelson & AACAP, 2012, at 969 (italics added).

¹¹⁶ Adelson & AACAP, 2012, at 963.

discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality.”¹¹⁷

127. The policy similarly includes a provision for resolving mental health issues: “Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems.*”¹¹⁸ The document also includes minority stress issues and the need to deal with mental health aspects of minority status (e.g., bullying).¹¹⁹

128. Rather than endorse social transition for prepubertal children, the AACAP indicates: “There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so.”¹²⁰

5. American College of Obstetricians & Gynecologists (ACOG)

129. The American College of Obstetricians & Gynecologists (ACOG) published a “Committee Opinion” expressing recommendations in 2017. The statement indicates it was developed by the ACOG’s Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: “This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.”¹²¹

¹¹⁷ Adelson & AACAP, 2012, at 968.

¹¹⁸ Adelson & AACAP, 2012, at 970 (italics added).

¹¹⁹ Adelson & AACAP, 2012, at 969.

¹²⁰ Adelson & AACAP, 2012, at 969.

¹²¹ ACOG, 2017, at 1.

130. Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.¹²²

131. The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE),, PES, and the Endocrine Society—and by WPATH.¹²³ It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: “*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental health professional, has no contraindications to therapy, and displays an understanding of the risks involved.”¹²⁴

132. The “Eligibility and Readiness Criteria” also include, “Diagnosis established for gender dysphoria, transgender, transsexualism.”¹²⁵ This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

133. ACOG’s remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

6. American College of Physicians (ACP)

134. The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including

¹²² ACOG, 2017, at 1.

¹²³ ACOG, 2017, at 1, 3.

¹²⁴ ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (italics added).

¹²⁵ ACOG, 2017, at 3 Table 1.

nondiscrimination, antiharassment, and defining “family” by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.¹²⁶

135. ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting “reparative therapy;” however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that “[s]exual orientation and gender identity are inherently different.”¹²⁷ It based this statement on the fact that “the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*.”¹²⁸ The APA’s document, entitled “Report of the American Psychological Task Force on appropriate therapeutic responses to *sexual orientation*” does not include or reference research on gender identity.¹²⁹ Despite citing no research about transgenderism, the ACP nonetheless included in its statement: “Available research does not support the use of reparative therapy as an effective method in the treatment of LGBT persons.”¹³⁰ That is, the inclusion of “T” with “LGB” is based on something other than the existing evidence.

136. There is another statement,¹³¹ which was funded by ACP and published in the Annals of Internal Medicine under its “*In the Clinic*” feature, noting that “In the Clinic’ does not necessarily represent official ACP clinical policy.”¹³² The document discusses medical transition procedures for adults rather than for children, except to note that “[n]o medical intervention is indicated for prepubescent youth,”¹³³ that a “mental health provider can assist the child and family with identifying an

¹²⁶ Daniel & Butkus, 2015a, 2015b.

¹²⁷ Daniel & Butkus, 2015b, at 2.

¹²⁸ Daniel & Butkus, 2015b, at 8 (italics added).

¹²⁹ APA, 2009 (italics added).

¹³⁰ Daniel & Butkus, 2015b, at 8 (italics added).

¹³¹ Safer & Tangpricha, 2019.

¹³² Safer & Tangpricha, 2019, at ITC1.

¹³³ Safer & Tangpricha, 2019, at ITC9.

appropriate time for a social transition,”¹³⁴ and that the “child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers.”¹³⁵

7. American Academy of Pediatrics (AAP)

137. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy 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.¹³⁶ Moreover, of all the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.¹³⁷.

8. The ESPE-LWPES GnRH Analogs Consensus Conference Group

138. Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).¹³⁸ Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

139. The effort concluded that “[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation

¹³⁴ Safer & Tangpricha, 2019, at ITC9.

¹³⁵ Safer & Tangpricha, 2019, at ITC9.

¹³⁶ Cantor, 2020.

¹³⁷ Cantor, 2020, at 1.

¹³⁸ Carel et al., 2009.

and cannot be suggested routinely.”¹³⁹ However, gender dysphoria was not explicitly mentioned as one of those other conditions.

¹³⁹ Carel et al. 2009, at 752.

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EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 1

James M. Cantor, PhD

Toronto Sexuality Centre
2 Carlton Ave., suite 1820
Toronto, Ontario, Canada M5B 1J3

416-766-8733 (o)
416-352-6003 (f)
jamescantorphd@gmail.com

EDUCATION

Postdoctoral Fellowship Centre for Addiction and Mental Health • Toronto, Canada	Jan., 2000–May, 2004
Doctor of Philosophy Psychology • McGill University • Montréal, Canada	Sep., 1993–Jun., 2000
Master of Arts Psychology • Boston University • Boston, MA	Sep., 1990–Jan., 1992
Bachelor of Science Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY Concentrations: Computer science, mathematics, physics	Sep. 1984–Aug., 1988

EMPLOYMENT HISTORY

Director Toronto Sexuality Centre • Toronto, Canada	Feb., 2017–Present
Senior Scientist (Inaugural Member) Campbell Family Mental Health Research Institute Centre for Addiction and Mental Health • Toronto, Canada	Aug., 2012–May, 2018
Senior Scientist Complex Mental Illness Program Centre for Addiction and Mental Health • Toronto, Canada	Jan., 2012–May, 2018
Head of Research Sexual Behaviours Clinic Centre for Addiction and Mental Health • Toronto, Canada	Nov., 2010–Apr. 2014
Research Section Head Law & Mental Health Program Centre for Addiction and Mental Health • Toronto, Canada	Dec., 2009–Sep. 2012
Psychologist Law & Mental Health Program Centre for Addiction and Mental Health • Toronto, Canada	May, 2004–Dec., 2011

Clinical Psychology Intern Centre for Addiction and Mental Health • Toronto, Canada	Sep., 1998–Aug., 1999
Teaching Assistant Department of Psychology McGill University • Montréal, Canada	Sep., 1993–May, 1998
Pre-Doctoral Practicum Sex and Couples Therapy Unit Royal Victoria Hospital • Montréal, Canada	Sep., 1993–Jun., 1997
Pre-Doctoral Practicum Department of Psychiatry Queen Elizabeth Hospital • Montréal, Canada	May, 1994–Dec., 1994

ACADEMIC APPOINTMENTS

Associate Professor Department of Psychiatry University of Toronto Faculty of Medicine • Toronto, Canada	Jul., 2010–May, 2019
Adjunct Faculty Graduate Program in Psychology York University • Toronto, Canada	Aug. 2013–Jun., 2018
Associate Faculty (Hon) School of Behavioural, Cognitive & Social Science University of New England • Armidale, Australia	Oct., 2017–Dec., 2017
Assistant Professor Department of Psychiatry University of Toronto Faculty of Medicine • Toronto, Canada	Jun., 2005–Jun., 2010
Adjunct Faculty Clinical Psychology Residency Program St. Joseph's Healthcare • Hamilton, Canada	Sep., 2004–Jun., 2010

PUBLICATIONS

1. 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
2. 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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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
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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:	<i>Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria</i>
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:	<i>Are connectivity differences unique to pedophilia?</i>
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:	<i>Investigations into the neural underpinnings and biological correlates of asexuality</i>
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:	<i>Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria</i>
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:	<i>Neuroanatomic features specific to pedophilia</i>
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	\$1,071,920 / 5 years (October, 2008)
Principal Investigator:	James M. Cantor
Title:	<i>A preliminary study of fMRI as a diagnostic test of pedophilia</i>
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. (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.
2. Cantor, J. M. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. Cantor, J. M. (2017, June 9). Pedophilia being in the brain: The evidence and the public's reaction. Invited presentation to *SEXposition at the ROM: The science of love and sex*, Toronto, Canada.
10. 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.
11. 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.
12. 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.
13. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
14. 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>]
15. 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.

16. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole*. Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
17. 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.
18. 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.
19. 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.
20. Cantor, J. M. (2015, June). *Hypersexuality*. Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
21. 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.
22. 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.
23. Cantor, J. M. (2015, March). *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
24. Cantor, J. M. (2015, February). *Hypersexuality*. Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
25. 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.
26. 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.
27. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain*. Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
28. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications*. Invited lecture presented to the Mental Health and Addiction Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
29. 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.
30. Cantor, J. M. (2014, April). *Pedophilia and the brain*. Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
31. 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.
32. 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.

33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.
39. 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.
40. 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.
41. 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.
42. Cantor, J. M. (2013, January). *Pedophilia and child molestation*. Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
43. 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.
44. 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.
45. 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.
46. 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.
47. 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.
48. 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, Regensburg, Germany.

49. 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.
50. 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.
51. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
52. 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.
53. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men*. Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.
59. 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 meeting of 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., & Pfau, 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., & Pfau, 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

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

Ad hoc Journal Reviewer Activity

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

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*
- 2006–Present Member (elected) • *International Academy of Sex Research*
- 2006–Present Research and Clinical Member • *Association for the Treatment of Sex Abusers*
- 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

2017 Elected Fellow, Association for the Treatment of Sexual Abusers

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. Ibbetson, 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 kindporno 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](#).
- 10 Oct 2019. Smith, T. [Growing efforts are looking at how—or if—#MeToo offenders can be reformed](#). *National Public Radio*.
- 29 Sep 2019. Carey, B. [Preying on Children: The Emerging Psychology of Pedophiles](#). *New York Times*.
- 29 Apr 2019. Mathieu, Isabelle. [La poupée qui a troublé les Terre-Neuviens](#). *La Tribune*.
- 21 Mar 2019. [Pope Francis wants psychological testing to prevent problem priests. But can it really do that?](#) *The Washington Post*.
- 12 Dec 2018. [Child sex dolls: Illegal in Canada, and dozens seized at the border](#). Ontario Today with Rita Celli. *CBC*.
- 12 Dec 2018. Celli, R. & Harris, K. [Dozens of child sex dolls seized by Canadian border agents](#). *CBC News*.
- 27 Apr 2018. Rogers, Brook A. [The online ‘incel’ culture is real—and dangerous](#). *New York Post*.
- 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 Nov 2017. 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*.
- 19 Aug 2015. Blackwell, T. [Treat sex offenders for impotence—to keep them out of trouble, Canadian psychiatrist says.](#) *National Post*.
- 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*.
- 10 Apr 2015. [NWT failed to prevent sex offender from abusing stepdaughter again.](#) *CBC News*.
- 10 Feb 2015. Savage, D. "The ethical sadist." In *Savage Love*. *The Stranger*.
- 31 Jan 2015. [Begrip voor/van pedofilie \[Understanding pedophilia\].](#) *de Volkskrant*.
- 9 Dec 2014. Carey, B. [When a rapist's weapon is a pill.](#) *New York Times*.
- 1 Dec 2014. Singal, J. [Can virtual reality help pedophiles?](#) *New York Magazine*.
- 17 Nov 2014. [Say pedófile, busco ayuda.](#) *El País*.
- 4 Sep 2014. [Born that way? Ideas, with Paul Kennedy.](#) CBC Radio One.
- 27 Aug 2014. [Interrogating the statistics for the prevalence of paedophilia.](#) BBC.
- 25 Jul 2014. Stephenson, W. [The prevalence of paedophilia.](#) *BBC World Service*.
- 21 Jul 2014. Hildebrandt, A. [Virtuous Pedophiles group gives support therapy cannot.](#) CBC.
- 26 Jan 2014. [Paedophilia a result of faulty wiring, scientists suggest.](#) *Daily Mail*.
- 22 Dec 2013. Kane, L. [Is pedophilia a sexual orientation?](#) *Toronto Star*.
- 21 Jul 2013. Miller, L. [The turn-on switch: Fetish theory, post-Freud.](#) *New York Magazine*.
- 1 Jul 2013. Morin, H. [Pédophilie: la difficile quête d'une origine biologique.](#) *Le Monde*.
- 2 Jun 2013. Malcolm, L. [The psychology of paedophilia.](#) *Australian National Radio*.
- 1 Mar 2013. Kay, J. [The mobbing of Tom Flanagan is unwarranted and cruel.](#) *National Post*.
- 6 Feb 2013. [Boy Scouts board delays vote on lifting ban on gays.](#) *L.A. Times*.
- 31 Aug 2012. [CNN Newsroom interview with Ashleigh Banfield.](#) CNN.
- 24 Jun 2012. [CNN Newsroom interview with Don Lemon.](#) CNN.

LEGAL TESTIMONY, PAST 5 YEARS

2021	Cross et al. v Loudoun School Board	Loudoun, VA
2021	Allan M. Josephson v Neeli Bendapudi	Western District of Kentucky
2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, Illinois
2019	US vs Peter Bright NY	Southern District of New York,
2019	Probate and Family Court (Custody Hearing)	Boston, Massachusetts
2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, Illinois
2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
2018	Re Commitment of Fernando Little (Frye Hearing)	Utica, NY
2018	Canada vs John Fitzpatrick (Sentencing Hearing)	Toronto, Ontario, Canada

EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 2



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

James M. Cantor

Toronto Sexuality Centre, Toronto, Canada

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

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 unsuccessful³⁸ 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, Giannattesi 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 summarizes 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

No potential conflict of interest was reported by the author.

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Appendix

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

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

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

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

Plaintiff,

vs.

WEST VIRGINIA STATE BOARD OF EDUCATION,
et al.,

Case No. 2:21-cv-00316

Defendants,

Hon. Joseph R. Goodwin

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

DECLARATION OF STEPHEN B. LEVINE, MD

I, Dr. Stephen B. Levine, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of Stephen B. Levine, MD., in the Case of B.P.J. v. West Virginia State Board of Education, dated February 23, 2022 and attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.

Executed on February 23, 2022.

Stephen B. Levine MD

Stephen B. Levine, MD

Expert Report of
Stephen B. Levine, MD

In the case of B.P.J. vs. West Virginia State Board of Education.

February 23, 2022

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I. CREDENTIALS & SUMMARY

1. I am Clinical Professor of Psychiatry at Case Western Reserve University School of Medicine, and maintain an active private clinical practice. I received my MD from Case Western Reserve University in 1967, and completed a psychiatric residency at the University Hospitals of Cleveland in 1973. I became an Assistant Professor of Psychiatry at Case Western in 1973, became a Full Professor in 1985, and in 2021 was honored to be inducted into the Department of Psychiatry's "Hall of Fame."

2. Since July 1973, my specialties have included psychological problems and conditions relating to individuals' sexuality and sexual relations, therapies for sexual problems, and the relationship between love, intimate relationships, and wider mental health. In 2005, I received the Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research. I am a Distinguished Life Fellow of the American Psychiatric Association.

3. I have served as a book and manuscript reviewer for numerous professional publications. I have been the Senior Editor of the first (2003), second (2010), and third (2016) editions of the *Handbook of Clinical Sexuality for Mental Health Professionals*. In addition to five previously solo-authored books for professionals, I have recently published *Psychotherapeutic Approaches to Sexual Problems* (2020). The book has a chapter titled "The Gender Revolution."

4. In total I have authored or co-authored over 180 journal articles and book chapters, 20 of which deal with the issue of gender dysphoria. I am an invited member of a Cochrane Collaboration subcommittee that is currently preparing a review of the scientific literature on the effectiveness of puberty blocking hormones and of cross-sex hormones for

gender dysphoria for adolescents. Cochrane Reviews are a well-respected cornerstone of evidence-based practice, comprising a systematic review that aims to identify, appraise, and synthesize all the empirical evidence that meets pre-specified eligibility criteria in response to a particular research question.

5. I first encountered a patient suffering what we would now call gender dysphoria in July 1973. In 1974, I founded the Case Western Reserve University Gender Identity Clinic, and have served as Co-Director of that clinic since that time. Across the years, our Clinic treated hundreds of patients who were experiencing a transgender identity. An occasional child was seen during this era. I was the primary psychiatric caregiver for several dozen of our patients and supervisor of the work of other therapists. I was an early member of the Harry Benjamin International Gender Dysphoria Association (later known as WPATH) and served as the Chairman of the committee that developed the 5th version of its Standards of Care. In 1993 the Gender Identity Clinic was renamed, moved to a new location, and became independent of Case Western Reserve University. I continue to serve as Co-Director.

6. In the course of my five decades of practice treating patients who suffered from gender dysphoria, I have at one time or another recommended or prescribed or supported social transition, cross-sex hormones, and surgery for particular patients, but only after extensive diagnostic and psychotherapeutic work.

7. In 2006, Judge Mark Wolf of the Eastern District of Massachusetts asked me to serve as an independent, court-appointed expert in a litigation involving the treatment of a transgender inmate within the Massachusetts prison system. In that litigation, the U.S. Court of Appeals for the First Circuit in a 2014 (En Banc) opinion cited and relied on my expert

testimony. I have been retained by the Massachusetts Department of Corrections as a consultant on the treatment of transgender inmates since 2007.

8. In 2019, I was qualified as an expert and testified concerning the diagnosis, understanding, developmental paths and outcomes, and therapeutic treatment of transgenderism and gender dysphoria, particularly as it relates to children, in the matter of *In the Interest of J.A.D.Y. and J.U.D.Y.*, Case No. DF-15-09887-S, 255th Judicial District, Dallas County, TX (the “Younger litigation”). I have provided expert testimony in other litigation as listed in my curriculum vitae. In 2019, I provided written expert testimony in the landmark case in the United Kingdom; *Bell v. The Tavistock and Portman NHS Foundation Trust*.

9. I am regularly requested to speak on the topic of gender dysphoria and have given countless presentations to academic conferences and Departments of Psychiatry around the country. In May of this year, I will be co-presenting a symposium on the management of adolescent-onset transgender identity at American Psychiatric Association’s Annual Meeting.

10. A fuller review of my professional experience, publications, and awards is provided in my curriculum vitae, a copy of which is attached hereto as Exhibit A.

11. I am being compensated for my time spent in connection with this case at a rate of \$400.00 per hour for consultation and \$500.00 per hour for time spent testifying.

12. I have reviewed the “Declaration and Expert Report of Deanna Adkins, MD,” dated January 21, 2022 (“Adkins”). In that declaration Dr. Adkins makes a variety of statements about gender dysphoria, therapies for gender dysphoria, and outcomes of therapies, which I believe to be inaccurate, or unsupported by scientific evidence. Dr. Adkins is a pediatric endocrinologist. I note with some concern that Dr. Adkins makes a number of sweeping and

purportedly scientific assertions but cites almost no peer-reviewed articles or studies that support her opinions.

13. Based on her declaration, Dr. Adkins' practice is focused on children and adolescents; her CV and declaration do not suggest substantial experience in working with adults or older young adults who are living in a transgender identity, or who suffer from gender dysphoria. (This diagnosis requires "clinically significant" distress.) The wider lifecycle view that derives from experience with these adults (and familiarity with the literature concerning them) provides an important cautionary perspective. The psychiatrist or psychologist treating a trans child or adolescent, of course seeks to make the young patient happy, but the overriding consideration is the creation of a happy, highly functional, mentally healthy person for the next 50 to 70 years of life. I refer to treatment that keeps this goal in view as the "life course" perspective.

14. Dr. Adkins' stated belief that the only way to avoid harm is affirmative care is just one of many questionable assumptions that lack firm scientific foundation. Others that frequently ride along with advocates' convictions about affirmative care include:

- a. A trans identity is immutable;
- b. Trans identities are primarily caused by biological forces;
- c. Gender identity and orientation are distinct stable dimensions of identity;
- d. There are no alternative treatments to affirmative care;
- e. Affirmative care lastingly improves mental health and social function;
- f. Affirmative care reduces the rates of suicidal ideation and suicide;
- g. Young teens can give informed consent for hormones because they know best what will make them happy now and in the future;

h. De-transition of affirmed youth is rare;
i. Associated psychopathology during and after affirmative care is primarily due to minority stress.

15. These assertions are inaccurate or unsupported, for reasons that I explain in this Declaration. I will provide citations to published, peer-reviewed articles that inform my judgments.

16. I have also reviewed the “Expert Report and Declaration of Joshua D. Safer, MD,” dated January 21, 2022 (“Safer”). In that declaration Dr. Safer similarly makes a variety of statements about gender dysphoria, therapies for gender dysphoria, and outcomes of therapies, which I believe to be inaccurate, or unsupported by scientific evidence. Dr. Safer also makes a number of sweeping and purportedly scientific assertions that are not substantiated by peer-reviewed articles or studies.

17. It is also my opinion that a number of Dr. Safer’s assertions are inaccurate or unsupported, for reasons that I explain in this Declaration. Similarly, I will provide citations to published, peer-reviewed articles that inform my judgments.

18. A summary of the key points that I explain in this report is as follows:

- a. Sex as defined by biology and reproductive function is clear, binary, and cannot be changed. While hormonal and surgical procedures may enable some individuals to “pass” as the opposite gender during some or all of their lives, such procedures carry with them physical, psychological, and social risks, and no procedures can enable an individual to perform the reproductive role of the opposite sex. (Section II.A.)

b. The diagnosis of “gender dysphoria” encompasses a diverse array of conditions, with widely differing pathways and characteristics depending on age of onset, biological sex, mental health, intelligence, motivations for gender transition, socioeconomic status, country of origin, etc. Data from one population (e.g., adults) cannot be assumed to be applicable to others (e.g., children). (Section II.B.)

c. Among practitioners in the field, there are currently widely varying views concerning both the causes of and appropriate therapeutic response to gender dysphoria in children or adolescents. There are no generally accepted “standards of care” and existing studies do not provide a basis for a scientific conclusion as to which therapeutic response results in the best long-term outcomes for affected individuals. (Section III.)

d. Transgender identity is not biologically based. Rather, gender dysphoria is a psychiatric condition that cannot be identified by any biological test or measurement. (Sections IV.A, IV.B.)

e. Disorders of sexual development (“DSDs”) are biological phenomena. It is an error to conflate and/or scientifically link DSDs with incidents of gender dysphoria. (Sections IV.C, IV.D.)

f. The large majority of children who are diagnosed with gender dysphoria “desist”—that is, their gender dysphoria does not persist—by puberty or adulthood. Desistance is also increasingly observed among teens and young adults who have experienced “rapid onset gender dysphoria”—first manifesting gender dysphoria during or shortly after adolescence. (Section V.A., V.B.)

g. “Social transition”—the active affirmation of transgender identity—in young children is a powerful psychotherapeutic intervention that will substantially reduce the

number of children “desisting” from transgender identity. Therefore, the profound implications of “affirmative” treatment—which include taking puberty blockers and cross-sex hormones—must be taken into account where social transition is being considered. (Section VI.A., VI.B.)

h. Administration of puberty blockers is not a benign “pause” of puberty, but rather a powerful medical and psychotherapeutic intervention that almost invariably leads to persistence in a transgender identity and, ultimately, to the administration of cross-sex hormones. (Section VI.C.)

i. The knowledge base concerning the “affirmative” treatment of gender dysphoria available today has very low scientific quality with many long-term implications remaining unknown. (Section VII.A)

j. There are no studies that show that affirmation of transgender identity in young children reduces suicide or suicidal ideation, or improves long-term outcomes, as compared to other therapeutic approaches. Meanwhile, multiple studies show that adult individuals living transgender lives suffer much higher rates of suicidal ideation, completed suicide, and negative physical and mental health conditions than does the general population. This is true before and after transition, hormones, and surgery. (Section VII.B., VII.C.)

k. In light of what is known and not known about the impact of affirmation on the incidence of suicide, suicidal ideation, and other indicators of mental and physical health, it is scientifically baseless, and therefore unethical, to assert that a child or adolescent who express an interest in a transgender identity will kill him- or herself unless adults and peers affirm that child in a transgender identity. (Section VIII.)

I. Hormonal interventions to treat gender dysphoria are experimental in nature and have not been shown to be safe, but rather put an individual at risk of a wide range of long-term and even life-long harms including: physical health risks; sterilization and the associated emotional response; impaired sexual response; surgical complications and life-long after-care; alienation of family and romantic relationships; elevated mental health risks of depression, anxiety, and substance abuse. (Section IX.)

II. BACKGROUND ON THE FIELD

A. The biological baseline of the binary sexes

19. Dr. Adkins asserts that “the terms biological sex and biological male or female are imprecise and should be avoided.” (Adkins at 10.) Dr. Safer further asserts that the term biological sex “can cause confusion,” and moreover that a person’s sex encompasses gender identity. (Safer at 6.) These statements are untrue. Biological sex is very well defined in all biological sciences including medicine. It is pervasively important in human development throughout the lifecycle.

20. Sex is not “assigned at birth” by humans visualizing the genitals of a newborn; it is not imprecise. Rather, it is clear, binary, and determined at conception. The sex of a human individual at its core structures the individual’s biological reproductive capabilities—to produce ova and bear children as a mother, or to produce semen and beget children as a father. As physicians know, sex determination occurs at the instant of conception, depending on whether a sperm’s X or Y chromosome fertilizes the egg. A publication of the federal government’s National Institute of Health accurately summarizes the scientific facts:

“Sex is a biological classification, encoded in our DNA. Males have XY chromosomes, and females have XX chromosomes. Sex makes us male or female. Every cell in your body has a sex—making up tissues and organs, like your skin, brain, heart, and

stomach. Each cell is either male or female depending on whether you are a man or a woman.” (NIH 2022.)

21. The binary of biological sex is so fundamental and wide-ranging in its effects on human (and mammal) development and physiology that since 2014 the NIH has required all funded research on humans or vertebrate animals to include “sex as a biological variable” and give “adequate consideration of both sexes in experiments.” (NIH 2015). In 2021, the Endocrine Society issued a position paper elaborating on the application of the NIH requirement. The Endocrine Society correctly stated that “Sex is a biological concept . . . all mammals have 2 distinct sexes;” that “biological sex is . . . a fundamental source of intraspecific variation in anatomy and physiology;” and that “In mammals, numerous sexual traits (gonads, genitalia, etc.) that typically differ in males and females are tightly linked to each other because one characteristic leads to sex differences in other traits.” (Bhargava et al. 2021 at 221, 229.)

22. The Endocrine Society emphasized that “The terms sex and gender should not be used interchangeably,” and noted that even in the case of those “rare” individuals who suffer from some defect such that they “possess a combination of male- and female-typical characteristics, those clusters of traits are sufficient to classify most individuals as either biologically male or female.” They concluded, “Sex is an essential part of vertebrate biology, but gender is a human phenomenon. Sex often influences gender, but gender cannot influence sex.” (Bhargava et al. 2021 at 220-221, 228.) For purposes of this litigation, Dr. Bhargava’s statement that gender cannot influence sex is of central importance.

23. As these statements and the NIH requirement suggest, biological sex pervasively influences human anatomy, its development and physiology. This includes, of course, the development of the human brain, in which many sexually dimorphic characteristics have now been identified. In particular, the Endocrine Society and countless other researchers have

determined that human brains undergo particular sex-specific developmental stages during puberty. This predictable developmental process is a genetically controlled coordinated endocrine response that begins with pituitary influences leading to increases in circulating sex hormones. (Bhargava et al. 2021 at 225, 229; Blakemore et al. 2010 at 926-927, 929; NIH 2001.).

24. Humans have viewed themselves in terms of binary sexes since the earliest historical records. Recognizing a concept of “gender identity” as something distinct from sex is a rather recent innovation whose earliest manifestations likely began in the late 1940s. Its usage became common in medicine in the 1980s and subsequently in the larger culture. Definitions of gender have been evolving and remain individual-centric and subjective. In a statement on “Gender and Health,” the World Health Organization defines “gender” as “the characteristics of women, men, girls and boys that are socially constructed” and that “var[y] from society to society and can change over time,” and “gender identity” as referring to “a person’s deeply felt, internal and individual experience of gender.” (WHO Gender and Health.) As these definitions indicate, a person’s “felt” “experience of gender” is inextricably bound up with and affected by societal gender roles and stereotypes—or, more precisely, by the affected individual’s *perception* of societal gender roles and stereotypes and their personal idiosyncratic meanings. Typically, gendered persons also have subtly different, often idiosyncratic, reactions to societal gender roles and stereotypes without preoccupation with changing their anatomy.

25. Thus, the self-perceived gender of a child begins to develop along with the early stages of identity formation generally, influenced in part from how others label the infant: “I love you, son (daughter).” This designation occurs thousands of times in the first two years of life when a child begins to show awareness of the two possibilities. As acceptance of the designated

gender corresponding to the child's sex is the outcome in >99% of children everywhere, anomalous gender identity formation begs for understanding. Is it biologically shaped? Is it biologically determined? Is it the product of how the child was privately regarded and treated? Is it a product of the quality of early life caregiver attachments? Does it stem from trauma-based rejection of maleness or femaleness, and if so, flowing from what trauma? Does it derive from a tense, chaotic interpersonal parental relationship without physical or sexual abuse? Is it a symptom of another, as of yet unrevealed, emotional disturbance or neuropsychiatric condition (autism)? The answers to these relevant questions are not scientifically known but are not likely to be the same for every trans-identified child, adolescent, or adult.

26. Under the influence of hormones secreted by the testes or ovaries, numerous additional sex-specific differences between male and female bodies continuously develop postnatally, culminating in the dramatic maturation of the primary and secondary sex characteristics with puberty. These include differences in hormone levels, height, weight, bone mass, shape, musculature, body fat levels and distribution, and hair patterns, as well as physiological differences such as menstruation and ejaculation. These are genetically programmed biological consequences of sex—the actual meaning of sex over time. Among the consequences of sex is the consolidation of gender identity during and after puberty.

27. Despite the increasing ability of hormones and various surgical procedures to reconfigure some male bodies to visually pass as female, or vice versa, the biology of the person remains as defined by his (XY) or her (XX) chromosomes, including cellular, anatomic, and physiologic characteristics and the particular disease vulnerabilities associated with that chromosomally defined sex. For instance, the XX (genetically female) individual who takes testosterone to stimulate certain male secondary sex characteristics will nevertheless remain

unable to produce sperm and father children. It is certainly true, as Dr. Adkins writes, that “[h]ormone therapy and social transition significantly change a person’s physical appearance.” (Adkins at 8.) But in critical respects this change can only be “skin deep.” Contrary to assertions and hopes that medicine and society can fulfill the aspiration of the trans individual to become “a complete man” or “a complete woman,” this is not biologically attainable. (Levine 2018 at 6; Levine 2016 at 238.) It is possible for some adolescents and adults to pass unnoticed—that is, to be perceived by most individuals as a member of the gender that they aspire to be—but with limitations, costs, and risks, as I detail later.

B. Definition and diagnosis of gender dysphoria

28. Specialists have used a variety of terms over time, with somewhat shifting definitions, to identify and speak about a distressing incongruence between an individual’s genetically determined sex and the gender with which they identify or to which they aspire. Today’s American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders* (“DSM-5”) employs the term Gender Dysphoria and defines it with separate sets of criteria for adolescents and adults on the one hand, and children on the other.

29. There are at least five distinct pathways to gender dysphoria: early childhood onset; onset near or after puberty with no prior cross gender patterns; onset after defining oneself as gay for several or more years and participating in a homosexual lifestyle; adult onset after years of heterosexual transvestism; and onset in later adulthood with few or no prior indications of cross-gender tendencies or identity. (Levine 2021.) The early childhood onset pathway and the more recently observed onset around puberty pathway are most relevant to this matter.

30. Gender dysphoria has very different characteristics depending on age and sex at onset. Young children who are living a transgender identity commonly suffer materially fewer symptoms of concurrent mental distress than do older patients. (Zucker 2018 at 10.) The

developmental and mental health patterns for each of these groups are sufficiently different that data developed in connection with one of these populations cannot be assumed to be applicable to another.

31. The criteria used in DSM-5 to identify Gender Dysphoria include a number of signs of discomfort with one's natal sex and vary somewhat depending on the age of the patient, but in all cases require "clinically significant distress or impairment in . . . important areas of functioning" such as social, school, or occupational settings. The symptoms must persist for at least six months.

32. Children who conclude that they are transgender are often unaware of a vast array of adaptive possibilities for how to live life as a man or a woman—possibilities that become increasingly apparent over time to both males and females. A boy or a girl who claims or expresses interest in pursuing a transgender identity often does so based on stereotypical notions of femaleness and maleness that reflect constrictive notions of what men and women can be. (Levine 2017 at 7.) A young child's—or even an adolescent's—understanding of this topic is quite limited. Nor can they grasp what it may mean for their future to be sterile. These children and adolescents consider themselves to be relatively unique; they do not realize that discomfort with the body and perceived social role is neither rare nor new to civilization. What is new is that such discomfort is thought to indicate that they must be a trans person.

C. Impact of gender dysphoria on minority and vulnerable groups

33. Given that, as I discuss later, a diagnosis of gender dysphoria is now frequently putting even young children on a pathway that leads to irreversible physical changes and sterilization by young adulthood, it should be of serious concern to all practitioners that minority and vulnerable groups are receiving this diagnosis at disproportionately high rates. These include: children of color (Rider et al. 2018), children with mental developmental disabilities

(Reisner et al. 2015), children on the autistic spectrum (at a rate more than 7x the general population) (Shumer et al. 2016; van der Miesen et al. 2018), children with ADHD (Becerra-Culqui et al. 2018), children residing in foster care homes, adopted children (at a rate more than 3x the general population) (Shumer et al. 2017), victims of childhood sexual or physical abuse or other “adverse childhood events” (Thoma 2021 et al.; Newcomb et al. 2020; Kozlowska et al. 2021), children with a prior history of psychiatric illness (Edwards-Leeper et al. 2017; Kaltiala-Heino et al. 2015; Littman 2018), and more recently adolescent girls (in a large recent study, at a rate more than 2x that of boys) (Rider et al. 2018 at 4).

D. Three competing conceptual models of gender dysphoria and transgender identity

34. Discussions about appropriate responses by mental health professionals (“MHPs”) to actual or sub-threshold gender dysphoria are complicated by the fact that various speakers and advocates (or a single speaker at different times) view transgenderism through at least three very different paradigms, often without being aware of, or at least without acknowledging, the distinctions.

35. Gender dysphoria is **conceptualized and described by some professionals and laypersons as though it were a serious, physical medical illness that causes suffering**, comparable to diseases that are curable before it spreads, such as melanoma or sepsis. Within this paradigm, whatever is causing distress associated with gender dysphoria—whether secondary sex characteristics such as facial hair, nose and jaw shape, presence or absence of breasts, or the primary anatomical sex organs of testes, ovaries, penis, or vagina—should be removed to alleviate the illness. The promise of these interventions is the cure of the gender dysphoria.

36. Dr. Adkins appears to endorse this perspective, asserting that gender dysphoria is a “medical condition.” (Adkins at 4.) It should be noted, however, that gender dysphoria is a psychiatric, not a medical, diagnosis. Since its inception in DSM-III in 1983, it has always been specified in the psychiatric DSM manuals and has not been specified in medical diagnostic manuals. Notably, gender dysphoria is the only psychiatric condition to be treated by surgery, even though no endocrine or surgical intervention package corrects any identified biological abnormality. (Levine 2016 at 240.)

37. Gender dysphoria is alternatively **conceptualized in developmental terms**, as an adaptation to a psychological problem that may have been first manifested as a failure to establish a comfortable conventional sense of self in early childhood. This paradigm starts from the premise that all human lives are influenced by past processes and events. Trans lives are not exceptions to this axiom. (Levine 2016 at 238.) MHPs who think of gender dysphoria through this paradigm may work both to identify and address causes of the basic problem of the deeply uncomfortable self or a sense of self impaired by later adversity or abuse. The purpose is to ameliorate suffering when the underlying problem cannot be solved. MHPs first work with the patient and (ideally) family to learn about the events and processes that may have led to the trans person repudiating the gender associated with his sex. The developmental paradigm is mindful of temperamental, parental bonding, psychological, sexual, and physical trauma influences, and the fact that young children work out their psychological issues through fantasy and play and adolescents work out their issues by adopting various interests and identity labels.

38. There is evidence among adolescents that peer social influences through “friend groups” (Littman 2018) or through the internet can increase the incidence of gender dysphoria or claims of transgender identity. Responsible MHPs will want to probe these potential influences

to better understand what is truly deeply tied to the psychology of the patient, and what may instead be being “tried on” by the youth as part of the adolescent process of self-exploration and self-definition.

39. In addition, the developmental paradigm recognizes that, with the important exception of genetic sex, essentially all aspects of an individual’s identity evolve—often markedly—across the individual’s lifetime. This includes gender. Some advocates assert that a transgender identity is biologically caused, fixed from early life, and eternally present in an unchanging manner. As I review later, however, this assertion is not supported by science.¹

40. The third paradigm through which gender dysphoria is alternatively conceptualized is from **a sexual minority rights perspective**. Under this paradigm, any response other than medical and societal affirmation and implementation of a patient’s claim to “be” the opposite gender is a violation of the individual’s civil right to self-expression. Any effort to ask “why” questions about the patient’s condition, or to address underlying causes, is viewed as a violation of autonomy and civil rights. In the last few years, this paradigm has been successful in influencing public policy and the education of pediatricians, endocrinologists, and many mental health professionals. Obviously, however, this is not a medical or psychiatric perspective. Unfortunately, it appears to be the most powerful perspective that exists in the public, non-scientific debate.

E. Four competing models of therapy

41. Few would disagree that the human psyche is complex. Few would disagree that children’s and adolescents’ developmental pathways typically have surprising twists and turns. The complexity and unpredictability of childhood and adolescent development equally applies to

¹ Even the advocacy organization The Human Rights Campaign asserts that a person can have “a fluid or unfixed gender identity.” <https://www.hrc.org/resources/glossary-of-terms>.

trans-identifying youth. Because of past difficulties of running placebo-controlled clinical trials in the transgender treatment arena, substantial disagreements among professionals about the causes of trans identities and their ideal treatments exist. These current disagreements might have been minimized if trans treated persons were carefully followed up to determine long term outcomes. They have not been. When we add to this to the very different current paradigms for understanding transgender phenomena, it is not scientifically surprising that disagreements are sharply drawn. It is with this in mind that I summarize below the leading approaches, and offer certain observations and opinions concerning them.

(1) The “watchful waiting” therapy model

42. In Section V.A below I review the uniform finding of eleven follow-up studies that the large majority of children who present with gender dysphoria will desist from desiring a transgender identity by adulthood if left untreated by social transition approaches.

43. When a pre-adolescent child presents with gender dysphoria, a “watchful waiting” approach seeks to allow for the fluid nature of gender identity in children to naturally evolve—that is, take its course from forces within and surrounding the child. Watchful waiting has two versions:

- a. Treating any other psychological co-morbidities—that is, other mental illnesses as defined by DSM-5 (separation anxiety disorder, attention deficit hyperactivity disorder, autism spectrum disorder, obsessive compulsive disorder, etc), or subthreshold for diagnosis but behavioral problems that the child may exhibit (school avoidance, bedwetting, inability to make friends, aggression/defiance) without a focus on gender (**model #1**); and

- b. No treatment at all for anything but a regular follow-up appointment. This might be labeled a “hands off” approach (**model #2**).

(2) The psychotherapy model: Alleviate distress by identifying and addressing causes (model #3)

44. One of the foundational principles of psychotherapy has long been to work with a patient to identify the causes of observed psychological distress and then to address those causes as a means of alleviating the distress. The National Institute of Mental Health has promulgated the idea that 75% of adult psychopathology has its origins in childhood experience.

45. Many experienced practitioners in the field of gender dysphoria, including myself, have believed that it makes sense to employ these long-standing tools of psychotherapy for patients suffering gender dysphoria, asking the question as to what factors in the patient's life are the determinants of the patient's repudiation of his or her natal sex. (Levine 2017 at 8; Levine 2021.) I and others have reported success in alleviating distress in this way for at least some patients, whether the patient's sense of discomfort or incongruence with his or her natal sex entirely disappeared or not. Relieving accompanying psychological co-morbidities leaves the patient freer to consider the pros and cons of transition as he or she matures.

46. Among other things, the psychotherapist who is applying traditional methods of psychotherapy may help—for example—the male patient appreciate the wide range of masculine emotional and behavioral patterns as he grows older. He may discuss with his patient, for example, that one does not have to become a “woman” in order to be kind, compassionate, caring, noncompetitive, to love the arts, and to be devoted to others’ feelings and needs. (Levine 2017 at 7.) Many biologically male trans individuals, from childhood to older ages, speak of their perceptions of femaleness as enabling them to discuss their feelings openly, whereas they perceive boys and men to be constrained from emotional expression within the family and larger culture, and to be aggressive. Men, of course, can be emotionally expressive, just as they can

wear pink. Converse examples can be given for girls and women. These types of ideas regularly arise during psychotherapies.

47. As I note above, many gender-nonconforming children and adolescents in recent years derive from minority and vulnerable groups who have reasons to feel isolated and have an uncomfortable sense of self. A trans identity may be a hopeful attempt to redefine the self in a manner that increases their comfort and decreases their anxiety. The clinician who uses traditional methods of psychotherapy may not focus on their gender identity, but instead work to help them to address the actual sources of their discomfort. Success in this effort may remove or reduce the desire for a redefined identity. This often involves a focus on disruptions in their attachment to parents in vulnerable children, for instance, those in the foster care system.

48. Because “watchful waiting” can include treatment of accompanying psychological co-morbidities, and the psychotherapist who hopes to relieve gender dysphoria may focus on potentially causal sources of psychological distress rather than on the gender dysphoria itself, there is no sharp line between “watchful waiting” and the psychotherapy model in the case of prepubescent children.

49. To my knowledge, there is no evidence beyond anecdotal reports that psychotherapy can enable a return to male identification for genetically male boys, adolescents, and men, or return to female identification for genetically female girls, adolescents, and women. On the other hand, anecdotal evidence of such outcomes does exist; I and other clinicians have witnessed reinvestment in the patient’s biological sex in some individual patients who are undergoing psychotherapy. The Internet contains many such reports, and I have published a paper on a patient who sought my therapeutic assistance to reclaim his male gender identity after 30 years living as a woman and is in fact living as a man today. (Levine 2019.) I have seen

children desist even before puberty in response to thoughtful parental interactions and a few meetings of the child with a therapist. There are now a series of articles and at least one major book on the psychological treatment of adolescents. (D'Angelo et al. 2021 at 7-16; Evans & Evans 2021.)

(3) The affirmation therapy model (model #4)

50. While it is widely agreed that the therapist should not directly challenge a claimed transgender identity in a child, some advocates and practitioners go much further, and promote and recommend that any expression of transgender identity should be immediately accepted as decisive, and thoroughly affirmed by means of consistent use of clothing, toys, pronouns, etc., associated with transgender identity. They argue that the child should be comprehensively re-socialized in grade school in their aspired-to gender. As I understand it, this is asserted as a reason why male students who assert a female gender identity must be permitted to compete in girls' or women's athletic events. These advocates treat any question about the causes of the child's transgender identification as inappropriate. They may not recognize the child's ambivalence. They assume that observed psychological co-morbidities in the children or their families are unrelated or will get better with transition, and need not be addressed by the MHP who is providing supportive guidance concerning the child's gender identity.

51. Some advocates, indeed, assert that unquestioning affirmation of any claim of transgender identity in children is essential, and that the child will otherwise face a high risk of suicide or severe psychological damage. Dr. Adkins appears to follow this line, asserting that "My clinical experience . . . has been that [patients] suffer and experience worse health outcomes" when they are not permitted to enter all spaces and participate in all activities in a manner "consistent with gender identity." (Adkins at 9.) This claim is simply not supported by the clinical data we have available to us. Indeed, available long-term data contradicts Dr.

Adkins' claim. I address physical and mental health outcomes in Section VII below, and suicide in Section VIII below.

52. Dr. Adkins also asserts that fully supported social transition is the "only treatment for prepubertal children." (Adkins at 6.) As I review in the next section, this is not correct. This may be the only treatment that Dr. Adkins considers, but my own conversations and contacts lead me to believe that Dr. James Cantor was correct when he wrote that "almost all clinics and professional associations in the world" do not use "gender affirmation" for prepubescent children and instead "delay any transitions after the onset of puberty." (Cantor 2019 at 1.)

53. I do not know what proportion of practitioners are using which model. However, in my opinion, in the case of young children, prompt and thorough affirmation of a transgender identity disregards the principles of child development and family dynamics and is not supported by science. Instead of science, this approach is currently being reinforced by an echo-chamber of approval from other like-minded child-oriented professionals who do not sufficiently consider the known negative medical and psychiatric outcomes of trans adults. Rather than recommend social transition in grade school, the MHP must focus attention on the child's underlying internal and familial issues. Ongoing relationships between the MHP and the parents, and the MHP and the child, are vital to help the parents, child, other family members, and the MHP to understand over time the issues that need to be dealt with by each of them.

54. Likewise, since the child's sense of gender develops in interaction with his parents and their own gender roles and relationships, the responsible MHP will almost certainly need to delve into family and marital dynamics.

III. THERE IS NO CONSENSUS OR AGREED “STANDARD OF CARE” CONCERNING THERAPEUTIC APPROACHES TO CHILD OR ADOLESCENT GENDER DYSPHORIA.

55. Dr. Adkins states that “[t]he only treatment to avoid [] serious harm is to recognize the gender identity of patients with gender dysphoria and follow appropriate treatment protocols to affirm gender identity and alleviate distress,” and appears to believe that transition and affirmation of children who suffer from gender dysphoria is a generally accepted “standard of care.” (Adkins at 5.) It is not.

56. As I review in separate sections later, there is far too little firm clinical evidence in this field to permit any evidence-based standard of care. Given the lack of scientific evidence, it is neither surprising nor improper that—as I detailed in Section II—there is a diversity of views among practitioners as to as to the best therapeutic response for the child, adolescent, or young adult who suffers from gender dysphoria. Dr. Adkins is unwittingly confusing therapeutic precedent among those who agree with her views, armed with ideas promulgated by WPATH, with careful scientific documentation of her concepts. She presumes that her views have been scientifically established even though much has been published highlighting the lack of supportive definitive evidence.

57. Reviewing the state of opinion and practice in 2021, the Royal Australian and New Zealand College of Psychiatrists observed that “There are polarised views and mixed evidence regarding treatment options for people presenting with gender identity concerns, especially children and young people.” (RANZCP, 2021.) Similarly, a few years earlier prominent Dutch researchers noted: “[T]here is currently no general consensus about the best approach to dealing with the (uncertain) future development of children with GD, and making decisions that may influence the function and/or development of the child — such as social

transition.” (Ristori & Steensma 2016 at 18.)² In this Section, I comment on some of the more important areas of disagreement within the field.

A. Experts and organizations disagree as to whether “distress” is a necessary element for diagnoses that justifies treatment for gender identity issues.

58. As outlined in Section II.B above, “clinically significant distress” is one of the criteria used in DSM-5 to identify gender dysphoria. This indicates a heightened level of distress that rises beyond a threshold level of social awkwardness or discomfort with the changing body. It is known that many trans-identified youth with incongruence between their sexed bodies and their gender identity choose not to take hormones; their incongruence is quite tolerable as they further clarify their sexual identity elements. This population raises the questions of what distress is being measured when DSM-5 criteria are met and what else might be done about it.

59. I note that there is no “clinically significant distress” requirement in World Health Organization’s International Classification of Diseases (ICD-11) criteria for gender incongruence, which rather indicates “a marked and persistent incongruence between an individual’s experienced gender and the assigned sex.” (World Health Organization 2019.)

60. Therefore, even between these two committee-based authorities, there is a significant disagreement as to what constitutes a gender condition justifying life-changing interventions. To my knowledge, some American gender clinics and practitioners are essentially operating under the ICD-11 criteria rather than the APA’s DSM-5 criteria, prescribing transition for children, hormonal interventions for slightly older children, and different hormones for adolescents who assert a desire for a transgender identity whether or not they are exhibiting “clinically significant distress.” Others adhere to the DSM-5 diagnostic standard.

² See also Zucker 2020 which questions the merit of social transition as a first-line treatment.

61. I will add that even from within one “school of thought,” such as embodied by Dr. Adkins, it is not responsible to make a single, categorical statement about the proper treatment of children or adolescents presenting with gender dysphoria or other gender-related issues. There is no single pathway to the development of a trans identity and no reasonably uniform short- or long-term outcome of medically treating it. As individuals grow physically, mature psychologically, and experience or fail to experience satisfying romantic relationships, their life course depends on their differing psychological, social, familial, and life experiences. There should be no trust in assertions that trans identified youth must be treated in a particular manner to avoid harm for two reasons: first, there is no systematic data on the nature of, and the rate of harms of either affirmative treatment, no treatment, or psychological only treatment. Second, as in other youthful psychiatric and other challenges, outcomes vary.

B. Opinions and practices vary widely about the utilization of social transition for children and adolescents.

62. Dr. Adkins notes that she is a member of the World Professional Association for Transgender Health (WPATH), invokes a guidance document that that organization has chosen to publish under the title of “standards of care,” and asserts that the WPATH Standards of Care are “widely accepted.” (Adkins at 3, 5.) Below, I will provide some explanation of WPATH and its “Standards of Care,” which are not the product of a strictly scientific organization, and are by no means accepted by all or even most practitioners as setting out best practices.

63. Here, however, I will note that WPATH does not take a position concerning whether or when social transition may be appropriate for pre-pubertal children. Instead, the WPATH “Standards of Care” states that the question of social transition for children is a “controversial issue” and calls for mental health professionals to support families in what it describes as “difficult decisions” concerning social transition.

64. Dr. Erica Anderson is a prominent practitioner in this area who identifies as a transgender woman, who was the first transgender president of USPATH, and who is a former board member of WPATH. Dr. Anderson recently resigned from those organizations and has condemned automatic approval of transition upon the request of a child or adolescent, noting that “adolescents . . . are notoriously susceptible to peer influence,” that transition “doesn’t cure depression, doesn’t cure anxiety disorders, doesn’t cure autism-spectrum disorder, doesn’t cure ADHD,” and instead that “a comprehensive biopsychosocial evaluation” should proceed allowing a child to transition. (Davis 2022.) And as I have explained previously, my own view based on 50 years of experience in this area favors strong caution before approving life-altering interventions such as social transition, puberty blockers, or cross-sex hormones.

C. The WPATH “Standards of Care” is not an impartial or evidence-based document.

65. Because WPATH is frequently cited by advocates of social, hormonal, and surgical transition, I provide some context concerning that private organization and its “Standards of Care.”

66. I was a member of the Harry Benjamin International Gender Dysphoria Association from 1974 until 2001. From 1997 through 1998, I served as the Chairman of the eight-person International Standards of Care Committee that issued the fifth version of the Standards of Care. I resigned my membership in 2002 due to my regretful conclusion that the organization and its recommendations had become dominated by politics and ideology, rather than by scientific process, as it was years earlier. In approximately 2007, the Harry Benjamin International Gender Dysphoria Association changed its name to the World Professional Association for Transgender Health.

67. WPATH is a voluntary membership organization. Since at least 2002, attendance at its biennial meetings has been open to trans individuals who are not licensed professionals. While this ensures taking patients' needs into consideration, it limits the ability for honest and scientific debate, and means that WPATH can no longer be considered a purely professional organization.

68. WPATH takes a decided view on issues as to which there is a wide range of opinion among professionals. WPATH explicitly views itself as not merely a scientific organization, but also as an advocacy organization. (Levine 2016 at 240.) WPATH is supportive to those who want sex reassignment surgery ("SRS"). Skepticism as to the benefits of SRS to patients, and strong alternate views, are not well tolerated in discussions within the organization or their educational outreach programs. Such views have been known to be shouted down and effectively silenced by the large numbers of nonprofessional adults who attend the organization's biennial meetings. Two groups of individuals that I regularly work with have attended recent and separate WPATH continuing education sessions. There, questions about alternative approaches were quickly dismissed with "There are none. This is how it is done." Such a response does not accurately reflect what is known, what is unknown, and the diversity of clinical approaches in this complex field.

69. The Standards of Care ("SOC") document is the product of an effort to be balanced, but it is not politically neutral. WPATH aspires to be both a scientific organization and an advocacy group for the transgendered. These aspirations sometimes conflict. The limitations of the Standards of Care, however, are not primarily political. They are caused by the lack of rigorous research in the field, which allows room for passionate convictions on how to care for the transgendered. And, of course, once individuals have socially, medically, and surgically

transitioned, WPATH members and the trans people themselves at the meetings are committed to supporting others in their transitions. Not only have some trans participants been distrustful or hostile to those who question the wisdom of these interventions, their presence makes it difficult for professionals to raise their concerns. Vocal trans rights advocates have a worrisome track record of attacking those who have alternative views. (Dreger 2015.)

70. In recent years, WPATH has fully adopted some mix of the medical and civil rights paradigms. It has downgraded the role of counseling or psychotherapy as a requirement for these life-changing processes. WPATH no longer considers preoperative psychotherapy to be a requirement. It is important to WPATH that the person has gender dysphoria; the pathway to the development of this state is not. (Levine 2016 at 240.) The trans person is assumed to have thoughtfully considered his or her options before seeking hormones, for instance.

71. Most psychiatrists and psychologists who treat patients suffering sufficiently severe distress from gender dysphoria to seek inpatient psychiatric care are not members of WPATH. Many psychiatrists, psychologists, and pediatricians who treat some patients suffering gender dysphoria on an outpatient basis are not members of WPATH. WPATH represents a self-selected subset of the profession along with its many non-professional members; it does not capture the clinical experiences of others. WPATH claims to speak for the medical profession; however, it does not welcome skepticism and therefore, deviates from the philosophical core of medical science. There are pediatricians, psychiatrists, endocrinologists, and surgeons who object strongly, on professional grounds, to transitioning children and providing affirmation in a transgender identity as the first treatment option. WPATH does not speak for all of the medical profession.

72. In 2010 the WPATH Board of Directors issued a statement advocating that incongruence between sex and felt gender identity should cease to be identified in the DSM as a pathology.³ This position was debated but not adopted by the (much larger) American Psychiatric Association, which maintained the definitions and diagnoses of gender dysphoria as a pathology in the DSM-5 manual issued in 2013.

73. In my experience some current members of WPATH have little ongoing experience with the mentally ill, and many trans care facilities are staffed by MHPs who are not deeply experienced with recognizing and treating frequently associated psychiatric comorbidities. Further, being a mental health professional, *per se*, does not guarantee experience and skill in recognizing and effectively intervening in serious or subtle patterns. Because the 7th version of the WPATH SOC deleted the requirement for therapy, trans care facilities that consider these Standards sufficient are permitting patients to be counseled to transition by means of social presentation, hormones, and surgery by individuals with masters rather than medical degrees.

D. Opinions and practices differ widely with respect to the proper role of psychological counseling before, as part of, or after a diagnosis of gender dysphoria.

74. In Version 7 of its Standards of Care, released in 2012, WPATH downgraded the role of counseling or psychotherapy, and the organization no longer sees psychotherapy without transition and hormonal interventions as a potential path to eliminate gender dysphoria by enabling a patient to return to or achieve comfort with the gender identity aligned with his or her biology.

³ WPATH *De-Psychopathologisation Statement* (May 26, 2010), available at wpath.org/policies (last accessed January 21, 2020).

75. Around the world, many prominent voices and practitioners disagree. For example, renowned gender therapists Dr. Laura Edwards-Leeper and Dr. Erica Anderson (who, as mentioned above, identifies as a transgender woman) have recently spoken out arguing that children and adolescents are being subjected to puberty blockers and hormonal intervention far too quickly, when careful and extended psychotherapy and investigation for potential causes of feelings of dysphoria (such as prior sexual abuse) should be the first port of call and might resolve the dysphoria. (Edwards-Leeper & Anderson 2021; Davis 2022.)

76. In a recently published position statement on gender dysphoria, the Royal Australian and New Zealand College of Psychiatrists emphasized the critical nature of mental health treatment for gender dysphoric minors, stressing “the importance of the psychiatrist’s role to undertake thorough assessment and evidence-based treatment ideally as part of a multidisciplinary team, especially highlighting co-existing issues which may need addressing and treating.” The Royal College also emphasized the importance of assessing the “psychological state and context in which Gender Dysphoria has arisen,” before any treatment decisions are made. (RANZCP, 2021.)

77. Dr. Paul Hruz of the University of Washington St. Louis Medical School has noted, “The WPATH has rejected psychological counseling as a viable means to address sex–gender discordance with the claim that this approach has been proven to be unsuccessful and is harmful (Coleman et al. 2012). Yet the evidence cited to support this assertion, mostly from case reports published over forty years ago, includes data showing patients who benefited from this approach (Cohen-Kettenis and Kuiper 1984).” (Hruz 2020.)

E. Opinions and practices vary widely with respect to the administration of puberty blockers and cross-sex hormones.

78. There is likewise no broadly accepted standard of care with respect to use of puberty blockers. The WPATH Standards of Care explicitly recognize the lack of any consensus on this important point, stating: “Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. . . The percentages of treated adolescents are likely influenced by the organization of health care, insurance aspects, cultural differences, opinions of health professionals, and diagnostic procedures offered in different settings.”

79. The use of puberty blockers as a therapeutic intervention for gender dysphoria is often justified by reference to the seminal work of a respected Dutch research team that developed a protocol that administered puberty blockers to children no younger than age 14. However, it is well known that many clinics in North America now administer puberty blockers to children at much younger ages than the “Dutch Protocol” allows. (Zucker 2019.) The Dutch protocol only treated children with these characteristics: a stable cross gender identity from early childhood; dysphoria that worsened with the onset of puberty; were otherwise psychologically healthy; had healthy families; the patient and family agreed to individual and family counselling throughout the protocol. But the experience and results of the Dutch model is being used as a justification for giving puberty blockers to children who differ considerably from these criteria. Its authors have also recently noted this fact. (de Vries 2020.)

80. However, Zucker notes that “it is well known” that clinicians are administering cross-sex hormones, and approving surgery, at ages lower than the minimum age thresholds set by that “Dutch Protocol.” (Zucker 2019 at 5.)

81. Similarly, at least one prominent clinic—that of Dr. Safer at Columbia’s Mt. Sinai Medical Center—is quite openly admitting patients for even *surgical* transition who are not eligible under the criteria set out in WPATH’s Standards of Care. A recent study published by Dr. Safer and colleagues revealed that of a sample of 139 individuals, 45% were eligible for surgery “immediately” under the center’s own criteria, while only 15% were eligible under WPATH’s criteria. That is, *three times* as many patients immediately qualified for surgery under the center’s loose standards than would have qualified under WPATH criteria. (Lichenstein et al. 2020.)

82. Internationally, there has been a recent marked trend *against* use of puberty blockers, as a result of extensive evidence reviews by national medical bodies, which I discuss later. The main gender clinic in Sweden has declared that it will no longer authorize use of puberty blockers for minors below the age of 16. Finland has similarly reversed its course, issuing new guidelines that allow puberty blockers only on a case-by-case basis after an extensive psychiatric assessment. A landmark legal challenge against the UK’s National Health Service in 2020 by “detransitioner” Keira Bell led to the suspension of the use of puberty blockers and new procedures to ensure better psychological care, as well as prompting a thorough evidence review by the National Institute for Health and Care Excellence (NICE 2021a; NICE 2021b).⁴

83. In this country, some voices in the field are now publicly arguing that *no* comprehensive mental health assessment at all should be required before putting teens on puberty blockers or cross-sex hormones (Ghorayshi 2022), while Dr. Anderson and Dr.

⁴ The decision requiring court approval for administration of hormones to any person younger than age 16 was later reversed on procedural grounds by the Court of Appeal and is currently under consideration by the UK Supreme Court.

Edwards-Leeper argue that U.S. practitioners are already moving too quickly to hormonal interventions. (Edwards-Leeper & Anderson 2021; Davis 2022.) It is evident that opinions and practices are all over the map.

84. It is true that a committee of the American Academy of Pediatricians has issued a statement supporting administration of puberty blockers to children diagnosed with gender dysphoria. It is also true that no other American medical association has endorsed the use of puberty blockers, and that pediatricians are neither endocrinologists nor psychiatrists. Dr. James Cantor published a peer-reviewed paper detailing that the Academy's statement is not evidence-based and misdescribed the few scientific sources it did reference. (Cantor 2019.) It has been well noted in the field that the AAP has declined invitations to publish any rebuttal to Dr. Cantor's analysis. But this is all part of ongoing debate, simply highlighting the absence of any generally agreed standard of care.

85. Dr. Adkins asserts that the Society's 2017 Practice Guidelines on Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons (Hembree et al. 2017) amount to "widely accepted standards of care" that were "developed through rigorous scientific processes." (Adkins at 2, 5 and 6.)

86. Contrary to Dr. Adkins' assertion, the 2017 Endocrine Society Guidelines themselves expressly state that they are *not* "standards of care." The document states: "The guidelines cannot guarantee any specific outcome, *nor do they establish a standard of care*. The guidelines are not intended to dictate the treatment of a particular patient." (Hembree et al. 2017 at 3895 (emphasis added).) Nor do the Guidelines claim to be the result of a "rigorous scientific process." Rather, they expressly advise that their recommendations concerning use of puberty blockers are based only on "low quality" evidence.

87. Dr. Adkins notes that the 2017 Guidelines assert that: “patients with gender dysphoria often must be treated with ‘a safe and effective hormone regimen. . .’” (Adkins at 6.) Notably, however, the Guidelines do not make any firm statement that use of puberty blockers for this purpose *is* safe, and the Guidelines go no further than “suggest[ing]” use of puberty blockers—language the Guidelines warn represents only a “weak recommendation.” (Hembree 2017 at 3872.) Several authors have pointed out that not only were the Endocrine Society suggestions regarding use of puberty blockers reached on the basis of “low quality” evidence, but its not-quite claims of ‘safety’ and ‘efficacy’ are starkly contradicted by several in-depth evidence reviews. (Laidlaw et al., 2019; Malone et al. 2021.) I detail these contradictory findings in more detail in Section VII below.

88. While there is too little meaningful clinical data and no consensus concerning best practices or a “standard of care” this area, there are long-standing ethical principles that do or should bind all medical and mental health professionals as they work with, counsel, and prescribe for these individuals.

89. One of the oldest and most fundamental principles guiding medical and psychological care—part of the Hippocratic Oath—is that the physician must “do no harm.” This states an ethical responsibility that cannot be delegated to the patient. Physicians themselves must weigh the risks of treatment against the harm of not treating. If the risks of treatment outweigh the benefits, principles of medical ethics prohibit the treatment.

IV. TRANSGENDER IDENTITY IS NOT BIOLOGICALLY BASED.

90. Dr. Safer asserts that “Although the detailed mechanisms are unknown, there is a medical consensus that there is a significant biologic component underlying gender identity” and

that gender identity is a “largely biological phenomenon.” (Safer at 5, 6.) Many advocates of affirmative care assert this belief.

91. However, it is not true. There is no medical consensus that transgender identity has any biological basis. Furthermore, there is considerable well-documented evidence that is inconsistent with the hypothesis of a biological basis for gender identity—at least in the large majority of currently-presenting patients.

A. No theory of biological basis has been scientifically validated.

92. At the outset, the attempt to identify a single “typically . . . biological” cause for psychiatric conditions (including gender dysphoria) has been strongly criticized as “out of step with the rest of medicine” and as a lingering “ghost” of an understanding of the nature of psychiatric conditions that is now broadly disproven. (Kendler 2019 at 1088-1089.) Gender dysphoria is defined and diagnosed only as a psychiatric, not a medical, condition.

93. Nonetheless, in a published article, Dr. Safer has referred to data that he asserts supports the existence of “a fixed, biologic basis for gender identity.” (Saraswat et al. 2015 at 199.) But on the contrary, this article itself states that studies attempting to find an association between genetics and transgender identification “have been contradictory,” and that “no statistically significant association between particular genes [and transgender identity] has been described.” (Saraswat 2015 at 202.)

94. Similarly, while some have pointed to very small brain scan studies as evidence of a biological basis, no studies of brain structure of individuals identifying as transgender have found any statistically significant correlation between any distinct structure or pattern and transgender identification, after controlling for sexual orientation and exposure to exogenous hormones. (Sarawat et al. 2015 at 202; Frigerio et al. 2021.)

95. Indeed, the Endocrine Society 2017 Guidelines recognizes: “With current knowledge, we cannot predict the psychosexual outcome for any specific child” and “there are currently no criteria to identify the GD/gender-incongruent children to whom this applies. At the present time, clinical experience suggests that persistence of GD/gender incongruence can only be reliably assessed after the first signs of puberty.” (Hembree et al. 2017 at 3876.)

96. In short, no biological test or measurement has been identified that provides any ability to predict which children will exhibit, and which children will persist in, gender dysphoria or a transgender identification. Unless and until such a test is identified, the theory of a biological basis is a hypothesis still searching for support. A hypothesis is not a fact, and responsible scientists will not confuse hypothesis with fact.

B. Large changes across time and geography in the epidemiology of transgender identification are inconsistent with the hypothesis of a biological basis for transgender identity.

97. In fact, there is substantial evidence that the “biological basis” theory is incorrect, at least with respect to the large majority of patients presenting with gender dysphoria today.

98. **Vast changes in incidence:** Historically, there were very low reported rates of gender dysphoria or transgender identification. In 2013, the DSM-5 estimated the incidence of gender dysphoria in adults to be at 2-14 per 100,000, or between 0.002% and 0.014%. (APA 2013 at 454.) Recently however, these numbers have increased dramatically, particularly in adolescent populations. Recent surveys estimate that between 2-9% of high school students self-identify as transgender or “gender non-conforming.” with a significantly large increase in adolescents claiming “nonbinary” gender identity as well. (Johns et al. 2019; Kidd et al. 2021.) Consistent with these surveys, gender clinics around the world have seen numbers of referrals increase rapidly in the last decade, with the Tavistock clinic in London seeing a 30-fold increase in the last decade (GIDS 2019), and similar increases being observed in Finland (Kaltiala-Heino

et al. 2018), the Netherlands (de Vries 2020), and Canada (Zucker 2019). The rapid change in the number of individuals experiencing gender dysphoria points to social and cultural, not biological, causes.

99. **Large change in sex ratio:** In recent years there has been a marked shift in the sex ratio of patients presenting with gender dysphoria or transgender identification. The Tavistock clinic in London saw a ratio of 4 biological females(F):5 biological males(M) shift to essentially 11F:4M in a decade. (GIDS 2019.) One researcher summarizing multiple sources documented a swing of 1F:2M or 1F:1.4M through 2005 to 2F:1M generally (but as high as 7F:1M) in more recent samples. (Zucker 2019 at 2.) This phenomenon has been noted by Dr. Erica Anderson, who said: “The data are very clear that adolescent girls are coming to gender clinics in greater proportion than adolescent boys. And this is a change in the last couple of years. And it’s an open question: What do we make of that? We don’t really know what’s going on. And we should be concerned about it.” (Davis 2022.) Again, this large and rapid change in who is experiencing gender dysphoria points to social, not biological, causes.

100. **Clustering:** Dr. Littman’s recent study documented “clustering” of new presentations of gender dysphoria among natal females in specific schools and among specific friend groups. This again points strongly to social causes for gender dysphoria at least among the adolescent female population. (Littman 2018.)

101. **Desistance:** As I discuss later, there are very high levels of desistance among children diagnosed with gender dysphoria, as well as increasing (or at least increasingly vocal) numbers of individuals who first asserted a transgender identity during or after adolescence, underwent substantial medical interventions to “affirm” that trans-identity, and then “desisted”

and reverted to a gender identity congruent with their sex. (See Section V.B below.) These narratives, too, point to a social and/or psychological cause, rather than a biological one.

102. **“Fluid” gender identification:** Advocates and some practitioners assert that gender identity is not binary, but can span an almost endless range of gender identity self-labels, which a given individual may try on, inhabit, and often discard. (A recent article identifies 72.⁵) I have not heard any theory offered for how there is or could be a biological basis for gender identity as now expansively defined.

103. I frequently read attempts to explain away the points in this Section IV. They include: these problems always existed, but children are now learning that there are effective treatments for their dilemma and are simply seeking them. And; children have hidden their trans identity throughout childhood and now that trans people are recognized and accepted, they are presenting themselves. And; now pediatricians realize that girls can have gender dysphoria and are referring them to gender clinics. But these are all mere hypotheses unsupported by concrete evidence. One set of unproven hypotheses cannot provide support for the unproven hypothesis of biological basis. And none of these hypotheses could even potentially explain the failure of science thus far to identify any predictive biological marker of transgender identification.

104. **Therapies affect gender identity outcomes:** Finally, the evidence shows that therapeutic choices can have a powerful effect on whether and how gender identity does change, or gender dysphoria desists. Social transition of juveniles, for instance, strongly influences gender identity outcomes to such an extent that it has been described a “unique predictor of

⁵ Allarakha, *What Are the 72 Other Genders?*, MedicineNet, available at: https://www.medicinenet.com/what_are_the_72_other_genders/article.htm

persistence.” (See Section V.B below.) Again, this observation cuts against the hypothesis of biological origin.

C. Disorders of sexual development (or DSDs) and gender identity are very different phenomena, and it is an error to conflate the two.

105. Dr. Adkins spends much of her report discussing individuals who suffer from disorders of sexual development (DSDs), apparently as evidence that sex is not binary or clearly defined, or as somehow supporting the idea that transgender identification has a biological basis. (Adkins at 9.) I have extensively detailed that sex is clear, binary, and determined at conception. (Section II.) Here I explain that gender dysphoria is an entirely different phenomenon than DSDs—which unlike transgender identity are indeed biological phenomena. It is an error to conflate the two distinct concepts.

106. Every DSD reflects a genetic enzymatic defect with negative anatomic and physiological consequences. As the Endocrine Society recognized in a 2021 statement: “Given the complexities of the biology of sexual determination and differentiation, it is not surprising that there are dozens of examples of variations or errors in these pathways associated with genetic mutations that are now well known to endocrinologists and geneticists; in medicine, these situations are generally termed *disorders of sexual development* (DSD) or *differences in sexual development*.” Gender Identity on the other hand is uniformly defined as a subjective “sense” of being, a feeling or state of mind. (Section II.C.)

107. The vast majority of those who experience gender dysphoria or a transgender identity do not suffer from any DSD, nor from any genetic enzymatic disorder at all. Conversely, many who suffer from a DSD do not experience a gender identity different from their chromosomal sex (although some may). In short, those who suffer from gender dysphoria are not a subset of those who suffer from a DSD, nor are those who suffer from a DSD a subset of those

who suffer from gender dysphoria. The two are simply different phenomena, one physical, the other mental, defined only as a psychiatric condition. The issue here is not whether biological forces play a role in personality development; it is whether there is strong evidence that it is determinative. Science has come too far to revert to single explanations for gender dysphoria or any psychiatric diagnosis.

108. The importance of this distinction is evident from the scientific literature. For example, in a recent study of clinical outcomes for gender dysphoric patients, Tavistock Clinic researchers *excluded* from their analysis any patients who did not have “normal endocrine function and karyotype consistent with birth registered sex.” (Carmichael et al. 2021 at 4.) In other words, the researchers specifically *excluded* from their study anyone who suffered from genetic-based DSD, or a DSD comprising any serious defect in hormonal use pathways, in order to ensure the study was focused only on individuals experiencing the psychological effects of what we might call “ordinary” gender dysphoria.

D. Studies of individuals born with DSDs suggest that there may be a biological predisposition towards *typical* gender identifications, but provide no support for a biological basis for transgender identification.

109. Studies of individuals born with serious DSDs have been pointed to as evidence of a biological basis for transgender identification. They provide no such support.

110. One well-known study by Meyer-Bahlburg reviewed the case histories of a number of XY (i.e. biologically male) individuals born with severe DSDs who were surgically “feminized” in infancy and raised as girls. (Meyer-Bahlburg 2005.) The majority of these individuals nevertheless later adopted male gender identity—suggesting a strong biological predisposition towards identification aligned with genetic sex, even in the face of feminized genitalia from earliest childhood, and parental “affirmation” in a transgender identity. But at the same time, the fact that some of these genetically male individuals did *not* later adopt male

gender identity serves as evidence that medical and social influences can indeed encourage and sustain transgender identification.

111. Importantly, the Meyer-Bahlburg study did *not* include any individuals who were assigned a gender identity congruent with their genetic sex who subsequently adopted a transgender identity. Therefore, the study can provide no evidence of any kind that supports the hypothesis of a biological basis for transgender identity. A second study in this area (Reiner & Gearhart 2004) likewise considered exclusively XY subjects, and similarly provides evidence only for a biological bias towards a gender identity congruent with one's genetic sex, even in the face of medical and social "transition" interventions. None of this provides any evidence at all of a biological basis for transgender identity.

V. GENDER IDENTITY IS EMPIRICALLY NOT FIXED FOR MANY INDIVIDUALS.

112. Dr. Safer states that gender identity is "durable and cannot be changed by medical intervention." (Safer at 5.) Dr. Adkins likewise states that gender identity "cannot be voluntarily changed." (Adkins at 4.) There is extensive evidence that this is not correct. Instead, gender identity changes over time for many individuals.⁶ I summarize their two opinions as: they assert that a trans identity in a child or adolescent is immutable—unchangeable by medical, psychotherapeutic, or developmental processes.

A. Most children who experience gender dysphoria ultimately "desist" and resolve to cisgender identification.

113. A distinctive and critical characteristic of juvenile gender dysphoria is that multiple studies from separate groups and at different times have reported that in the large

⁶ See n1 *supra*.

majority of patients, absent a substantial intervention such as social transition or puberty blocking hormone therapy, it does *not* persist through puberty.

114. A recent article reviewed all existing follow-up studies that the author could identify of children diagnosed with gender dysphoria (11 studies), and reported that “every follow-up study of GD children, without exception, found the same thing: By puberty, the majority of GD children ceased to want to transition.” (Cantor 2019 at 1.) Another author reviewed the existing studies and reported that in “prepubertal boys with gender discordance . . . 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 et al. 2012 at 963; see also Cohen-Kettinis 2008 at 1895.) The Endocrine Society recognized this important baseline fact in its 2017 Guidelines. (Hembree 2017 at 3879.) It should be noted that the reason that the Dutch Protocol waited until age 14 to initiate puberty blockers was that it was well known that many children would desist if left free of hormonal intervention until that age.

115. Findings of high levels of desistance among children who experience gender dysphoria or incongruence have been reaffirmed in the face of critiques through thorough reanalysis of the underlying data. (Zucker 2018.)

116. As I explained in detail in Section IV above, it is not yet known how to distinguish those children who will desist from that small minority whose trans identity will persist.

117. It does appear that prevailing circumstances during particularly formative years can have a significant impact on the outcome of a juvenile’s gender dysphoria. A 2016 study reviewing the follow-up literature noted that “the period between 10 and 13 years” was “crucial” in that “both persisters and desisters stated that the changes in their social environment, the

anticipated and actual feminization or masculinization of their bodies, and the first experiences of falling in love and sexual attraction in this period, contributed to an increase (in the persisters) or decrease (in the desisters) of their gender related interests, behaviors, and feelings of gender discomfort.” (Ristori & Steensma 2016 at 16.) As I discuss in Section VI below, there is considerable evidence that early transition and affirmation causes far more children to persist in a transgender identity.

B. Desistance is increasingly observed among teens and young adults who first manifest GD during or after adolescence.

118. Desistance within a relatively short period may also be a common outcome for post-pubertal youths who exhibit recently described “rapid onset gender disorder.” I have observed an increasingly vocal online community of young women who have reclaimed a female identity after claiming a male gender identity at some point during their teen years, and young “detransitioners” (individuals in the process of reidentifying with their birth sex after having undergone a gender transition) are now receiving increasing attention in both clinical literature and social media channels. (It is my understanding that March 12, 2022, is scheduled to be Detransition Awareness Day.)

119. Almost all scientific articles on this topic have appeared within the last few years. Perhaps this historic lack of coverage is not entirely surprising – one academic who undertook an extensive review of the available scientific literature in 2021 noted that the phenomenon was “socially controversial” in that it “poses significant professional and bioethical challenges for those clinicians working in the field of gender dysphoria.” (Expósito Campos 2021 at 270.) This review reported on multifarious reasons for why individuals were motivated to detransition, which included coming to “understand[] how past trauma, internalized sexism, and other psychological difficulties influenced the experience of GD.”

120. In 2021, Lisa Littman of Brown University conducted a ground-breaking study of 100 teenage and young adults who had transitioned and lived in a transgender identity for a number of years, and then “detransitioned” or changed back to a gender identity matching their sex. Littman noted that the “visibility of individuals who have detransitioned is new and may be rapidly growing.” (Littman 2021 at 1.) Of the 100 detransitioners included in Littman’s study, 60% reported that their decision to detransition was motivated (at least in part) by the fact that they had become more comfortable identifying as their natal sex, and 38% had concluded that their gender dysphoria was caused by something specific such as trauma, abuse, or a mental health condition. (Littman 2021 at 9.)

121. A significant majority (76%) did not inform their clinicians of their detransition. (Littman 2021 at 11.)

122. A similar study that recruited a sample of 237 detransitioners (the large majority of whom had initially transitioned in their teens or early twenties) similarly reported that a common reason for detransitioning was the subject’s conclusion that his or her gender dysphoria was related to other issues (70% of the sample). (Vandenbussche 2021.)

123. The existence of increasing numbers of youth or young adult detransitioners has also been recently noted by Dr. Edwards-Leeper and Dr. Anderson. (Edwards-Leeper & Anderson 2021.) Edwards-Leeper and Anderson noted “the rising number of detransitioners that clinicians report seeing (they are forming support groups online)” which are “typically youth who experienced gender dysphoria and other complex mental health issues, rushed to medicalize their bodies and regretted it.” Other clinicians working with detransitioners have also noted the recent phenomenon. (Marchiano 2020.)

124. A growing body of evidence suggests that for many teens and young adults, a post-pubertal onset of transgender identification can be a transient phase of identity exploration, rather than a permanent identity, as evidenced by a growing number of young detransitioners (Entwistle 2020; Littman 2021; Vandenbussche 2021). Previously, the rate of detransition and regret was reported to be very low, although these estimates suffered from significant limitations and were likely undercounting true regret (D'Angelo 2018). As gender-affirmative care has become popularized, the rate of detransition appears to be accelerating.

125. A recent study from a UK adult gender clinic observed that 6.9% of those treated with gender-affirmative interventions detransitioned within 16 months, and another 3.4% had a pattern of care suggestive of detransition, yielding a rate of probable detransition in excess of 10%. Another 21.7%, however, disengaged from the clinic without completing their treatment plan. While some of these individuals later re-engaged with the gender service, the authors concluded, “detransitioning might be more frequent than previously reported.” (Hall et al. 2021).

126. Another study from a UK primary care practice found that 12.2% of those who had started hormonal treatments either detransitioned or documented regret, while the total of 20% stopped the treatments for a wider range of reasons. The mean age of their presentation with gender dysphoria was 20, and the patients had been taking gender-affirming hormones for an average 5 years (17 months-10 years) prior to discontinuing. Comparing these much higher rates of treatment discontinuation and detransition to the significantly lower rates reported by the older studies, the researchers noted: “Thus, the detransition rate found in this population is novel and questions may be raised about the phenomenon of overdiagnosis, overtreatment, or iatrogenic harm as found in other medical fields” (Boyd et al. 2022 at 15.) Indeed, given that regret may take up to 8-11 years to materialize (Dhejne et al., 2014; Wiepjes et al., 2018), many more

detransitioners are likely to emerge in the coming years. Detrancitioner research is still in its infancy, but the Littman and Vandenbussche studies in 2021 both report that detransitioners from the recently transitioning cohorts feel they were rushed into medical gender-affirmative interventions with irreversible effects, often without the benefit of appropriate, or in some instances any, psychologic exploration.

VI. TRANSITION AND AFFIRMATION IS AN IMPORTANT PSYCHOLOGICAL AND MEDICAL INTERVENTION THAT CHANGES GENDER IDENTITY OUTCOMES.

A. If both a typical gender or a transgender long-term gender identity outcome are possible for a particular patient, the alternatives are not medically neutral.

127. Where a juvenile experiences gender dysphoria, the gender identity that is stabilized will have a significant impact on the course of their life. Living in a transgender identity for a time will make desistance, if it is ever considered, more difficult to accomplish.

128. If the juvenile desists from the gender dysphoria and becomes reasonably comfortable with a gender identity congruent with their sex—the most likely outcome from a statistical perspective absent affirming intervention—the child will not require ongoing pharmaceutical maintenance and will not have their fertility destroyed post-puberty.

129. However, if the juvenile persists in a transgender identity, under current practices, the child is most likely to require regular administration of hormones for the rest of their lives, exposing them to significant physical, mental health, and relational risks (which I detail in Section IX below), as well as being irreversibly sterilized chemically and/or surgically. The child is therefore rendered a “patient for life” with complex medical implications further to a scientifically unproven course of treatment.

B. Social transition of young children is a powerful psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance.

130. Dr. Adkins asserts that social transition is a “a critical part” of the treatment of gender dysphoria. (Adkins at 6, 7). Rather, social transition has a critical *effect* on the persistence of gender dysphoria. It is evident from the scientific literature that engaging in therapy that encourages social transition before or during puberty—which would include participation on athletic teams designated for the opposite sex—is a psychotherapeutic intervention that dramatically changes outcomes. A prominent group of authors has written that “The gender identity affirmed during puberty appears to predict the gender identity that will persist into adulthood.” (Guss et al. 2015 at 421.) Similarly, a comparison of recent and older studies suggests that when an “affirming” methodology is used with children, a substantial proportion of children who would otherwise have desisted by adolescence—that is, achieved comfort identifying with their natal sex—instead persist in a transgender identity. (Zucker 2018 at 7.)

131. Indeed, a review of multiple studies of children treated for gender dysphoria across the last three decades found that early social transition to living as the opposite sex severely reduces the likelihood that the child will revert to identifying with the child’s natal sex, at least in the case of boys. That is, while, as I review above, studies conducted before the widespread use of social transition for young children reported desistance rates in the range of 80-98%, a more recent study reported that fewer than 20% of boys who engaged in a partial or complete social transition before puberty had desisted when surveyed at age 15 or older. (Zucker 2018 at 7⁷; Steensma et al. 2013.)⁸ Another researcher observed that a partial or complete gender

⁷ Zucker found social transition by the child to be strongly correlated with persistence for natal boys, but not for girls. (Zucker 2018 at 5.)

⁸ Only 2 (3.6%) of 56 of the male desisters observed by Steensma et al. had made a complete or partial transition prior to puberty, and of the twelve males who made a complete or

social transition prior to puberty “proved to be a unique predictor of persistence.” (Singh et al. 2021 at 14.)

132. Some vocal practitioners of prompt affirmation and social transition even proudly claim that essentially *no* children who come to their clinics exhibiting gender dysphoria or cross-gender identification desist in that identification and return to a gender identity consistent with their biological sex.⁹ This is a very large change as compared to the desistance rates documented apart from social transition.

133. Even voices generally supportive of prompt affirmation and social transition are acknowledging a causal connection between social transition and this change in outcomes. As the Endocrine Society recognized in its 2017 Guidelines: “If children have completely socially transitioned, they may have great difficulty in returning to the original gender role upon entering puberty. . . [S]ocial transition (in addition to GD/gender incongruence) has been found to contribute to the likelihood of persistence.” (Hembree et al. 2017 at 3879.) The fact is that these unproven interventions with the lives of kids and their families have systematically documented outcomes. Given this observed phenomenon, I agree with Dr. Ken Zucker who has written that social transition in children must be considered “a form of psychosocial treatment.” (Zucker 2020 at 1.)

134. Moreover, as I review below, social transition cannot be considered or decided alone. Studies show that engaging in social transition starts a juvenile on a “conveyor belt” path

partial transition prior to puberty, only two had desisted when surveyed at age 15 or older. Steensma 2013 at 584.

⁹ See, e.g., Ehrensaft 2015 at 34: “In my own clinical practice . . . of those children who are carefully assessed as transgender and who are allowed to transition to their affirmed gender, we have no documentation of a child who has ‘desisted’ and asked to return to his or her assigned gender.”

that almost inevitably leads to the administration of puberty blockers, which in turn almost inevitably leads to the administration of cross-sex hormones. The emergence of this well-documented path means that the implications of taking puberty blockers *and* cross-sex hormones must be taken into account even where “only” social transition is being considered or requested by the child or family. As a result, there are a number of important “known risks” associated with social transition.

C. Administration of puberty blockers is a powerful medical and psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance on the historically observed timeline.

135. Dr. Adkins speaks of the use of puberty blockers as though this major hormonal disruption of some of the most basic aspects of ordinary human development were entirely benign, acting as a “pause.” (Adkins at 7.) This optimistic view is not based on science. In fact, it should be understood that puberty blockers are usually administered to early-stage adolescents as part of a path that includes social transition. Moreover, medicine does not know what the long-term health effects on bone, brain, and other organs are of a “pause” between ages 11-16. Medicine also does not know if the long-term effects of these compounds are different in boys than in girls. The mental health professional establishment likewise does not know the long-term effects on coping skills, interpersonal comfort, and intimate relationships of this “pause” while one’s peers are undergoing their maturational gains in these vital arenas of future mental health. I address medical, social, and mental health risks associated with the use of puberty blockers in Section IX. Here, I note that the data strongly suggests that the administration of puberty blockers, too, must be considered to be a component of a “psychosocial treatment” with complex implications, rather than a “pause.”

136. Multiple studies show that the large majority of children who begin puberty blockers go on to receive cross-sex hormones. (de Vries 2020 at 2.) A recent study by the

Tavistock and Portman NHS Gender Identity Development Service (UK)—the world’s largest gender clinic—found that 98% of adolescents who underwent puberty suppression continued on to cross-sex hormones. (Carmichael et al 2021 at 12.)¹⁰

137. These studies demonstrate that going on puberty blockers virtually eliminates the possibility of desistance in juveniles. Rather than a “pause,” puberty blockers appear to act as a psychosocial “switch,” decisively shifting many children to a persistent transgender identity. Therefore, as a practical and ethical matter the decision to put a child on puberty blockers must be considered as the equivalent of a decision to put that child on cross-sex hormones, with all the considerations and informed consent obligations implicit in that decision.

VII. TRANSITION AND AFFIRMATION ARE EXPERIMENTAL THERAPIES THAT HAVE NOT BEEN SHOWN TO IMPROVE MENTAL OR PHYSICAL HEALTH OUTCOMES BY YOUNG ADULTHOOD.

138. It is undisputed that children and adolescents who present with gender dysphoria exhibit a very high level of mental health comorbidities. (Section II.C.) Whether the gender dysphoria is cause or effect of other diagnosed or undiagnosed mental health conditions, or whether these are merely coincident comorbidities, is hotly disputed, but the basic fact is not.

139. Dr. Adkins asserts that when the “transition, affirmation, and hormones” therapy that she advocates is followed, “gender dysphoria is easily managed” (Adkins at 5), implying that transition and hormone therapy have been proven to be effective in relieving gender dysphoria and the general mental health distress that broadly afflicts these children and adolescents. This is scientifically incorrect. It ignores both what is known and what is unknown.

¹⁰ See also Brik 2020 where Dutch researchers found nearly 97% of adolescents who received puberty blockers proceeded to cross-sex hormones.

A. The knowledge base concerning therapies for gender dysphoria is “very low quality.”

140. At the outset, it is important for all sides to admit that the knowledge base concerning the causes and treatment of gender dysphoria has low scientific quality.

141. In evaluating claims of scientific or medical knowledge, it is axiomatic in science that no knowledge is absolute, and to recognize the widely accepted hierarchy of reliability when it comes to “knowledge” about medical or psychiatric phenomena and treatments. Unfortunately, in this field opinion is too often confused with knowledge, rather than clearly locating what exactly is scientifically known. In order of increasing confidence, such “knowledge” may be based upon data comprising:

- a. Expert opinion—it is perhaps surprising to educated laypersons that expert opinion standing alone is the lowest form of knowledge, the least likely to be proven correct in the future, and therefore does not garner as much respect from professionals as what follows;
- b. A single case or series of cases (what could be called anecdotal evidence) (Levine 2016 at 239.);
- c. A series of cases with a control group;
- d. A cohort study;
- e. A randomized double-blind clinical trial;
- f. A review of multiple trials;
- g. A meta-analysis of multiple trials that maximizes the number of patients treated despite their methodological differences to detect trends from larger data sets.

142. Prominent voices in the field have emphasized the severe lack of scientific knowledge in this field. The American Academy of Child and Adolescent Psychiatry has

recognized that “Different clinical approaches have been advocated for childhood gender discordance. . . . There have been no randomized controlled trials of any treatment. . . . [T]he proposed benefits of treatment to eliminate gender discordance . . . must be carefully weighed against . . . possible deleterious effects.” (Adelson et al. at 968–69.) Similarly, the American Psychological Association has stated, “because no approach to working with [transgender and gender nonconforming] children has been adequately, empirically validated, consensus does not exist regarding best practice with pre-pubertal children.” (APA 2015 at 842.)

143. Critically, “there are no randomized control trials with regard to treatment of children with gender dysphoria.” (Zucker 2018 at 8.) On numerous critical questions relating to cause, developmental path if untreated, and the effect of alternative treatments, the knowledge base remains primarily at the level of the practitioner’s exposure to individual cases, or multiple individual cases. As a result, claims to certainty are not justifiable. (Levine 2016 at 239.)

144. Within the last two years, at least three formal evidence reviews concerning hormonal interventions for gender dysphoria have been conducted. All three found all of the available clinical evidence to be very low quality.

145. The British National Health Service (NHS) commissioned formal “evidence reviews” of all clinical papers concerning the efficacy and safety of puberty blockers and cross-sex hormones as treatments for gender dysphoria. These evidence reviews were performed by the U.K. National Institute for Health and Care Excellence (NICE), applying the respected “GRADE” criteria for evaluating the strength of clinical evidence.

146. Both the review of evidence concerning puberty blockers and the review of evidence concerning cross-sex hormones were published in 2020, and both found that *all* available evidence as to both efficacy and safety was “very low quality” according to the

GRADE criteria. (NICE 2021a; NICE 2021b.) “Very low quality” according to GRADE means there is a high likelihood that the patient *will not experience* the hypothesized benefits of the treatment. (Balshem et al. 2011.)

147. Similarly, the highly respected Cochrane Library—the leading source of independent systematic evidence reviews in health care—commissioned an evidence review concerning the efficacy and safety of hormonal treatments now commonly administered to “transitioning transgender women” (i.e., testosterone suppression and estrogen administration to biological males). That review, also published in 2020, concluded that “We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition.” (Haupt et al. 2020 at 2.) It must be understood that both the NICE and the Cochrane reviews considered *all* published scientific studies concerning these treatments.

148. As to social transition, as I have noted above, considerable evidence suggests that socially transitioning a pre-pubertal child puts him or her on a path from which very few children escape—a path which includes puberty blockers and cross-sex hormones before age 18. As a practical matter, then, a decision about social transition for a child must be made in light of what is known and what is unknown about the effects of those expected hormonal interventions.

149. I discuss safety considerations in Section IX below. Here, I detail what is known about the effectiveness of social and hormonal transition and affirmation to improve the mental health of individuals diagnosed with gender dysphoria.

B. Youth who adopt a transgender identity show no durable improvement in mental health after social, hormonal, or surgical transition and affirmation.

150. As I noted above, the evidence reviews for the efficacy and safety of hormonal interventions published in 2020 concluded that the supporting evidence is so poor that there is “a

high likelihood that the patient will not experience the hypothesized benefits of the treatment.”

There is now some concrete evidence that on average they do not experience those benefits.

151. An important paper published in 2021 by Tavistock clinic clinicians provided the results of the first longitudinal study that measured widely used metrics of general psychological function and suicidality before commencement of puberty blockers, and then at least annually after commencing puberty blockers. After up to three years, they “found no evidence of change in psychological function with GnRHa treatment as indicated by parent report (CBCL) or self-report (YSR) of overall problems, internalizing or externalizing problems or self-harm” as compared to the pre-puberty-blocker baseline evaluations. “Outcomes that were not formally tested also showed little change.” (Carmichael et al. 2021 at 18-19.) Similarly, a study by Branström and Pachankis of the case histories of a set of individuals diagnosed with GD in Sweden found no positive effect on mental health from hormonal treatment. (Landen 2020.)

152. A cohort study by authors from Harvard and Boston Children’s Hospital found that youth and young adults (ages 12-29) who self-identified as transgender had an elevated risk of depression (50.6% vs. 20.6%) and anxiety (26.7% vs. 10.0%); a higher risk of suicidal ideation (31.1% vs. 11.1%), suicide attempts (17.2% vs. 6.1%), and self-harm without lethal intent (16.7% vs. 4.4%) relative to the matched controls; and a significantly greater proportion of transgender youth accessed inpatient mental health care (22.8% vs. 11.1%) and outpatient mental health care (45.6% vs. 16.1%) services. (Reisner et al. 2015 at 6.) Similarly, a recent longitudinal study of transgender and gender diverse youth and young adults in Chicago found rates of alcohol and substance abuse “substantially higher than those reported by large population-based studies of youth and adults.” (Newcomb et al. 2020 at 14.) Members of the clinical and research team at the prominent Dutch VU University gender dysphoria center recently compared mental

health metrics of two groups of subjects before (mean age 14.5) and after (mean age 16.8) puberty blockers. But they acknowledged that the structure of their study meant that it “can . . . not provide evidence about . . . long-term mental health outcomes,” and that based on what continues to be extremely limited scientific data, “Conclusions about the long-term benefits of puberty suppression should . . . be made with extreme caution.” In other words, we just don’t know. (van der Miesen et al. 2020 at 703.)

153. Kiera Bell, who was diagnosed with gender dysphoria at the Tavistock Clinic, given cross-sex hormones, and subjected to a mastectomy, before desisting and reclaiming her female gender identity, and a Swedish teen girl who appeared in a recent documentary after walking that same path, have both stated that they feel that they were treated “like guinea pigs,” experimental subjects. They are not wrong.

C. Long-term mental health outcomes for individuals who persist in a transgender identity are poor.

154. The responsible MHP cannot focus narrowly on the short-term happiness of the young patient, but must instead consider the happiness and health of the patient from a “life course” perspective. When we look at the available studies of individuals who continue to inhabit a transgender identity across adult years, the results are strongly negative.

155. In the United States, the death rates of trans veterans are comparable to those with schizophrenia and bipolar diagnoses—20 years earlier than expected. These crude death rates include significantly elevated rates of substance abuse as well as suicide. (Levine 2017 at 10.) Similarly, researchers in Sweden and Denmark have reported on almost all individuals who underwent sex-reassignment surgery over a 30-year period. (Dhejne et al. 2011; Simonsen et al. 2016.) The Swedish follow-up study similarly found a suicide rate in the post-SRS population

19.1 times greater than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions. (Levine 2017 at 10.)

156. A recent study in the American Journal of Psychiatry reported high mental health utilization patterns of adults for ten years after surgery for approximately 35% of patients. (Bränström & Panchakis, 2020.) Indeed, earlier Swedish researchers in a long-term study of all patients provided with SRS over a 30-year period (median time since SRS of > 10 years) concluded that individuals who have SRS exhibit such poor mental health that they should be provided very long-term psychiatric care as the “final” transition step of SRS. (Dhejne et al. 2011, at 6-7.) Unfortunately, across the succeeding decade, in Sweden and elsewhere their suggestion has been ignored.

157. I will note that these studies do not tell us whether the subjects first experienced gender dysphoria as children, adolescents, or adults, so we cannot be certain how their findings apply to each of these subpopulations which represent quite different pathways. But in the absence of knowledge, we should be cautious.

158. Meanwhile, no studies show that affirmation of pre-pubescent children or adolescents leads to more positive outcomes (mental, physical, social, or romantic) by, e.g., age 25 or older than does “watchful waiting” or ordinary therapy.

159. The many studies that I have cited here warn us that as we look ahead to the patient’s life as a young adult and adult, the prognosis for the physical health, mental health, and social well-being of the child or adolescent who transitions to live in a transgender identity is not good. Gender dysphoria is not “easily managed” when one understands the marginalized, vulnerable physical, social, and psychological status of adult trans populations.

VIII. TRANSITION AND AFFIRMATION DO NOT DECREASE, AND MAY INCREASE, THE RISK OF SUICIDE.

A. The risk of suicide among transgender youth is confused and exaggerated in the public mind.

160. While suicide is closely linked to mental health, I comment on it separately because rhetoric relating to suicide figures so prominently in debates about responses to gender dysphoria.

161. At the outset, I will note that any discussion of suicide when considering younger children involves very long-range and very uncertain prediction. Suicide in pre-pubescent children is extremely rare, and the existing studies of gender identity issues in pre-pubescent children do not report significant incidents of suicide. Any suggestion otherwise is misinformed. Our focus for this topic, then, is on adolescents and adults.

162. Some authors have reported rates of suicidal thoughts and behaviors among trans-identifying teens or adults ranging from 25% to as high as 52%, generally through non-longitudinal self-reports obtained from non-representative survey samples. (Toomey et al. 2018.) Dr. Adkins asserted in her declaration submitted in support of Plaintiff's preliminary injunction motion that "Attempted suicide rates in the transgender community are over 40%," and that "[t]he only treatment to avoid this serious harm is to . . . affirm gender identity." (Adkins at 6.) Contrary to these assertions, no studies show that affirmation of children (or anyone else) reduces suicide, prevents suicidal ideation, or improves long-term outcomes, as compared to either a "watchful waiting" or a psychotherapeutic model of response, as I have described above. Rhetorical references to figures such as 40%—and some published studies—confuse suicidal thoughts and actions that represent a cry for help, manipulation, or expression of rage with serious attempts to end life. Such statements or studies ignore a crucial and long-recognized distinction.

163. I have included suicidality in my discussion of mental health above. Here, I focus on actual suicide. Too often, in public comment suicidal thoughts are blurred with suicide. Yet the available data tells us that suicide among children and youth suffering from gender dysphoria is extremely rare.

164. An important new analysis of data covering patients as well as those on the waiting list (and thus untreated) at the UK Tavistock gender clinic—the world’s largest gender clinic—found a total of only four completed suicides across 11 years’ worth of patient data, reflecting an estimated cumulative 30,000 patient-years spent by patients under the clinic’s care or on its waiting list. This corresponded to an annual suicide rate of 0.013%. The proportion of individual patients who died by suicide was 0.03%, which is orders of magnitude smaller than trans adolescents who self-report suicidal behavior or thoughts on surveys. (Biggs 2022b.)

165. Thus, only a minute fraction of trans-identifying adolescents who report thoughts or conduct considered to represent “suicidality” actually commit suicide. I agree with the statement by Dr. Zucker that the assertion by, for example, Karasic and Ehrensaft (2015) that completed suicides among transgender youth are “alarmingly high” “has no formal and systematic empirical basis.” (Zucker 2019 at 3.)

166. Professor Biggs of Oxford, author of the study of incidence of suicide among Tavistock clinic patients, rightly cautions that it is “irresponsible to exaggerate the prevalence of suicide.” (Biggs 2022b at 4.) It is my opinion that telling parents—or even allowing them to believe from their internet reading—that they face a choice between “a live son or a dead daughter” is both factually wrong and unethical. Informed consent requires clinicians to tell the truth and ensure that their patients understand the truth. To be kind, the clinicians who believe

such figures represent high risk of ultimate suicide in adolescence simply do not know the truth; they are ill-informed.

B. Transition of any sort has not been shown to reduce levels of suicide.

167. Every suicide is a tragedy, and steps that reduce suicide should be adopted. I have noted above that suicidality (that is, suicidal thoughts or behaviors, rather than suicide) is common among transgender adolescents and young adults before, during, and after social and medical transition. If a medical or mental health professional believes that an individual he or she is diagnosing or treating for gender dysphoria presents a suicide risk, in my view it is unethical for that professional merely to proceed with treatment for gender dysphoria and hope that “solves the problem.” Rather, that professional has an obligation to provide or refer the patient for evidence-based therapies for addressing depression and suicidal thoughts that are well-known to the profession. (Levine 2016 at 242.)

168. This is all the more true because there is in fact no evidence that social and/or medical transition reduces the risk or incidence of actual suicide. On the contrary, in his analysis of those who were patients of or on the waiting list of the Tavistock clinic, Professor Biggs found that the suicide rate was not higher among those on the clinic’s waiting list (and thus as-yet untreated), than for those who were patients under care. (Biggs 2022b.) And as corrected, Bränström and Pachankis similarly acknowledge that their review of records of GD patients “demonstrated no advantage of surgery in relation to . . . hospitalizations following suicide attempts.” (I assume for this purpose that attempts that result in hospitalization are judged to be so serious as to predict a high rate of future suicide if not successfully addressed.”)¹¹

¹¹ Turban et al. (2020) has been described in press reports as demonstrating that administration of puberty suppressing hormones to transgender adolescents reduces suicide or suicidal ideation. The paper itself does not make that claim, nor permit that conclusion.

C. Long-term life in a transgender identity correlates with very high rates of completed suicide.

169. As with mental health generally, the patient, parent, or clinician fearing the risk of suicide must consider not just the next month or year, but a life course perspective.

170. There are now four long-term studies that analyze completed suicide among those living in transgender identities into adulthood. The results vary significantly, but are uniformly highly negative.

171. Dhejne reported a long-term follow-up study of subjects after sex reassignment surgery. Across the multi-year study, subjects who had undergone SRS committed suicide at 19.1 times the expected rate compared to general population controls matched by age and both sexes. MtF subjects committed suicide at 13.9 times the expected rate, and FtM subjects committed suicide at 40.0 times the expected rate. (Dhejne et al. 2011 Supplemental Table S1.)

172. Asscheman, also writing in 2011, reported results of a long-term follow-up of all transsexual subjects of the Netherlands' leading gender medicine clinic who started cross-sex hormones before July 1, 1997, a total of 1331 patients. Due to the Dutch system of medical and death records, extensive follow-up was achieved. Median follow-up period was 18.5 years. The mortality rate among MtF patients was 51% higher than among the age-matched general population; the rate of completed suicide among MtF patients was six times that of the age-matched general population. (Asscheman et al. 2011.)

173. Importantly, Asscheman et al. found that "No suicides occurred within the first 2 years of hormone treatment, while there were six suicides after 2-5 years, seven after 5-10 years, and four after more than 10 years of CSH treatment at a mean age of 41.5 years." (Asscheman et al. 2011 at 637-638.) This suggests that studies that follow patients for only a year or two after treatment are insufficient. Asscheman et al.'s data suggest that such short-term follow-up is

engaging only with an initial period of optimism, and will simply miss the feelings of disillusion and the increase in completed suicide that follows in later years.

174. A retrospective, long-term study published in 2020 of a very large cohort (8263) of patients referred to the Amsterdam University gender clinic between 1972 and 2017 found that the annual rate of completed suicides among the transgender subjects was “three to four times higher than the general Dutch population.” “[T]he incidence of observed suicide deaths was almost equally distributed over the different stages of treatment.” The authors concluded that “vulnerability for suicide occurs similarly in the different stages of transition.” (Wiepjes et al. 2020.) In other words, neither social nor medical transition reduced the rate of suicide.

175. As with Asscheman et al., Wiepjes et al. found that the median time between start of hormones and suicide (when suicide occurred) was 6.1 years for natal males, and 6.9 years for natal females. Again, short- or even medium-term studies will miss this suicide phenomenon.

176. A 2021 study analyzed the case histories of a cohort of 175 gender dysphoria patients treated at one of the seven UK adult gender clinics who were “discharged” (discontinued as patients) within a selected one-year period. The authors reported the rather shocking result that 7.7% (3/39) of natal males who were diagnosed and admitted for treatment, and who were between 17 and 24 years old, were “discharged” because they committed suicide during treatment. (Hall et al. 2021, Table 2.)

177. None of these studies demonstrates that the hormonal or surgical intervention *caused* suicide. That is possible, but as we have seen, the population that identifies as transgender suffers from a high incidence of comorbidities that correlate with suicide. What these studies demonstrate—at the least—is that this remains a troubled population in need of extensive and careful psychological care that they generally do not receive, and that neither

hormonal nor surgical transition and “affirmation” resolve their underlying problems and put them on the path to a stable and healthy life.

178. In sum, claims that affirmation will reduce the risk of suicide for children and adolescents are not based on science. Instead, transition of any sort must be justified, if at all, as a life-enhancing measure, not a lifesaving measure. (Levine 2016 at 242.) In my opinion, this is an important fact that patients, parents, and even many MHPs fail to understand.

IX. HORMONAL INTERVENTIONS ARE EXPERIMENTAL PROCEDURES THAT HAVE NOT BEEN PROVEN SAFE.

179. Dr. Adkins also appears to assert as a fact—but without citation to peer-reviewed literature—that social transition, puberty blockers, and cross-sex hormones are known to be “safe.” (Adkins at 5-6, 8.) This is not true. And Dr. Adkins, along with a number of voices in the field, also asserts that puberty blockers act merely as a “pause” in the process of puberty-driven maturation, suggesting that this hormonal intervention has been proven to be fully reversible. This is also an unproven belief.

180. On the contrary, no studies have been done that meaningfully demonstrate that either puberty blockers or cross-sex hormones, as prescribed for gender dysphoria, are safe in other than the short run. No studies have attempted to determine whether the effects of puberty blockers, as currently being prescribed for gender dysphoria, are fully reversible. Neither Dr. Adkins nor Dr. Safer cites any such studies, and there are none. There are only pronouncements. In fact, there are substantial reasons for concern that these hormonal interventions are not safe. Multiple researchers have expressed concern that the full range of possible harms have not even been correctly conceptualized.

181. Because, as I have explained in Section VI, recent evidence demonstrates that pre-pubertal social transition almost always leads to progression on to puberty blockers which in turn

almost always leads to the use of cross-sex hormones, physicians bear the ethical responsibility for a thorough informed consent process for parents and patients that includes this fact and its full implications. Informed consent does not mean sharing with the parents and patients what the doctor believes: it means sharing what is known and what is not known about the intervention. So much of what doctors believe is based on mere trust in what they have been taught. Neither they themselves nor their teachers may be aware of the scientific foundation and scientific limitations of what they are recommending.

A. Use of puberty blockers has not been shown to be safe or reversible for gender dysphoria.

182. As I noted above, the recent very thorough literature review performed for the British NHS concluded that *all* available clinical evidence relating to “safety outcomes” from administration of puberty blockers for gender dysphoria is of “very low certainty.” (NHS 2020a at 6.)

183. In its 2017 Guidelines, the Endocrine Society cautioned that “in the future we need more rigorous evaluations of the effectiveness and safety of endocrine and surgical protocols” including “careful assessment of . . . the effects of prolonged delay of puberty in adolescents on bone health, gonadal function, and the brain (including effects on cognitive, emotional, social, and sexual development).” (Hembree et al. 2017 at 3874.) No such “careful” or “rigorous” evaluation of these very serious safety questions has yet been done.

184. Some advocates appear to assume that puberty blockers are “safe” because they have been approved by the Food and Drug Administration (FDA) for use to treat precocious puberty—a rare condition in which the puberty process may start at eight or younger. No such conclusion can be drawn. As the “label” for Lupron (one of the most widely prescribed puberty blockers) explains, the FDA approved the drug only *until* the “age was appropriate for entry into

puberty.” The study provides no information at all as to the safety or reversibility of instead *blocking* healthy, normally-timed puberty’s beginning, and *throughout* the years that body-wide continuing changes normally occur. Given the physical, social, and psychological dangers to the child with precocious puberty, drugs like Lupron are effective in returning the child to a puerile state without a high incidence of significant side effects—that is, they are “safe” to reverse the condition. But use of drugs to suppress normal puberty has multiple organ system effects whose long-term consequences have not been investigated.

185. **Fertility:** The Endocrine Society Guidelines rightly say that research is needed into the effect of puberty blockade on “gonadal function” and “sexual development.” The core purpose and function of puberty blockers is to prevent the maturation of the ovaries or testes, the sources of female hormones and male hormones when stimulated by the pituitary gland. From this predictable process fertility is accomplished within a few years. Despite widespread assertions that puberty blockers are “fully reversible,” there has been no study published on the critical question of whether patients ever develop normal levels of fertility if puberty blockers are terminated after a “prolonged delay of puberty.” The 2017 Endocrine Society Guidelines are correct that are no data on achievement of fertility “following prolonged gonadotropin suppression” (that is, puberty blockade). (Hembree et al. 2017 at 3880.)

186. **Bone strength:** Multiple studies have documented adverse effects from puberty blockers on bone density. (Klink et al. 2015; Vlot et al. 2016; Joseph et al. 2019.) The most recent found that after two years on puberty blockers, the bone density measurements for a significant minority of the children had declined to clinically concerning levels. Density in the spines of some subjects fell to a level found in only 0.13% of the population. (Biggs 2021.) Some

other studies have found less concerning effects on bone density. While the available evidence remains limited and conflicting, it is not possible to conclude that the treatment is “safe.”

187. **Brain development:** Important neurological growth and development in the brain occurs across puberty. The anatomic and functional effect on brain development of blocking the natural puberty process has not been well studied. A prominent Australian clinical team recently expressed concern that “no data were (or are) available on whether delaying the exposure of the brain to a sex steroid affects psychosexual, cognitive, emotional, or other neuropsychological maturation.” (Kozlowska et al. 2021 at 89.) In my opinion, given the observed correlation between puberty and brain development, the default hypothesis must be that there *would* be a negative impact. For the purpose of protecting patients all over the world, the burden of proof should be on advocates to first demonstrate to a reasonable degree of certainty that brain structure and its measurable cognitive and affect processing are not negatively affected. This recalls the ethical principle: Above All Do No Harm.

188. The Endocrine Society Guidelines acknowledge as much, stating that side effects of pubertal suppression “may include . . . unknown effects on brain development,” that “we need more rigorous evaluations of . . . the effects of prolonged delay of puberty in adolescents on . . . the brain (including effects on cognitive, emotional, social, and sexual development),” and stating that “animal data suggests there may be an effect of GnRH analogs [puberty blockers] on cognitive function.” (Hembree et al. 2017 at 3874, 3882, 3883.) Given this concern, one can only wonder why this relevant question has not been scientifically investigated in a large group of natal males and females.

189. There has been a longitudinal study of one natal male child, assessed before, and again 20 months after, puberty suppression was commenced. It reported a reduction in the

patient's "global IQ," measured an anomalous absence of certain structural brain development expected during normal male puberty, and hypothesized that "a plausible explanation for the G[lobal] IQ decrease should consider a disruption of the synchronic [i.e., appropriately timed] development of brain areas by pubertal suppression." (Schneider et al. 2017 at 7.) This should cause parents and practitioners serious concern.

190. Whether any impairment of brain development is "reversed" upon later termination of puberty blockade has, to my knowledge, not been studied at all. As a result, assertions by medical or mental health professionals that puberty blockade is "fully reversible" are unjustified and based on hope rather than science.

191. Without a number of additional case studies—or preferably statistically significant clinical studies—two questions remain unanswered: Are there brain anatomic or functional impairment from puberty blockers? And are the documented changes reversed over time when puberty blockers are stopped? With these questions unanswered, it is impossible to assert with certainty that the effects of this class of medications are "fully reversible." Such an assertion is another example of ideas based on beliefs rather than on documentation, on hope not science.

192. **Psycho-social harm:** Puberty is a time of stress, anxiety, bodily discomfort during physical development, and identity formation for *all* humans. No careful study has been done of the long-term impact on the young person's coping skills, interpersonal comfort, and intimate relationships from remaining puerile for, e.g., two to five years while one's peers are undergoing pubertal transformations, and of then undergoing an artificial puberty at an older age. However, pediatricians and mental health professionals hear of distress, concern, and social awkwardness in those who naturally have a delayed onset of puberty. In my opinion, individuals

in whom puberty is delayed multiple years are likely to suffer at least subtle negative psychosocial and self-confidence effects as they stand on the sidelines witnessing their peers developing the social relationships (and attendant painful social learning experiences) that come with adolescence. (Levine 2018 at 9.) Social anxiety and social avoidance are common findings in the evaluation of trans-identified children and teens. Are we expected to believe that creating years of being further different than their peers has no lasting internal consequences? Do we ignore Adolescent Psychiatry's knowledge of the importance of peer groups among adolescents?

193. We simply do not know what all the psychological impacts of NOT grappling with puberty at the ordinary time may be, because it has not been studied. And we have no information as to whether that impact is "fully reversible."

194. In addition, since the overwhelming proportion of children who begin puberty blockers continue on to cross-sex hormones, it appears that there is an important element of "psychological irreversibility" in play. The question of to what extent the physical and developmental impacts of puberty blockers might be reversible is an academic one, if psycho-social realities mean that very few patients will ever be able to make that choice once they have started down the road of social transition and puberty blockers.

B. Use of cross-sex hormones in adolescents for gender dysphoria has not been shown to be medically safe except in the short term.

195. As with puberty blockers, all evidence concerning the safety of extended use of cross-sex hormones is of "very low quality." The U.K. NICE evidence review cautioned that "the safety profiles" of cross-sex hormone treatments are "largely unknown," and that several of the limited studies that do exist reported high numbers of subjects "lost to follow-up," without explanation—a worrying indicator. (NICE 2020b.)

196. The 2020 Cochrane Review reported that: “We found insufficient evidence to determine the . . . safety of hormonal treatment approaches for transgender women in transition.” (Haupt et al. 2020 at 4.) Even the Endocrine Society tagged all its recommendations for the administration of cross-sex hormones as based on “low quality evidence.” (Hembree et al. 2017 at 3889.)

197. **Sterilization:** It is undisputed, however, that harm to the gonads is an expected effect, to the extent that it must be assumed that cross-sex hormones will sterilize the patient. Thus, the Endocrine Society 2017 Guidelines caution that “[p]rolonged exposure of the testes to estrogen has been associated with testicular damage,” that “[r]estoration of spermatogenesis after prolonged estrogen treatment has not been studied,” and that “[i]n biological females, the effect of prolonged treatment with exogenous testosterone upon ovarian function is uncertain.” (Hembree et al. 2017 at 3880.)¹²

198. The Guidelines go on to recommend that the practitioner counsel the patient about the (problematic and uncertain) options available to collect and preserve fertile sperm or ova before beginning cross-sex hormones. The life-long negative emotional impact of infertility on both men and women has been well studied. While this impact has not been studied specifically within the transgender population, the opportunity to be a parent is likely a human, emotional need, and so should be considered an important risk factor when considering gender transition for any patient.

¹² See also Guss et al. 2015 at 4 (“a side effect [of cross-sex hormones] may be infertility”) and at 5 (“cross-sex hormones . . . may have irreversible effects”); Tishelman et al. 2015 at 8 (Cross-sex hormones are “irreversible interventions” with “significant ramifications for fertility”).

199. **Sexual response:** Puberty blockers prevent maturation of the sexual organs and response. Some, and perhaps many, transgender individuals who did not go through puberty consistent with their sex and are then put on cross-sex hormones face significantly diminished sexual response as they enter adulthood and are unable ever to experience orgasm. In the case of males, the cross-sex administration of estrogen limits penile genital growth and function. In the case of females, prolonged exposure to exogenous testosterone impairs vaginal function. Much has been written about the negative psychological and relational consequences of anorgasmia among non-transgender individuals that is ultimately applicable to the transgendered. (Levine 2018 at 6.) At the same time, prolonged exposure of females to exogenous testosterone often increases sexual drive to a distracting degree. It is likely that parents and physicians are uncomfortable discussing any aspects of genital sexual activity with patients.

200. **Cardiovascular harm:** Several researchers have reported that cross-sex hormones increase the occurrence of various types of cardiovascular disease, including strokes, blood clots, and other acute cardiovascular events. (Getahun et al. 2018; Guss et al. 2015; Asscheman et al. 2011.) With that said, I agree with the conclusion of the Endocrine Society committee (like that of the NICE Evidence Review) that: “A systematic review of the literature found that data were insufficient (due to very low-quality evidence) to allow a meaningful assessment of patient-important outcomes, such as death, stroke, myocardial infarction, or venous thromboembolism in transgender males. Future research is needed to ascertain the potential harm of hormonal therapies.” (Hembree et al. 2017 at 3891.) Future research questions concerning long-term harms need to be far more precisely defined. The question of whether cross-sex hormones are safe for adolescents and young adults cannot be answered by analogies to hormone replacement therapy in menopausal women (which is not a cross-sex usage).

Medicine has answered safety questions for menopausal women in terms of cancer and cardiovascular safety: at what dose, for what duration, and at what age range. The science of endocrine treatment of gender dysphoric youth is being bypassed by short-term clinical impressions of safety even though physicians know that cardiovascular and cancer processes often develop over many years.

201. Further, in contrast to administration for menopausal women, hormones begun in adolescence are likely to be administered for four to six decades. The published evidence of adverse impact, coupled with the lack of data sufficient to reach a firm conclusion, make it irresponsible to assert that cross-sex hormones “are safe.”

202. **Harm to family and friendship relationships:** As a psychiatrist, I recognize that mental health is a critical part of health generally, and that relationships cannot be separated from and profoundly impact mental health. Gender transition routinely leads to isolation from at least a significant portion of one’s family in adulthood. In the case of a juvenile transition, this will be less dramatic while the child is young, but commonly increases over time as siblings who marry and have children of their own do not wish the transgender individual to be in contact with those children. By adulthood, the friendships of transgender individuals tend to be confined to other transgender individuals (often “virtual” friends known only online) and the generally limited set of others who are comfortable interacting with transgender individuals. (Levine 2017 at 5.) My concerns about this are based on decades of observations in my professional work with patients.

203. **Sexual-romantic harms associated with transition:** After adolescence, transgender individuals find the pool of individuals willing to develop a romantic and intimate relationship with them to be greatly diminished. When a trans person who passes well reveals his or her natal sex, many potential mates lose interest. When a trans person does not pass well,

options are likely further diminished. But regardless of a person's appearance, these adults soon learn that many of their dates are looking for exotic sexual experiences rather than genuinely loving relationships. (Levine 2017 at 5, 13; Levine 2013 at 40.)

C. The timing of harms.

204. The multi-year delay between start of hormones and the spike in completed suicide observed by Professor Biggs in the Tavistock data (as discussed in Section VIII above) warns us that the safety and beneficence of these treatments cannot be judged based on short-term studies, or studies that do not continue into adulthood. Similarly, several of the harms that I discuss above would not be expected to manifest until the patient reaches at least middle-age. For example, stroke or other serious cardiovascular event is a complication that is unlikely to manifest during teen years even if its likelihood over the patient's lifetime has been materially increased via obesity, lipid abnormalities, and smoking. Regret over sterilization or over an inability to form a stable romantic relationship may occur sooner. Psychological challenges of being a trans adult may become manifest after the medical profession is only doing routine follow up care—or, in many cases, has lost contact with the patient altogether. Because few, if any, clinics in this country are conducting systematic long-term follow-up with their child and adolescent patients, the doctors who counsel, prescribe, or perform hormonal and surgical therapies are unlikely ever to become aware of the later negative life impacts, however severe. These concerns are compounded by the findings in the recent “detransitioner” research that 76% did not inform their clinicians of their detransition. (Littman 2021.)

205. The possibility that steps along the transition and affirmation pathway, while lessening the pain of gender dysphoria in the short term, could lead to additional sources of crippling emotional and psychological pain, are too often not considered by advocates of social transition and not considered at all by the trans child. (Levine 2016 at 243.) Clinicians must

distinguish the apparent short-term safety of hormones from likely or possible long-term consequences, and help the patient or parents understand these implications as well. The young patient may feel, “I don’t care if I die young, just as long I get to live as a woman.” The mature adult may take a different view. Hopefully, so will the child’s physician.

206. Individual patients often pin excessive hope in transition, believing that transition will solve what are in fact ordinary social stresses associated with maturation, or mental health co-morbidities. In this way, transition can prevent them from mastering personal challenges at the appropriate time or directly addressing conditions that require treatment. When the hoped-for “vanishing” of other mental health or social difficulties does not occur, disappointment, distress, and depression may ensue. It is noteworthy that half of the respondents to the larger “detransitioner” survey reported that their transition had not helped the gender dysphoria, and 70% had concluded that their gender dysphoria was related to other issues. (Vandenbussche 2021.) Without the clinical experience of monitoring the psychosocial outcomes of these young patients as they age into adulthood, many such professionals experience no challenge to their affirmative beliefs. But medical and mental health professionals who deliver trans affirmative care for those with previous and co-existing mental health problems have an ethical obligation to inform themselves, and to inform patients and parents, that these dramatic treatments are not a panacea.

207. In sum, whether we consider physical or mental health, science does not permit us to say that either puberty blockers or cross-sex hormones are “safe,” and the data concerning the mental health of patients before, during, and after such treatments strongly contradict the assertion that gender dysphoria is “easily managed.”

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LEVINE EXPERT REPORT

EXHIBIT A

Brief Introduction

Dr. Levine is Clinical Professor of Psychiatry at Case Western Reserve University School of Medicine. He is the author or coauthor of numerous books on topics relating to human sexuality and related relationship and mental health issues. Dr. Levine has been teaching, providing clinical care, and writing since 1973, and has generated original research, invited papers, commentaries, chapters, and book reviews. He has served as a journal manuscript and book prospectus reviewer for many years. Dr. Levine has been co-director of the Center for Marital and Sexual Health/ Levine, Risen & Associates, Inc. in Beachwood, Ohio from 1992 to the present. He received a lifetime achievement Masters and Johnson's Award from the Society for Sex Therapy and Research in March 2005.

Personal Information

Date of birth 1/14/42

Medical license no. Ohio 35-03-0234-L

Board Certification 6/76 American Board of Neurology and Psychiatry

Education

1963 BA Washington and Jefferson College

1967 MD Case Western Reserve University School of Medicine

1967-68 internship in Internal Medicine University Hospitals of Cleveland

1968-70 Research associate, National Institute of Arthritis and Metabolic Diseases, Epidemiology Field Studies Unit, Phoenix, Arizona, United States Public Health Service

1970-73 Psychiatric Residency, University Hospitals of Cleveland

1974-77 Robert Wood Johnson Foundation Clinical Scholar

Appointments at Case Western Reserve University School of Medicine

1973- Assistant Professor of Psychiatry

1979- Associate Professor

1982- Awarded tenure

1985- Full Professor

1993- Clinical Professor

Honors

Summa Cum Laude, Washington & Jefferson

Teaching Excellence Award-1990 and 2010 (Residency program)

Visiting Professorships

- Stanford University-Pfizer Professorship program (3 days)-1995
- St. Elizabeth's Hospital, Washington, DC –1998
- St. Elizabeth's Hospital, Washington, DC--2002

Named to America's Top Doctors consecutively since 2001

Invitations to present various Grand Rounds at Departments of Psychiatry and Continuing Education Lectures and Workshops

Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research, April 2005 along with Candace Risen and Stanley Alhof

2006 SSTAR Book Award for The Handbook of Clinical Sexuality for Mental Health Professionals: Exceptional Merit

2018—Albert Marquis Lifetime Achievement Award from Marquis Who's Who. (Exceling in one's field for at least twenty years)

Professional Societies

1971- American Psychiatric Association; fellow; #19909

2005- American Psychiatric Association, Distinguished Life Fellow

1973- Cleveland Psychiatric Society

1973- Cleveland Medical Library Association

- 1985 - Life Fellow
- 2003 - Distinguished Life Fellow

1974-Society for Sex Therapy and Research

- 1987-89-President

1983- International Academy of Sex Research

1983- Harry Benjamin International Gender Dysphoria Association

- 1997-8 Chairman, Standards of Care Committee

1994- 1999 Society for Scientific Study of Sex

Community Boards

- 1999-2002 Case Western Reserve University Medical Alumni Association
- 1996-2001 Bellefaire Jewish Children's Bureau
- 1999-2001 Physicians' Advisory Committee, The Gathering Place (cancer rehabilitation)

Editorial Boards

- 1978-80 Book Review Editor Journal Sex and Marital Therapy

Manuscript Reviewer for:

- a. Archives of Sexual Behavior
- b. Annals of Internal Medicine
- c. British Journal of Obstetrics and Gynecology
- d. JAMA
- e. Diabetes Care
- f. American Journal of Psychiatry
- g. Maturitas
- h. Psychosomatic Medicine
- i. Sexuality and Disability
- j. Journal of Nervous and Mental Diseases
- k. Journal of Neuropsychiatry and Clinical Neurosciences
- l. Neurology
- m. Journal Sex and Marital Therapy
- n. Journal Sex Education and Therapy
- o. Social Behavior and Personality: an international journal (New Zealand)
- p. International Journal of Psychoanalysis
- q. International Journal of Transgenderism
- r. Journal of Urology
- s. Journal of Sexual Medicine
- t. Current Psychiatry
- u. International Journal of Impotence Research
- v. Postgraduate medical journal
- w. Academic Psychiatry

Prospectus Reviewer

- a. Guilford
- b. Oxford University Press
- c. Brunner/Routledge
- d. Routledge

Administrative Responsibilities

Principal Investigator of approximately 70 separate studies involving pharmacological interventions for sexual dysfunction since 1989.

Co-leader of case conferences at DELRLLC.com

Expert testimony at trial or by deposition within the last 4 years

Provided expert testimony for Massachusetts Dept. of Corrections in its defense of a lawsuit brought by prisoner Katheena Soneeya, including by deposition in October 2018, and in-court testimony in 2019.

Provided expert testimony by deposition and at trial in *In the Interests of the Younger Children* (Dallas, TX), 2019.

Testified in an administrative hearing in *In the matter of Rhys & Lynn Crawford* (Washington State), March 2021.

Testified multiple times in juvenile court in *In the matter of Asha Kerwin* (Tucson, Arizona), 2021.

Provided expert testimony by deposition in *Kadel et al v. Folwell et al.* (North Carolina), 2021.

Consultancies

Massachusetts Department of Corrections—evaluation of 12 transsexual prisoners and the development of a Gender Identity Disorders Program for the state prison system. Monthly consultation with the GID treatment team since February 2009 and the GID policy committee since February 2010.

California Department of Corrections and Rehabilitation; 2012-2015; education, inmate evaluation, commentary on inmate circumstances, suggestions on future policies.

Virginia Department of Corrections –evaluation of an inmate.

New Jersey Department of Corrections—evaluation of an inmate.

Idaho Department of Corrections—workshop 2016.

Grant Support/Research Studies

TAP—studies of Apomorphine sublingual in treatment of erectile dysfunction.

Pfizer–Sertraline for premature ejaculation.

Pfizer–Viagra and depression; Viagra and female sexual dysfunction; Viagra as a treatment for SSRI-induced erectile dysfunction.

NIH- Systemic lupus erythematosus and sexuality in women.

Sihler Mental Health Foundation

- a. Program for Professionals
- b. Setting up of Center for Marital and Sexual Health
- c. Clomipramine and Premature ejaculation
- d. Follow-up study of clergy accused of sexual impropriety
- e. Establishment of services for women with breast cancer

Alza–controlled study of a novel SSRI for rapid ejaculation.

Pfizer–Viagra and self-esteem.

Pfizer- double-blind placebo control studies of a compound for premature ejaculation.

Johnson & Johnson – controlled studies of Dapoxetine for rapid ejaculation.

Proctor and Gamble: multiple studies to test testosterone patch for post menopausal sexual dysfunction for women on and off estrogen replacement.

Lilly-Icos—study of Cialis for erectile dysfunction.

VIVUS – study for premenopausal women with FSAD.

Palatin Technologies- studies of bremelanotide in female sexual dysfunction—first intranasal then subcutaneous administration.

Medtap – interview validation questionnaire studies.

HRA- quantitative debriefing study for Female partners os men with premature ejaculation, Validation of a New Distress Measure for FSD.

Boehringer-Ingelheim- double blind and open label studies of a prosexual agent for hypoactive female sexual desire disorder.

Biosante- studies of testosterone gel administration for post menopausal women with HSDD.

J&J a single-blind, multi-center, in home use study to evaluate sexual enhancement effects of a product in females.

UBC-Content validity study of an electronic FSEP-R and FSDS-DAO and usability of study PRO measures in premenopausal women with FSAD, HSDD or Mixed FSAD/HSDD.

National registry trial for women with HSDD.

Endoceutics—two studies of DHEA for vaginal atrophy and dryness in post menopausal women.

Palatin—study of SQ Bremelanotide for HSDD and FSAD.

Trimel- a double-blind, placebo controlled study for women with acquired female orgasmic disorder.

S1 Biopharma- a phase 1-B non-blinded study of safety, tolerability and efficacy of Lorexys in premenopausal women with HSDD.

HRA – qualitative and cognitive interview study for men experiencing PE.

Publications

A) Books

- 1) Pariser SR, Levine SB, McDowell M (eds.), Clinical Sexuality, Marcel Dekker, New York, 1985
- 2) Sex Is Not Simple, Ohio Psychological Publishing Company, 1988; Reissued in paperback as: Solving Common Sexual Problems: Toward a Problem Free Sexual Life, Jason Aronson, Livingston, NJ. 1997
- 3) Sexual Life: A Clinician's Guide. Plenum Publishing Corporation. New York, 1992
- 4) Sexuality in Midlife. Plenum Publishing Corporation. New York, 1998
- 5) Editor, Clinical Sexuality. Psychiatric Clinics of North America, March, 1995.
- 6) Editor, (Candace Risen and Stanley Althof, associate editors) Handbook of Clinical Sexuality for Mental Health Professionals. Routledge, New York, 2003
 1. 2006 SSTAR Book Award: Exceptional Merit
- 7) Demystifying Love: Plain Talk For The Mental Health Professional. Routledge, New York, 2006
- 8) Senior editor, (Candace B. Risen and Stanley E. Althof, Associate editors), Handbook of Clinical Sexuality for Mental Health Professionals, 2nd edition. Routledge, New York, 2010.
- 9) Barriers to Loving: A Clinician's Perspective. Routledge, New York, 2014.
- 10) Senior editor Candace B. Risen and Stanley E. Althof, Associate editors), Handbook of Clinical Sexuality for Mental Health Professionals. 3rd edition Routledge, New York, 2016

B) Research and Invited Papers

When his name is not listed in a citation, Dr. Levine is either the solo or the senior author.

- 1) Sampliner R. Parotid enlargement in Pima Indians. Annals of Internal Medicine 1970; 73:571-73

- 2) Confrontation and residency activism: A technique for assisting residency change: World Journal of Psychosynthesis 1974; 6: 23-26
- 3) Activism and confrontation: A technique to spur reform. Resident and Intern Consultant 173; 2
- 4) Medicine and Sexuality. Case Western Reserve Medical Alumni Bulletin 1974;37:9-11.
- 5) Some thoughts on the pathogenesis of premature ejaculation. J. Sex & Marital Therapy 1975; 1:326-334
- 6) Marital Sexual Dysfunction: Introductory Concepts. Annals of Internal Medicine 1976;84:448-453
- 7) Marital Sexual Dysfunction: Ejaculation Disturbances 1976; 84:575-579
- 8) Yost MA: Frequency of female sexual dysfunction in a gynecology clinic: An epidemiological approach. Archives of Sexual Behavior 1976;5:229-238
- 9) Engel IM, Resnick PJ, Levine SB: Use of programmed patients and videotape in teaching medical students to take a sexual history. Journal of Medical Education 1976;51:425-427
- 10) Marital Sexual Dysfunction: Erectile dysfunction. Annals of Internal Medicine 1976;85:342-350
- 11) Male Sexual Problems. Resident and Staff Physician 1981;2:90-5
- 12) Female Sexual Problems. Resident and Staff Physician 1981;3:79-92
- 13) How can I determine whether a recent depression in a 40 year old married man is due to organic loss of erectile function or whether the depression is the source of the dysfunction? Sexual Medicine Today 1977;1:13
- 14) Corradi RB, Resnick PJ Levine SB, Gold F. For chronic psychologic impotence: sex therapy or psychotherapy? I & II Roche Reports; 1977
- 15) Marital Sexual Dysfunction: Female dysfunctions 1977; 86:588-597
- 16) Current problems in the diagnosis and treatment of psychogenic impotence. Journal of Sex & Marital Therapy 1977;3:177-186
- 17) Resnick PJ, Engel IM. Sexuality curriculum for gynecology residents. Journal of Medical Education 1978; 53:510-15
- 18) Agle DP. Effectiveness of sex therapy for chronic secondary psychological impotence Journal of Sex & Marital Therapy 1978;4:235-258
- 19) DePalma RG, Levine SB, Feldman S. Preservation of erectile function after aortoiliac reconstruction. Archives of Surgery 1978;113:958-962
- 20) Conceptual suggestions for outcome research in sex therapy Journal of Sex & Marital Therapy 1981;6:102-108

- 21) Lothstein LM. Transsexualism or the gender dysphoria syndrome. *Journal of Sex & Marital Therapy* 1982; 7:85-113
- 22) Lothstein LM, Levine SB. Expressive psychotherapy with gender dysphoria patients *Archives General Psychiatry* 1981; 38:924-929
- 23) Stern RG Sexual function in cystic fibrosis. *Chest* 1982; 81:422-8
- 24) Shumaker R. Increasingly Ruth: Towards understanding sex reassignment surgery *Archives of Sexual Behavior* 1983;12:247-61
- 25) Psychiatric diagnosis of patients requesting sex reassignment surgery. *Journal of Sex & Marital Therapy* 1980; 6:164-173
- 26) Problem solving in sexual medicine I. *British Journal of Sexual Medicine* 1982;9:21-28
- 27) A modern perspective on nymphomania. *Journal of Sex & Marital Therapy* 1982;8:316-324
- 28) Nymphomania. *Female Patient* 1982;7:47-54
- 29) Commentary on Beverly Mead's article: When your patient fears impotence. *Patient Care* 1982;16:135-9
- 30) Relation of sexual problems to sexual enlightenment. *Physician and Patient* 1983 2:62
- 31) Clinical overview of impotence. *Physician and Patient* 1983; 8:52-55.
- 32) An analytical approach to problem-solving in sexual medicine: a clinical introduction to the psychological sexual dysfunctions. II. *British Journal of Sexual Medicine*
- 33) Coffman CB, Levine SB, Althof SE, Stern RG Sexual Adaptation among single young adults with cystic fibrosis. *Chest* 1984;86:412-418
- 34) Althof SE, Coffman CB, Levine SB. The effects of coronary bypass in female sexual, psychological, and vocational adaptation. *Journal of Sex & Marital Therapy* 1984;10:176-184
- 35) Letter to the editor: Follow-up on Increasingly Ruth. *Archives of Sexual Behavior* 1984;13:287-9
- 36) Essay on the nature of sexual desire *Journal of Sex & Marital Therapy* 1984; 10:83-96
- 37) Introduction to the sexual consequences of hemophilia. *Scandanavian Journal of Haemology* 1984; 33:(supplement 40).75-
- 38) Agle DP, Heine P. Hemophilia and Acquired Immune Deficiency Syndrome: Intimacy and Sexual Behavior. *National Hemophilia Foundation*; July, 1985
- 39) Turner LA, Althof SE, Levine SB, Bodner DR, Kursh ED, Resnick MI.

- External vacuum devices in the treatment of erectile dysfunction: a one-year study of sexual and psychosocial impact. *Journal of Sex & Marital Therapy*
- 40) Schein M, Zyzanski SJ, Levine SB, Medalie JH, Dickman RL, Alemagno SA. The frequency of sexual problems among family practice patients. *Family Practice Research Journal* 1988; 7:122-134
- 41) More on the nature of sexual desire. *Journal of Sex & Marital Therapy* 1987;13:35-44
- 42) Waltz G, Risen CB, Levine SB. Antiandrogen treatment of male sex offenders. *Health Matrix* 1987; V.51-55.
- 43) Lets talk about sex. *National Hemophilia Foundation* January, 1988
- 44) Sexuality, Intimacy, and Hemophilia: questions and answers . *National Hemophilia Foundation* January, 1988
- 45) Prevalence of sexual problems. *Journal Clinical Practice in Sexuality* 1988;4:14-16.
- 46) Kursh E, Bodner D, Resnick MI, Althof SE, Turner L, Risen CB, Levine SB. Injection Therapy for Impotence. *Urologic Clinics of North America* 1988; 15(4):625-630
- 47) Bradley SJ, Blanchard R, Coates S, Green R, Levine S, Meyer-Bahlburg H, Pauly I, Zucker KJ. Interim report of the DSM-IV Subcommittee for Gender Identity Disorders. *Archives of Sexual Behavior* 1991;;20(4):333-43.
- 48) Sexual passion in mid-life. *Journal of Clinical Practice in Sexuality* 1991 6(8):13-19
- 49) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DR, Resnick MI. Intracavernosal injections in the treatment of impotence: A prospective study of sexual, psychological, and marital functioning. *Journal of Sex & Marital Therapy* 1987; 13:155-167
- 50) Althof SE, Turner LA, Risen CB, Bodner DR, Kursh ED, Resnick MI. Side effects of self-administration of intracavernosal injection of papaverine and phentolamine for treatment of impotence. *Journal of Urology* 1989;141:54-7
- 51) Turner LA, Froman SL, Althof SE, Levine SB, Tobias TR, Kursh ED, Bodner DR. Intracavernous injection in the management of diabetic impotence. *Journal of Sexual Education and Therapy* 16(2):126-36, 1989
- 52) Is it time for sexual mental health centers? *Journal of Sex & Marital Therapy* 1989
- 53) Althof SE, Turner LA, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Sexual, psychological, and marital impact of self injection of papaverine and phentolamine: a long-term prospective study. *Journal of Sex & Marital Therapy*

- 54) Althof SE, Turner LA, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Why do so many men drop out of intracavernosal treatment? *Journal of Sex & Marital Therapy*. 1989;15:121-9
- 55) Turner LA, Althof SE, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Self injection of papaverine and phentolamine in the treatment of psychogenic impotence. *Journal of Sex & Marital Therapy*. 1989; 15(3):163-78
- 56) Turner LA, Althof SE, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Treating erectile dysfunction with external vacuum devices: impact upon sexual, psychological, and marital functioning. *Journal of Urology* 1990;141(1):79-82
- 57) Risen CB, Althof SE. An essay on the diagnosis and nature of paraphilia *Journal of Sex & Marital Therapy* 1990; 16(2):89-102.
- 58) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Through the eyes of women: the sexual and psychological responses of women to their partners' treatment with self-injection or vacuum constriction therapy. *International Journal of Impotence Research* (supplement 2)1990;346-7.
- 59) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. A comparison of the effectiveness of two treatments for erectile dysfunction: self injection vs. external vacuum devices. . *International Journal of Impotence Research* (supplement 2)1990;289-90
- 60) Kursh E, Turner L, Bodner D, Althof S, Levine S. A prospective study on the use of the vacuum pump for the treatment of impotence.*International Journal of Impotence Research* (supplement 2)1990;340-1.
- 61) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Long term use of intracavernous therapy in the treatment of erectile dysfunction in *Journal of Sex & Marital Therapy* 1991; 17(2):101-112
- 62) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Long term use of vacuum pump devices in the treatment of erectile dysfunction in *Journal of Sex & Marital Therapy* 1991;17(2):81-93
- 63) Turner LA, Althof SE, Levine SB, Bodner DB, Kursh ED, Resnick MI. A 12-month comparison of the effectiveness of two treatments for erectile dysfunction: self injection vs. external vacuum devices. *Urology* 1992;39(2):139-44
- 64) Althof SE, The pathogenesis of psychogenic impotence. *J. Sex Education and Therapy*. 1991; 17(4):251-66
- 65) Mehta P, Bedell WH, Cumming W, Bussing R, Warner R, Levine SB. Letter to the editor. Reflections on hemophilia camp. *Clinical Pediatrics* 1991; 30(4):259-260
- 66) Successful Sexuality. Belonging/Hemophilia. (Caremark Therapeutic

Services), Autumn, 1991

- 67) Psychological intimacy. *Journal of Sex & Marital Therapy* 1991; 17(4):259-68
- 68) Male sexual problems and the general physician, *Georgia State Medical Journal* 1992; 81(5): 211-6
- 69) Althof SE, Turner LA, Levine SB, Bodner DB, Kursh E, Resnick MI. Through the eyes of women: The sexual and psychological responses of women to their partner's treatment with self-injection or vacuum constriction devices. *Journal of Urology* 1992; 147(4):1024-7
- 70) Curry SL, Levine SB, Jones PK, Kurit DM. Medical and Psychosocial predictors of sexual outcome among women with systemic lupus erythematosis. *Arthritis Care and Research* 1993; 6:23-30
- 71) Althof SE, Levine SB. Clinical approach to sexuality of patients with spinal cord injury. *Urological Clinics of North America* 1993; 20(3):527-34
- 72) Gender-disturbed males. *Journal of Sex & Marital Therapy* 19(2):131-141, 1993
- 73) Curry SL, Levine SB, Jones PK, Kurit DM. The impact of systemic lupus erythematosis on women's sexual functioning. *Journal of Rheumatology* 1994; 21(12):2254-60
- 74) Althof SE, Levine SB, Corty E, Risen CB, Stern EB, Kurit D. Clomipramine as a treatment for rapid ejaculation: a double-blind crossover trial of 15 couples. *Journal of Clinical Psychiatry* 1995;56(9):402-7
- 75) Risen CB, Althof SE. Professionals who sexually offend: evaluation procedures and preliminary findings. *Journal of Sex & Marital Therapy* 1994; 20(4):288-302
- 76) On Love, *Journal of Sex & Marital Therapy* 1995; 21(3):183-191
- 77) What is clinical sexuality? *Psychiatric Clinics of North America* 1995; 18(1):1-6
- 78) "Love" and the mental health professions: Towards an understanding of adult love. *Journal of Sex & Marital Therapy* 1996; 22(3):191-202
- 79) The role of Psychiatry in erectile dysfunction: a cautionary essay on the emerging treatments. *Medscape Mental Health* 2(8):1997 on the Internet. September, 1997.
- 80) Discussion of Dr. Derek Polonsky's SSTAR presentation on Countertransference. *Journal of Sex Education and Therapy* 1998; 22(3):13-17
- 81) Understanding the sexual consequences of the menopause. *Women's Health in Primary Care*, 1998

- 82) Fones CSL, Levine SB. Psychological aspects at the interface of diabetes and erectile dysfunction. *Diabetes Reviews* 1998; 6(1):1-8
- 83) Guay AT, Levine SB, Montague DK. New treatments for erectile dysfunction. *Patient Care* March 15, 1998
- 84) Extramarital Affairs. *Journal of Sex & Marital Therapy* 1998; 24(3):207-216
- 85) Levine SB (chairman), Brown G, Cohen-Kettenis P, Coleman E, Hage JJ, Petersen M, Pfäfflin F, Shaeffer L, van Masdam J, Standards of Care of the Harry Benjamin International Gender Dysphoria Association, 5th revision, 1998. *International Journal of Transgenderism* at <http://www.symposion.com/ijt>
- Reprinted by the Harry Benjamin International Gender Dysphoria Association, Minneapolis, Minnesota
- 86) Althof SE, Corty E, Levine SB, Levine F, Burnett A, McVary K, Stecher V, Seftel. The EDITS: the development of questionnaires for evaluating satisfaction with treatments for erectile dysfunction. *Urology* 1999;53:793-799
- 87) Fones CSL, Levine SB, Althof SE, Risen CB. The sexual struggles of 23 clergymen: a follow-up study. *Journal of Sex & Marital Therapy* 1999
- 88) The Newly Devised Standards of Care for Gender Identity Disorders. *Journal of Sex Education and Therapy* 24(3):1-11,1999
- 89) Levine, S. B. (1999). The newly revised standards of care for gender identity disorders. *Journal of Sex Education & Therapy*, 24, 117-127.
- 90) Melman A, Levine SB, Sachs B, Segraves RT, Van Driel MF. Psychological Issues in Diagnosis of Treatment (committee 11) in Erectile Dysfunction (A. Jarden, G. Wagner, S. Khoury, F. Giuliano, H. Padma-nathan, R. Rosen, eds.) Plymbridge Distributors Limited, London, 2000
- 91) Pallas J, Levine SB, Althof SE, Risen CB. A study using Viagra in a mental health practice. *J Sex&Marital Therapy*.26(1):41-50, 2000
- 92) Levine SB, Stagno S. Informed Consent for Case Reports: the ethical dilemma between right to privacy and pedagogical freedom. *Journal of Psychotherapy: Practice and Research*, 2001, 10 (3): 193-201.
- 93) Alloggiamento T., Zipp C., Raxwal VK, Ashley E, Dey S. Levine SB, Froelicher VF. Sex, the Heart, and Sildenafil. *Current Problems in Cardiology* 26 June 2001(6):381-416
- 94) Re-exploring The Nature of Sexual Desire. *Journal of Sex and Marital Therapy* 28(1):39-51, 2002.
- 95) Understanding Male Heterosexuality and Its Disorders in *Psychiatric Times* XIX(2):13-14, February, 2002
- 96) Erectile Dysfunction: Why drug therapy isn't always enough. (2003)

- Cleveland Clinic Journal of Medicine, 70(3): 241-246.
- 97) The Nature of Sexual Desire: A Clinician's Perspective. Archives of Sexual Behavior 32(3):279-286, 2003 .
- 98) Laura Davis. What I Did For Love: Temporary Returns to the Male Gender Role. International Journal of Transgenderism, 6(4), 2002 and
<http://www.symposion.com/ijt>
- 99) Risen C.B., The Crisis in the Church: Dealing with the Many Faces of Cultural Hysteria in The International Journal of Applied Psychoanalytic Studies, 1(4):364-370, 2004
- 100) Althof SE, Leiblum SR (chairpersons), Chevert-Measson M. Hartman U., Levine SB, McCabe M., Plaut M, Rodrigues O, Wylie K., Psychological and Interpersonal Dimensions of Sexual Function and Dysfunction in World Health Organization Conference Proceedings on Sexual Dysfunctions, Paris, 2003.
Published in a book issued in 2004.
- 101) Commentary on Ejaculatory Restrictions as a Factor in the Treatment of Haredi (Ultra-Orthodox) Jewish Couples: How Does Therapy Work? Archives of Sexual Behavior, 33(3):June 2004
- 102) What is love anyway? J Sex & Marital Therapy 31(2):143-152,2005.
- 103) A Slightly Different Idea, Commentary on Y. M. Binik's Should Dyspareunia Be Retained as a Sexual Dysfunction in DSM-V? A Painful Classification Decision. Archives of Sexual Behavior 34(1):38-39, 2005.
<http://dx.doi.org/10.1007/s10508-005-7469-3>
- 104) Commentary: Pharmacologic Treatment of Erectile Dysfunction: Not always a simple matter. BJM USA; Primary Care Medicine for the American Physician, 4(6):325-326, July 2004
- 105) Leading Comment: A Clinical Perspective on Infidelity. Journal of Sexual and Relationship Therapy, 20(2):143-153, May 2005.
- 106) Multiple authors. Efficacy and safety of sildenafil citrate (Viagra) in men with serotonergic antidepressant-associated erectile dysfunction: Results from a randomized, double-blind, placebo-controlled trial. Submitted to Journal of Clinical Psychiatry Feb 2005
- 107) Althof SE, Leiblum SR, Chevert-Measson M, Hartman U, Levine SB, McCabe M, Plaut M, Rodrigues O, Wylie K. Psychological and Interpersonal Dimensions of Sexual Function and Dysfunction. Journal of Sexual Medicine, 2(6): 793-800, November, 2005
- 108) Shifren JL, Davis SR, Moreau M, Waldbaum A, Bouchard C., DeRogatis L., Derzko C., Bearson P., Kakos N., O'Neill S., Levine S., Wekselman K., Buch A., Rodenberg C., Kroll R. Testosterone Patch for the Treatment of Hypoactive Sexual

- Desire Disorder in Naturally Menopausal Women: Results for the INTIMATE NM1 Study. *Menopause: The Journal of the North American Menopause Society* 13(5) 2006.
- 109) Reintroduction to Clinical Sexuality. *Focus: A Journal of Lifelong Learning in Psychiatry* Fall 2005. III (4):526-531
- 110) PDE-5 Inhibitors and Psychiatry in *J Psychiatric Practice* 12 (1): 46-49, 2006.
- 111) Sexual Dysfunction: What does love have to do with it? *Current Psychiatry* 5(7):59-68, 2006.
- 112) How to take a Sexual History (Without Blushing), *Current Psychiatry* 5(8): August, 2006.
- 113) Linking Depression and ED: Impact on sexual function and relationships in Sexual Function and Men's Health Through the Life Cycle under the auspices of the Consortium for Improvement of Erectile Function (CIEF), 12-19, November, 2006.
- 114) The First Principle of Clinical Sexuality. Editorial. *Journal of Sexual Medicine*, 4:853-854, 2007
- 115) Commentary on David Rowland's editorial, "Will Medical Solutions to Sexual Problems Make Sexological Care and Science Obsolete?" *Journal of Sex and Marital Therapy*, 33(5), 2007
- 116) Real-Life Test Experience: Recommendations for Revisions to the Standards of Care of the World Professional Association for Transgender Health *International Journal of Transgenderism*, Volume 11 Issue 3, 186-193, 2009
- 117) Sexual Disorders: Psychiatrists and Clinical Sexuality. *Psychiatric Times* XXIV (9), 42-43, August 2007
- 118) I am not a sex therapist! Commentary to I. Binik and M. Meana's article Sex Therapy: Is there a future in this outfit? *Archives of Sexual Behavior*, Volume 38, Issue 6 (2009), 1033-1034
- 119) Solomon A (2009) Meanings and Political Implications of "Psychopathology" in a Gender Identity Clinic: Report of 10 cases. *Journal of Sex and Marital Therapy* 35(1): 40-57.
- 120) Perelman, MA., Levine SB, Fischkoff SA. Randomized, Placebo-Controlled, Crossover Study to Evaluate the Effects of Intranasal Bremelanotide on Perceptions of Desire and Arousal in Postmenopausal Women with Sexual Arousal Disorder submitted to *Journal of Sexual Medicine* July 2009, rejected
- 121) What is Sexual Addiction? *Journal of Sex and Marital Therapy*. 2010 May;36(3):261-75

- 122) David Scott (2010) Sexual Education of Psychiatric Residents. Academic Psychiatry, 34(5) 349-352.
- 123) Chris G. McMahon, Stanley E. Althof, Joel M. Kaufman, Jacques Buvat, Stephen B. Levine, Joseph W. Aquilina, Fisseha Tesfaye, Margaret Rothman, David A. Rivas, Hartmut Porst. Efficacy and Safety of Dapoxetine for the Treatment of Premature Ejaculation: Integrated Analysis of Results From 5 Phase 3 Trials Journal of Sexual Medicine 2011 Feb;8(2):524-39.
- 124) Commentary on Consideration of Diagnostic Criteria for Erectile Dysfunction in DSM V. Journal of Sexual Medicine July 2010
- 125) Hypoactive Sexual Desire Disorder in Men: Basic types, causes, and treatment. Psychiatric Times 27(6)4-34. 2010
- 126) Male Sexual Dysfunctions, an audio lecture, American Physician Institute 2013
- 127) Fashions in Genital Fashion: Where is the line for physicians? Commentary on David Veale and Joe Daniels' Cosmetic Clitoridectomy in a 33-year-old woman. Arch Sex Behav (2012) 41:735–736 DOI 10.1007/s10508-011-9849-7
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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF KENTUCKY
LOUISVILLE DIVISION

ALLAN M. JOSEPHSON,

Plaintiff,

v.

NEELI BENDAPUDI, *et al.*,

Defendants.

Case No: 3:19-cv-00230-RGJ-CHL

THE HONORABLE
REBECCA GRADY JENNINGS

**EXPERT REPORT OF
JAMES M. CANTOR, PhD**

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I. Background & Credentials

1. I am a clinical psychologist and Director of the Toronto Sexuality Centre in Canada. For my education and training, 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.

2. Over my academic career, my posts have included Psychologist and Senior Scientist at the Centre for Addiction and Mental Health (CAMH) and Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and 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 of Sexual Abusers. 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*. 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.

3. My scientific expertise spans the biological and non-biological development of human sexuality, the classification of sexual interest patterns, the assessment and

treatment of atypical sexualities, and the application of statistics and research methodology in sex research. 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*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4. I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment of treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5. I have served as an expert witness in a total of 10 cases, which are listed in my CV, attached here as Appendix 1.

6. A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. I was a member of the hospital's adult forensic program. However, I was in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple projects.

7. 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.

II. Introduction

8. I have been asked to provide my expert opinion as to whether certain statements made by Dr. Allan Josephson concerning gender dysphoria and the treatment of gender dysphoria in children and adolescents were consistent with current science. As I explain in detail in this report, it is my opinion that they were.

9. To prepare the present report, I reviewed the video recording and a verbatim transcript of the complete panel discussion at the Heritage Foundation on 11 October 2021 including its question and answer session with Dr. Josephson and two other presenters, and I have compared his claims with the content the peer-reviewed research literature and professional statements on gender dysphoria and transsexuality. The points asserted were:

- A very high proportion (“almost all”) adolescents expressing gender issues are struggling with other mental health difficulties, to which the gender issues may be secondary.
- The stigma of transgenderism does not explain all the mental health difficulties reported among children and adolescents presenting with gender issues.
- After explicating the use of the term “affirmation,” affirming a new gender identity for a child should occur after rather than before ascertaining whether resolution of the child’s other mental health issues would alleviate distress over gender.

10. As shown in the following, Dr. Josephson’s claims are, without exception, entirely consistent with the contents of the peer-reviewed research literature, the empirically-based and internationally employed “Dutch Approach” to clinical practice with gender dysphoric children, and the clinical recommendations as set by the professional associations issuing them—including the World Professional Association of Transgender Health (WPATH) and the American Academy of Child & Adolescent Psychiatry (AACAP)—but with the single exception of the American Association of Pediatrics (AAP), which itself contradicts all the other professional associations. Dr. Josephson’s remarks reflected not only the published science available when he made his comments in 2017, but also reflect the subsequent research published since that

time through this writing.

11. It is not possible to assess Dr. Josephson's comments relative to a consensus of my field, however. No such consensus is discernable. The current situation remains today as described by Dr. Rosalia Costa of the widely cited gender clinic at the Tavistock Centre in the United Kingdom (UK).

Since the release of the Dutch model [detailed below], there has been disagreement about the appropriateness of treatment in minors. Some practitioners have questioned the ethics and safety of this intervention. Conversely, other healthcare professionals have argued that they have an obligation to alleviate suffering and it would be unethical to allow a patient to suffer through the distress of pubertal development when there was a way of preventing it.¹

III. The Science of Transgenderism

A. Clarifying Terms

12. Most scientific discussions begin with the relevant vocabulary and definitions of terms. In the highly polarized and politicized debates surrounding transgender issues, that is less feasible: Different authors have used terms in differing, overlapping ways. Activists and the public (especially on social media) will use the same terms, but to mean different things, and some have actively misapplied terms so that original documents appear to assert something they do not.

13. For example, the word “child” is used in some contexts to refer specifically to children before puberty; in some contexts, to refer to children before adolescence (thus including ages of puberty); in still some contexts, to refer to people under the legal age of consent, which is age sixteen in the Netherlands (where much of the research was conducted) or age eighteen in much of North America. Thus, care should be taken in both using and interpreting the word “child” in this field.

14. Because the present document is meant to compare the claims made by others, it is the definitions used by those specific authors in those specific contexts which are relevant. Thus, definitions to my own uses of terms are provided where appropri-

¹ Costa, *et al.*, 2015, p. 2207.

ate, but primarily explicate how terms were defined and used in their original contexts.

B. Types of Gender Dysphoria

15. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children do not represent the same phenomenon as adult gender dysphoria, but coming to clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from brain structure, to sexual interest patterns, to responses to treatments. Very many misunderstandings in the media and public mind arise from the misapprehension that, because they both express the desire to be treated as the other gender, they are best served by the same treatment.

16. The research literature has long and consistently demonstrated there exist two well-characterized forms of gender dysphoria: childhood- (prepubertal) onset gender dysphoria and adult-onset, typically midlife.² These have also been called “early-onset” and “late-onset.” A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or “rapid-onset.”

1. Adult-Onset Gender Dysphoria

17. People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively male.³ They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.⁴ Cases of adult-onset gen-

² Blanchard, 1985.

³ Blanchard, 1990, 1991.

⁴ Blanchard, 1988.

der dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.⁵

18. Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,⁶ Sweden,⁷ and the Netherlands.⁸

19. Importantly, each of the Canadian, Swedish, and Dutch clinics for adults with gender dysphoria all performed “gate-keeping” procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards.

2. Childhood Onset (Pre-Puberty) Gender Dysphoria

20. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 3–6 biological male children to each female.⁹

a. Prospective Studies of “Natural Course”: Desistance by Puberty in Majority

21. Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. Projects following-up and reporting on such cases began being published in the 1970s, with subsequent generations of research employing increasingly sophisticated methods studying the outcomes of increasingly large samples. In total, there have now been a total of 11 such outcomes studies. See Appendix 2 (listing these studies).

22. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without

⁵ Blanchard 1989a, 1989b, 1991.

⁶ Blanchard, *et al.*, 1989.

⁷ Dhejneberg, *et al.*, 2014.

⁸ Wiepjes, *et al.*, 2018.

⁹ Cohen-Kettenis, *et al.*, 2003.

exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender by puberty—ranging 61–88% desistance across the large, prospective studies. Such cases are often referred to as “desisters,” whereas children who continue to feel gender dysphoria are often called “persisters.”

23. Notably, in most cases, these children were receiving professional psychosocial support across the study period aimed, not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, its inclusion represents a complication for the interpretation of the results: That is, it is not possible to know to what extent the observed outcomes (predominant desistance, with a small but consistent occurrence of persistence) were influenced by the psychosocial support or would have emerged regardless. It can be concluded only that prepubescent children who suffer gender dysphoria and receive psychosocial support focused on issues other than “affirmation” of cross-gender identification do in fact desist in suffering from gender dysphoria, at high rates, over the course of puberty.

24. While the absolute number of those who present as prepubescent children with gender dysphoria and “persist” through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, the clinician cannot take either outcome for granted.

25. It is because of this long-established and invariably consistent research finding that desistance is probable, but not inevitable, that the “watchful waiting” method became the standard approach for assisting gender dysphoric children. *See infra* Part III.A.2.b. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

26. 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. Such is an empirical question, and there has not yet been any such study.

27. It is also important to note that research has not yet identified any reliable way to discern which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and “affirmation.”

28. 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 behavioral “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 assist in decision-making.¹⁰

29. A research team led by Dr. Kristina Olson attempted to develop a method of distinguishing persisters from desisters to develop a method of predicting outcomes in future groups.¹¹ That team created a single composite score representing a combination of children’s “peer preference, toy preference, clothing preference, gender similarity, and gender identity.”¹² They reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they described their result, “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

¹⁰ Singh *et al.*, in press; Steensma *et al.*, 2013; Wallien *et al.*, 2009

¹¹ Rae, *et al.*, 2019.

¹² Rae, *et al.*, p. 671.

roughly a .48 probability.”¹³ Although the authors declared that “social transitions may be predictable from gender identification and preferences,”¹⁴ 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 .75.¹⁵ Both of those are lower than the value of .75, so both of those would be less than 48% probable to transition. Thus, Olson’s model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

30. Although it remains entirely possible for some future finding to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time.

b. “Watchful Waiting” and “The Dutch Approach”

31. It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, often called “The Dutch Approach” (referring to The Netherlands clinic where it was developed) including “Watchful Waiting” periods. Internationally, the Dutch Approach is currently the most widely respected and utilized method for treatment of children who present with gender dysphoria.

32. The purpose of these methods was to compromise the conflicting needs among: clients’ desires upon assessment, the long-established and repeated observation that those preferences will change in the majority of (but not all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

¹³ Rae, *et al.*, p. 673.

¹⁴ Rae, *et al.*, pp. 673, 679.

¹⁵ Rae, *et al.*, 2019, p. 6, Table S1, bottom line.

33. The Dutch Approach (also called the “Dutch Protocol”) was developed over many years by the Netherlands’ child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach* (de Vries & Cohen-Kettenis, 2012).

The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

34. The Dutch Approach authors are explicit in indicating that these age cut-off's were not based on any research demonstrating their superiority over other potential age cut-off's. Rather, they were chosen to correspond to ages of consent to medical procedures under Dutch law. The authors were moreover explicit in indicating it is “conceivable that when more information about the safety of early hormone treatment becomes available, the age limit may be further adjusted.”¹⁶

35. For youth under age 12, “the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty.”¹⁷

36. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child’s parents. Indeed, those researchers’ description of the appropriate response to other potentially relevant mental health issues is nearly identical to Dr. Josephson’s panel remarks regarding unresolved issues of abuse as a potential confound:

¹⁶ de Vries & Cohen-Kettenis, 2012, p. 311.

¹⁷ de Vries & Cohen-Kettenis, 2012, p. 301.

If any [mental illness] is found, the possible relationship between the gender dysphoria and other diagnoses is investigated. In this way, for example, one can investigate whether an autistic boy's fascination for fancy dresses and long hair is more part of his autism or whether his autism reinforces certain aspects of his gender dysphoria. . . . If concomitant problems are observed (e.g., substantial problems with peers, psychiatric problems, or conflicts with parents or siblings), the child may be referred to a local mental health agency. The primary aim is for the child and, if necessary, the family to function better. If these problems have contributed to causing or keeping up some gender dysphoria, the dysphoria will likely disappear by tackling these other problems. Although there is little evidence that psychotherapeutic interventions can eliminate gender dysphoria in general, it is conceivable that in some cases gender variant behavior can change as a result of therapy. In our own practice, a reduction or disappearance of gender variant behavior seems to take place particularly when this behavior appeared to be a clear reaction to certain events or situations which in themselves are amenable to therapy (e.g., a boy suddenly dressing up and saying he wants to be a girl as an expression of extreme jealousy after the birth of a younger sister).¹⁸

37. Within the Dutch approach, there is no social transition before age twelve.

That is, social affirmation of the new gender may begin at age 12—as desistance is less likely to occur past that age. “Watchful Waiting” refers to a child’s developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Such children and families typically present with substantial distress involving both gender and non-gender issues. It is during the watchful waiting period that a child (and other family members as appropriate) would undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, “[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly seen by one of the clinic’s psychologists or psychiatrists.”¹⁹ One is actively treating the person, while carefully “watching” the dysphoria.

38. In sum, Dr. Josephson’s comments regarding the prevalence of comorbid mental health issues and the need to resolve them before making decisions about any type of transition are fully in line with the recommendations of the widely respected Dutch Model.

¹⁸ de Vries & Cohen-Kettenis, 2012, pp. 307, 309.

¹⁹ de Vries, *et al.*, 2011, p. 2281.

39. The inclusion of psychotherapy and support during the watchful waiting period is, clinically, a great benefit to the gender dysphoric children and their parents. The inclusion of psychotherapy and support poses a scientific complication, however: It becomes difficult to know to what extent the outcomes of these cases might be related to receiving psychotherapy received versus being “spontaneous” desistance, which would have occurred on its own anyway. This situation is referred to in science as a “confound.”

c. Prospective Studies of Social Transition and Puberty Blockers in Adolescence

i. The Dutch Approach (studies from before 2017): Mix of positive, negative, and neutral outcomes

40. The research confirms that some, but not all, adolescents improve on some, but not all, indicators of mental health and that those indicators are inconsistent across studies. Thus, the balance of potential benefits to potential risks differs across cases, and thus suggest different courses of actions across cases.

41. The Dutch clinical research team followed-up 70 youth undergoing puberty suppression at their clinic.²⁰ The youth were improved better on several variables upon follow-up than at the beginning, including depressive symptoms and general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria; however, natal females suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.²¹

42. As the report authors noted, it is possible that the improvement was due to the puberty-blockers, it is possible that the improvement was due to the mental health support, and it is possible that the improvement occurred only on its own with natural maturation. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other, representing a

²⁰ de Vries, *et al.* 2011.

²¹ Biggs, 2020.

confound. The authors of the study were explicit in noting this themselves: “All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents.”²²

43. The authors were careful not to overstate the implications of their results, “We *cautiously* conclude that puberty suppression may be a valuable *element* in clinical management of adolescent gender dysphoria.”²³

44. Of those 70 cases, 55 were re-examined in that clinic’s report of surgical outcomes.²⁴ This updated report indicated the cases’ level of functioning at baseline, after having undergone puberty blocking, and now after having undergone surgical sex reassignment. Changes were again positive in some variables, but without significant changes in depression, anger, or anxiety.

45. Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.²⁵ As those authors concluded, “Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence.”²⁶

ii. Clinicians and advocates have invoked the Dutch Approach while departing from its protocols in important ways.

46. The reports of partial success contained in de Vries, *et al.* 2011 called for additional research, both to confirm those results and to search for ways to maximize

²² de Vries, *et al.* 2011, p. 2281.

²³ de Vries, *et al.* 2011, p. 2282, italics added.

²⁴ de Vries, *et al.*, 2014.

²⁵ Costa, *et al.*, Table 2, p. 2212.

²⁶ Costa, *et al.*, p. 2206.

beneficial results and minimize negative outcomes. Instead, many other clinics and clinicians proceeded on the basis of the positives only, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent psychiatric health. Comprehensive, longitudinal assessments (*e.g.*, one and a half years²⁷) became approvals after a single assessment session. Validated, objective measures of youths psychological functioning were replaced with clinicians' subjective (and first) opinion, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

47. Most relevantly to Dr. Josephson's panel comments, instead of feelings of distress being explored and resolved as emphasized throughout the clinical recommendations, they are too often ignored entirely, dismissed at the outset as effects of stigma, but without empirical basis. *See infra* Part III.C.4 (discussing minority stress).

48. Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past can still be applied to this time. Many more children are applying, and also a different type."²⁸ Steensma opined that "every doctor or psychologist who engages in transgender care should feel the obligation to do a good before and after measurement." But few if any are doing so.

²⁷ de Vries, *et al.*, 2011.

²⁸ Tetelepta, 2021.

iii. Studies by other clinicians in other countries have failed to reliably replicate the positive components of the results reported by the Dutch clinicians in de Vries et al. 2011.

49. The indications of potential benefit from puberty suppression in at least some cases has led some clinicians to attempt to replicate the positive aspects of those findings. These efforts have not succeeded.

50. The Tavistock and Portman clinic in the U.K. recently released its findings, attempting to replicate the outcomes reported by the Dutch clinic.²⁹ Study participants were ages 12–15 (Tanner stages 3 for natal males, Tanner 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious psychiatric conditions (e.g., psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

51. A multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.³⁰ (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to “Endocrine Society Clinical Practice Guidelines.”³¹ Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.³² (Although the authors reported detecting some improvements, these were only found when the large group undergoing cross-sex hormone treatment were added in.) Although the Dutch Approach includes age 12 as a minimum for puberty suppression treatment, this team

²⁹ Carmichael, *et al.*, 2021.

³⁰ Kuper, *et al.*, 2020.

³¹ Kuper, *et al.*, p. 3, referring to Hembree, *et al.*, 2017.

³² Kuper, *et al.*, 2020, Table 2.

provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).³³

52. Achille, *et al.* (2020) at Stony Brook Children’s Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, “Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional.”³⁴ The puberty blockers themselves “were introduced in accordance with the Endocrine Society and the WPATH guidelines.”³⁵ Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, “*most predictors did not reach statistical significance.*”³⁶ Moreover, “the numbers are too small to parse out the effects of pubertal suppression versus cross sex hormone therapy in the different genders.”³⁷

53. In a recent update, the Dutch clinic reported continuing to find improvement in transgender adolescents’ psychological functioning, reaching age-typical levels, “after the start of specialized transgender care involving puberty suppression.”³⁸ Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors themselves noted, “The present study can, therefore, not provide evidence about the direct benefits of puberty suppression over time and long-term mental health outcomes.”³⁹

³³ Kuper, *et al.*, 2020, p. 4.

³⁴ Achille, *et al.*, 2020, p. 2.

³⁵ Achille, *et al.*, 2020, p. 2.

³⁶ Achille, *et al.*, 2020, p. 3, *italics added.*

³⁷ Achille, *et al.*, 2020, p. 4.

³⁸ van der Miesen, *et al.*, 2020, p. 699.

³⁹ van der Miesen, *et al.*, 2020, p. 703.

54. It has not yet been determined why the successful outcomes reported by the Dutch child gender clinic failed to emerge when applied by others. It is possible that:

- (1) The Dutch Approach itself does *not* work and that their originally successful results were a fluke;
- (2) The Dutch Approach *does* work, but only in the Netherlands, with local cultural, genetic, or other unrecognized factors that do not generalize to other countries;
- (3) The Dutch Approach itself *does* work, but that other clinics and individual clinicians are removing safeguards and adding short-cuts to the approach, and those changes are hampering success.
- (4) The Dutch Approach *does* work, but that the cause of the improvement is the psychosocial support, rather than any medical intervention, which other clinics are *not* providing.

55. The failure of other clinics to repeat the already very qualified success of the Dutch clinic demonstrates the need for still greater caution before endorsing transition and the greater need to resolve potential mental health obstacles before doing so. Although there do exist authors citing only the positive from among these research findings, Dr. Josephson's explicit cautions in his presentation are consistent with the complete content of the scientific literature.

d. Affirmation vs. Affirmation-Only and Affirmation-on-Demand: Social Transition in Childhood (pre-puberty)

56. Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

57. Referring to “affirmation” as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the

term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word “affirmation” refers to entirely different actions.

58. It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social affirmation (and puberty blocking) may begin at age 12 and cross-sex hormonal and other medical interventions, later.

59. The false dichotomy categorizing interventions into affirmative versus non-affirmative typically occurs within polarized debates, where one side espouses affirmation-on-demand for all (or nearly all) cases and mischaracterizes any delay, including the watchful waiting period of the Dutch Approach—to constitute non-affirmation and a denial of “rights.” Legitimate debate can (and should) be had regarding what ages or other developmental indicators would best guide clinical decision-making. Because almost all approaches discussed include affirmation, the most extreme is not accurately called the affirmation approach, but rather affirmation-*on-demand*.

60. There do not exist any prospective outcomes research on the Affirmation-on-Demand approach. All existing studies pertain to the step-wise use of affirmation, within a gate-keeper model, and with professionals diverting cases with other mental health issues or counter indicators as necessary. There have been attempts to use non-prospective research designs to demonstrate effects of prepubertal social transition. Although these studies are often cited as evidence of the benefits of early social transition, how the studies were conducted make them entirely unable to show what they are claimed to support. That is, non-prospective studies are being cited as if they

were prospective.

61. Olsen and colleagues used a novel research design, studying children recruited from the TransYouth Project—a convenience sample of socially transitioned youth and families, recruited by word of mouth and interested in participating in research. There were three groups of children for comparison: (i) children who had already socially transitioned, (ii) their siblings, and (iii) children in a university database of families interested in participating in child development research. As noted by the study authors, “For the first time, this article reports on socially transitioned gender children’s mental health as reported by the children.”⁴⁰ Reports from parents were also recorded.⁴¹ In contrast, no reports or ratings were provided by any mental health care professional or researcher at all. That is, although adding self-assessments to the professional assessments might indeed provide novel insights, this project did not add self-assessment to professional assessment. Rather, it replaced professional assessment with self-assessment.

62. It is well established in the field of psychology that participant self-assessment can be severely unreliable for multiple reasons. For example, one well-known phenomenon in psychological research is known as “socially desirable responding”—the tendency of subjects to give answers that they believe will make themselves look good, rather than accurate answers. Specifically, subjects’ reports that they are enjoying good mental health and functioning well could reflect the subjects’ desire to be *perceived* as healthy and to have made good choices, rather than reflecting their actual mental health.

63. In their analyses, the study reported finding no significant differences between the transgender children, their non-transgender siblings, or the community controls. As the authors noted, “[t]hese findings are in striking contrast to previous

⁴⁰ Durwood, *et al.*, 2016, p. 121, italics added.

⁴¹ See Olson, *et al.* (2016).

work with gender-nonconforming children who had not socially transitioned, which found very high rates of depression and anxiety.”⁴² The authors are correct to note that their result contrasts with the previous research, but they do not discuss that this could reflect a problem with the novel research design they used: The subjective self-reports of the children and their parents’ reports may not be reflecting reality objectively, as professional researchers would. Because the study did not employ any method to detect and control for participants indulging in “socially desirable responding” or acting under other biasing motivations, this possibility cannot be assessed or ruled out.

64. Because this was a single-time study relying on self-reporting, rather than a before-and-after transition study relying on professional evaluation, it is not possible to know if the children reported as well-functioning are in fact well-functioning, nor if so whether they are well-functioning because they were permitted to transition, or whether instead the fact is that they were already well-functioning and therefore permitted to transition. Finally, because the TransYouth project lacks a prospective design, it cannot be known how many cases attempted transition, reacted poorly, and then detransitioned, thus never having entered into the study in the first place.

e. “Conversion Therapy”

65. There exist writers who have denounced all attempts to address mental health concerns *before* undergoing transition as “conversion therapy.” The term makes no sense in this context. The purpose of the mental health support provided during the “watchful waiting” period before puberty is to address all the other mental health issues—anxiety, depression, drug use, etc. Clinical improvement in mental health is itself the purpose and would be deemed a success regardless of whether it resulted in a transgender child better prepared for the stresses of transition to come or a cis-gender child now ready to take on new challenges.

⁴² Durwood, *et al.*, 2017, p. 116.

66. Indeed, in the context of gender dysphoric children, “conversion therapy” is an oxymoron. It simply makes no sense to refer to externally induced conversion among gender dysphoric children, as this appears to be the usual outcome *regardless* of any attempt to change them.

3. Adolescent-Onset Gender Dysphoria

67. A third profile has begun to present to clinicians or socially, characteristically distinct from the previously identified ones.⁴³ Unlike adult-onset gender dysphoria (and also unlike childhood-onset, *see supra* Part III.B.2), this group is predominately biologically female. This group first presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is this feature which led to the term Rapid Onset Gender Dysphoria (ROGD).⁴⁴ The majority of cases appear to occur within clusters of peers and in association with increased social media use⁴⁵ and especially among people with autism or other neurodevelopmental or psychiatric disorders.⁴⁶

68. It cannot be easily determined whether the self-reported gender dysphoria is a result of other underlying issues or if those mental health issues are the result of the stresses of being a stigmatized minority.⁴⁷ *See infra* Part III.C (discussing mental health). Importantly, and unlike other presentations of gender dysphoria, “coming out” in this group was often (47.2%) associated with *declines* rather than improvements in mental health.⁴⁸ Although long-term outcomes have not yet been reported, these distinctions argue against generalizing findings from the other types of gender dysphoria to this one.

69. There do not yet exist prospective outcomes studies for medical interventions for people with this presentation. At least, no study has yet been organized in

⁴³ Kaltiala-Heino, *et al.*, 2015; Littman, 2018.

⁴⁴ Littman, 2018.

⁴⁵ Littman, 2018.

⁴⁶ Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier et al., 2020.

⁴⁷ Boivin, *et al.*, 2020.

⁴⁸ Biggs, 2020; Littman, 2018.

such a way as to allow for an analysis of this group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics systematically tracking and reporting on their case results) fail to distinguish between people who had childhood-onset gender dysphoria and have aged into adolescence and people whose onset was not until adolescence. Similarly, there are clinics 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 can produce only confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

C. Dr. Josephson's views regarding the importance of addressing mental health co-morbidities before deciding questions of transition are well supported by science and professional standards.

70. The role of mental illness in gender dysphoria is central to providing appropriate and effective care. Dr. Josephson's comments included noting the very high rates of mental health concerns among gender dysphoric youth. His statements in this regard were accurate. As demonstrated by the research summarized below, psychiatric issues are repeatedly observed to be present in the majority of samples seeking transition services, not only among gender dysphoric youth, but also for people with gender dysphoria of all age groups.

71. The need to address mental health concerns—and to do so *before* embarking on a gender transition—was also emphasized in Dr. Josephson's comments. That very protocol appears ubiquitously across medical associations providing such standards. *See infra* Part V (reviewing comprehensively medical associations' statements).

72. Many claims published about mental health among people with gender dysphoria pertain to suicidality—variously referring to suicidal ideation, threats, attempts, or actual completed suicides. The role of suicide in mental health is not itself

straight-forward, sometimes reflecting severe depression and hopelessness and sometimes reflecting emotionally manipulative gestures in persons with substantial histories of self-harm. *See infra* Part IV.B (reviewing suicidality).

73. The research evidence on mental illness in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. Although childhood-onset cases are the most directly relevant to the present proceedings, those findings are best understood in the context of what is known about the other age groups. Therefore, those findings are also summarized briefly.

1. Mental Illness in Adult-Onset Gender Dysphoria

74. The co-occurrence of psychiatric illness with gender dysphoria in adults is widely recognized and widely documented.⁴⁹ A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental illness in transgender adults.⁵⁰ There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless concluded that (1) rates of mental illness among people are highly elevated, and (2) rates of psychopathology decreased on average among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental illness observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients becoming “lost to follow-up.” With attrition rates that high, it is unclear to what extent the information from the available participants genuinely reflects the whole sample.

75. In a survey of the board-certified psychiatrists in the Netherlands, 186 respondents answered questions about their experiences with a total of 584 cross-gender identified patients. The survey indicated: “In 270 (75%) of these 359 patients, cross-gender identification was interpreted as *an epiphenomenon of other psychiatric*

⁴⁹ See, e.g., Hepp, et al., 2005.

⁵⁰ Dhejne, et al., 2016.

illnesses, notably personality, mood, dissociative, and psychotic disorders.”⁵¹ The survey also asked about the age at which individuals should be permitted to transition. Acknowledging on the one hand that the Netherlands may have social attitudes differing from the United States and on the other hand that such attitudes may have shifted since this 2003 survey, the results nonetheless indicated: “[T]here is little consensus, at least among Dutch psychiatrists, about diagnostic features of gender identity disorder or about the minimum age at which sex reassignment therapy is a safe option.”⁵²

76. More recently, an international consortium of gender clinics formed the European Network for the Investigation of Gender Incongruence, spanning the Netherlands, Belgium, Germany, and Norway.⁵³ They recorded systematically on all adult patients evaluated at any of the clinics, totaling 305 participants over a three-and-a-half year period. Rather than rely on self-descriptor narratives, degree of gender dysphoria experience was measured with the Utrecht Gender Dysphoria Scale (UGDS).⁵⁴ The presence of psychiatric disorders was assessed with two standard instruments, the Mini International Neuropsychiatric Interview—Plus and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders. When tabulated, “Almost 70% of the final sample of 305 participants show one or more Axis I disorders current and lifetime,”⁵⁵ which were primarily affective disorders (such as depression) and anxiety disorders.

77. An important caution applies to interpreting these results: These very high proportions of mental illness come from people who are attending a clinic for the first time and are undergoing assessment. Clinics serving a “gate-keeper” role diverted candidates with mental health issues away from medical intervention. The side-effect

⁵¹ Campo, *et al.*, 2003, p. 1332, italics added.

⁵² Campo, *et al.*, 2003, p. 1332.

⁵³ Heylens, *et al.*, 2014, p. 152.

⁵⁴ Cohen-Kettenis & van Goozen, 1997.

⁵⁵ Cohen-Kettenis & van Goozen, 1997, page 152.

of gate-keeping is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals after medical transition, then there would seem to have been a substantial improvement, even though transition had no effect at all: The removal of people with poorer mental health can create the statistical illusion of improvement among the remaining people.

2. Mental Illness in Adolescent-Onset Gender Dysphoria

78. In 2019, a Special Section of the *Archives of Sexual Behavior* was published: “Clinical Approaches to Adolescents with Gender Dysphoria.” It included this brief yet thorough summary of rates of mental illnesses among adolescents expressing gender dysphoria by Dr. Aron Janssen, of the Department of Child and Adolescent Psychiatry of New York University:⁵⁶ The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,⁵⁷ with suicide attempts ranging 10 to 45%.⁵⁸ Self-injurious thoughts and behaviors range 14–39%.⁵⁹ Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.⁶⁰ Gender dysphoria also overlaps with Autism Spectrum Disorder.⁶¹

79. There is one mental illness of specific concern in the context of adolescent onset gender dysphoria, *Borderline Personality Disorder* (BPD). The DSM criteria for BPD are:

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 devalu-

⁵⁶ Janssen, *et al.*, 2019.

⁵⁷ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.

⁵⁸ Mustanski *et al.*, 2015.

⁵⁹ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.

⁶⁰ de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.

⁶¹ de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.

ation.

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.)

80. It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria are actually cases of BPD. That is, some people may be misinterpreting their experiences to represent a gender identity issue, when it instead represents the “identity disturbance” noted in symptom Criterion 3. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence, is substantially more common among 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 had an ‘identity disturbance’ that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.

81. A primary cause for concern is symptom Criterion 5: recurrent suicidality. Regarding the provision of mental health care, this is a crucial distinction: A person with BPD going undiagnosed will not receive the appropriate treatments (the currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone

with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality. One would predict also that misdiagnoses would occur more often if one reflexively dismissed or discounted symptoms of BPD as responses to “minority stress.” *See infra* Part III.C.4 (discussing minority stress).

82. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. *See infra* Part IV.B. 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.

3. Mental Illness in Childhood-Onset Gender Dysphoria

83. Elevated rates of multiple mental illnesses 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 52% fulfilled criteria for a DSM axis-I disorder.⁶² A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but 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 the average score was in the clinical rather than healthy range, among children in both clinics.⁶³ When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

84. A systematic, comprehensive review of all studies of Autism Spectrum Dis-

⁶² Wallien, *et al.*, 2007.

⁶³ Cohen-Kettenis, *et al.*, 2003.

orders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD in youth with gender dysphoria. Studies reviewing medical records of children and adolescents referred to gender clinics showed 5–26% to have been diagnosed with ASD.⁶⁴ 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.”⁶⁵ The rate of ADHD among children with GD was 8.3–11%. Conversely, in 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.”⁶⁶

4. Dr. Josephson’s observations that the negative mental health of children with gender dysphoria cannot be sufficiently explained by social stigma is well supported by the available science.

85. Dr. Josephson’s panel comments included that stigma was not a sufficient explanation for all the mental health issues observed among children with gender dysphoria. The research evidence supports him in this assertion.

86. The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.⁶⁷ The association is not entirely straight-forward, however. For example, although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to

⁶⁴ Thrower, *et al.*, 2020.

⁶⁵ Thrower, *et al.*, 2020, p. 703.

⁶⁶ Janssen, *et al.*, 2016.

⁶⁷ Meyer, 2003.

gender identity.

87. Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but can successfully blend in as adult females; whereas the adult onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

88. Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.⁶⁸ The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also includes anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

IV. Scientific Claims Assessed

A. Assessment of Claims that All Childhood Outcome Studies Are Wrong

89. There exist authors asserting and re-asserting that the entire set of prospective outcomes studies on prepubescent children is wrong; that desistance is not, in fact, the usual outcome for gender dysphoric children; and that results from various retrospective studies are the more accurate picture.⁶⁹ As indicated in the responses published from authors of several prospective outcomes studies (and as summarized below), the arguments are not at all valid.⁷⁰

90. There have been accusations that some of the prospective outcome studies

⁶⁸ Meyer, 2003.

⁶⁹ Temple Newhook, *et al.*, 2018; Winters, *et al.*, 2018.

⁷⁰ Steensma, *et al.*, 2018; Zucker, *et al.* 2018.

(see Appendix 2 for a full list) are old. This criticism would be valid only if newer studies showed different results from the older studies; however, the findings of desistance are the same, indicating that age of the studies is not, in fact, a factor.

91. There have been accusations that some studies failed to use a DSM diagnosis, and should therefore be rejected. That would be a valid criticism only if studies using the DSM showed different results from studies not using the DSM. Because both kinds of studies showed the same results, one may conclude that DSM status was not a factor, even if using a DSM diagnosis would have been a preferred method.

92. There have been criticisms that some studies are too small to provide a reliable result. It is indeed true that if larger studies showed different results from the smaller studies, we would tend to favor the results of the larger studies. Because the smaller studies came to the same conclusion as the larger studies, however, the criticism is, once again, entirely moot.

93. There have been accusations that studies did not use the current DSM-5 as their method of diagnosing gender dysphoric children. This criticism would be valid only if there existed any studies using the DSM-5 against which to compare the existing studies. The DSM-5 is still too recent for there yet to have been long-term follow-up studies. It can be seen, however, that the outcome studies are the same across the DSM-III, DSM-III-R, DSM-IV, and DSM-IV-TR.

94. In science, there cannot be any such thing as a perfect study. Especially in medical research, where we cannot manipulate people in ways that would clear up difficult questions, all studies will have a fault. In science, we do not, however, reject every study with any identifiable short-coming—rather, we gather a diversity of observations, made with their diversity of compromises to safety and ethics (and time and cost, etc.), and tentatively accept the most parsimonious (simplest) explanation of the full set, weighting each study according to their individual strengths and weaknesses.

B. Assessment of Claims of Suicidality

95. The polarized context of gender dysphoria has led to the use of increasingly hyperbolic claims and terms. Typically, as part of an emotion-based effort to effect behavior change, reports of suicidality have been rhetorically weaponized, scarcely representing the content of the research literature.

96. Despite the frequency with which writers refer to “suicidality,” few explicate what they mean by the term. The research literature distinguishes importantly among suicidal ideation (which may range from fleeting to chronic), suicide gestures and attempts (which may range from expressions of cries for help range to actual intents to die), threats (which may or may not be sincere or involve lethal means), and actual deaths by suicide.

97. The scientific study of suicide is inextricably link to that of mental illness. For example, as noted in the preceding, suicidality is a well-documented symptom of Borderline Personality Disorder (as are chronic identity issues), and personality disorders are highly elevated among transgender populations, especially adolescent-onset. Thus, the elevations of suicidality among gender dysphoric adolescents may not be a result of anything related to transition (or lack of transition), but to the overlap with mental illnesses of which suicidality is a substantial part. Conversely, improvements in suicidality reported in some studies may not be the result of anything related to transition, but rather to the concurrent general mental health support which is reported by the clinical reported prospective outcomes. Studies that include more than one factor at the same time without accounting for each other represent a “confound,” and it cannot be known which factor (or both) is the one causing the effects observed. That is, when a study provides both mental health services and medical transition services at the same time, it cannot be known which (or both) is what caused any changes.

98. Overall, rates of suicidal ideation and suicidal attempts appear to be re-

lated—not to transition status—but to the social support received: The research evidence shows that support decreases suicidality, but that transition itself does not. Indeed, in some situations, social support was associated with increased suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.⁷¹

V. Statements from Professional Associations

99. The value of position statements from professional associations should be neither over- nor underestimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement will summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts of a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

100. Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's

⁷¹ Bauer, *et al.* (2015).

full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

101. In the presently highly politicized context, official statements of professional associations have been widely misrepresented. At the end of the Heritage panel discussion in which Dr. Josephson participated, audience member Zack Ford made a claim I have seen frequently on social and in mainstream media: "You all have beliefs that stand in stark contradiction to almost all of the major medical organizations." That claim is demonstrably untrue.

102. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations (below). Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

Association	Acronym	Statement Publication Date
American Academy of Pediatrics	AAP	2018
Endocrine Society (and Pediatric Endocrine Society)	ES/PES	2017 (2020)
American College of Obstetricians & Gynecologists	ACOG	2017
American College of Physicians	ACP	2015
American Academy of Child and Adolescent Psychiatry	AACAP	2012

Association	Acronym	Statement Publication Date
European Society for Pediatric Endocrinology & Lawson Wilkins Pediatric Endocrine Society	ESPE-LWPES	2009
World Professional Association for Transgender Health	WPATH	2011/2012

103. The professional associations statements addressed different subsets of the various aspects of transition. Nonetheless, with the broad exception of the American Academy of Pediatrics (AAP),⁷² the statements repeatedly noted:

- Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Puberty-blocking medication is an experimental, not a routine, treatment.
- Social transition is not generally recommended until after puberty.

Although some other medical associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

104. Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

105. I was unable to identify any statement from Dr. Josephson that contradicted the major medical associations, with the exception of the AAP, which itself contradicted all the other major medical associations. That is, AAP appears to be the only major medical association advocating an affirmation-only approach, despite the

⁷² Rafferty, *et al.*, 2018.

lack of any objective evidence justifying their departure. I review each of these statements by professional organizations below.

A. World Professional Association for Transgender Health (WPATH)—2011

106. The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

[I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).⁷³

107. That is, “In most children, gender dysphoria will disappear before or early in puberty.”⁷⁴

108. Dr. Josephson’s comments about the mental health of gender dysphoric children were entirely consistent with the WPATH standards, including the need to “[a]ssess and treat any co-existing mental health concerns of children or adolescents (or refer to another mental health professional for treatment).”⁷⁵ Indeed, the WPATH standards agree explicitly with Dr. Josephson’s expressed purpose: “The role of mental health professionals includes making reasonably sure that the gender dysphoria is not secondary to or better accounted for by other diagnoses.”⁷⁶

109. Although WPATH does not refer to puberty blocking medications as “experimental,” the document indicates the non-routine, or at least inconsistent availability of the treatment:

Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs

⁷³ Coleman, *et al.*, 2012, p. 172.

⁷⁴ Coleman, *et al.*, 2012, p. 173.

⁷⁵ Coleman, *et al.*, 2012, p. 174.

⁷⁶ Coleman, *et al.*, 2012, p. 180.

among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre, van de Waal & Cohen-Kettenis, 2006; Zucker et al., in press).⁷⁷

110. WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families' decisions:

Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.⁷⁸

111. It does caution, however, "Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria."⁷⁹

B. Endocrine Society (ES)—2017

112. The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

113. The document acknowledged the frequency of desistance among gender dysphoric children:

Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called "desisters"). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.⁸⁰

114. The statement similarly acknowledges inability to predict desistance or persistence, "With current knowledge, we cannot predict the psychosexual outcome

⁷⁷ Coleman, *et al.*, 2012, p. 173.

⁷⁸ Coleman, *et al.*, 2012, p. 173.

⁷⁹ Coleman, *et al.*, 2012, p. 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

⁸⁰ Hembree, *et al.*, 2017, p. 3876.

for any specific child.”⁸¹

115. Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, “In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues.”⁸² This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

116. The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: “We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional.”⁸³

117. Among his contributions to the panel, Dr. Josephson related a disagreement he had with a colleague regarding clinical judgments about clients’ thoughts about transition. The Endocrine Society guidelines side with Dr. Josephson, making explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician “provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable psychological and social outcomes.”⁸⁴

C. Pediatric Endocrine Society and Endocrine Society (ES/PES)—2020

118. In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.⁸⁵ Although strongly worded, the document provided no specific guidelines, instead

⁸¹ Hembree, *et al.*, 2017, p. 3876.

⁸² Hembree, *et al.*, 2017, 3877.

⁸³ Hembree, *et al.*, 2017, p. 3872.

⁸⁴ Hembree, *et al.*, 2017, p. 3877.

⁸⁵ PES, online; Pediatric Endocrine Society & Endocrine Society, 2020, December 15.

deferring to the Endocrine Society guidelines.⁸⁶

119. It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society “recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance.”⁸⁷ However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: “If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an anti-androgen that directly suppresses androgen synthesis or action.”⁸⁸ Despite the PES asserting it as ‘medically necessary’, the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: “We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient’s overall health and/or well-being.”⁸⁹

120. Thus, Dr. Josephson’s comments, including those about evaluating child clients’ thinking and the need to resolve mental health issues before transition, are entirely consistent also with the guidelines of the Pediatric Endocrine Society.

D. American Academy of Child & Adolescent Psychiatry (AACAP)—2012

121. The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression, suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least

⁸⁶ Hembree, *et al.*, 2017.

⁸⁷ PES, online, p. 1.

⁸⁸ Hembree, *et al.*, p. 3883.

⁸⁹ Hembree, *et al.*, p. 3872, repeated on p. 3894.

until the wish to change sex is unequivocal, consistent, and made with appropriate consent.⁹⁰

122. The AACAP's language repeats the description of the use of puberty blockers only as an exception "For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible*, one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues."⁹¹

123. The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: "In follow-up studies of 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,"⁹² adding that "[c]linicians should be aware of current evidence on the natural course of gender discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality."⁹³

124. The policy similarly includes a provision for resolving mental health issues: "Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems.*"⁹⁴ The document also includes minority stress issues and the need to deal with mental health aspects of minority status (e.g., bullying).⁹⁵

125. Rather than endorse social transition for prepubertal children, the AACAP indicates: "There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judg-

⁹⁰ Adelson & AACAP, 2012, p. 969.

⁹¹ Adelson & AACAP, 2012, p. 969, italics added.

⁹² Adelson & AACAP, 2012, p. 963.

⁹³ Adelson & AACAP, 2012, p. 968.

⁹⁴ Adelson & AACAP, 2012, p. 970, italics added.

⁹⁵ Adelson & AACAP, 2012, p. 969.

ment, bearing in mind the potential risks and benefits of doing so.”

E. American College of Obstetricians & Gynecologists (ACOG)—2017

126. The American College of Obstetricians & Gynecologists (ACOG) published a “Committee Opinion” expressing recommendations in 2017. The statement indicates it was developed by the ACOG’s Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: “This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.”⁹⁶

127. Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.

128. The ACOG statement cites the statements made by other medical associations—ESPE, PES, and the Endocrine Society—and by WPATH. It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no psychiatric illness that would hamper diagnosis and no psychiatric (or other medical) contraindications to treatment. It notes that “*before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental health professional, has no contraindications to therapy, and displays an understanding of the risks involved.”⁹⁷ Dr. Josephson’s comments are entirely in line with this recommendation.

129. The “Eligibility and Readiness Criteria” also include, “Diagnosis established for gender dysphoria, transgender, transsexualism.”⁹⁸ This standard, requir-

⁹⁶ ACOG, 2017, p. 1.

⁹⁷ ACOG, 2017, p. 3 (citing the Endocrine Society guidelines, italics added).

⁹⁸ ACOG, 2017, Table 1, p. 3.

ing a formal diagnosis, forestall affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

130. ACOG's remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

F. American College of Physicians (ACP)—2015

131. The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including nondiscrimination, antiharassment, and defining “family” by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services of public and private health benefit plans.⁹⁹

132. ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting “reparative therapy;” however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that “[s]exual orientation and gender identity are inherently different.”¹⁰⁰ It based this statement on the fact that “the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*.”¹⁰¹ The APA’s document, entitled “Report of the American Psychological Task Force on appropriate therapeutic responses to *sexual orientation*” (italics added) does not include or reference research on gender identity. Despite citing no research about transgenderism, the ACP nonetheless included in its statement: “Available research does not support the use of reparative therapy as an effective method in the treatment of LGBT persons.”¹⁰² That is, the inclusion of “T” with “LGB” is based on something other than the existing evidence.

⁹⁹ Daniel & Butkus, 2015a, 2015b.

¹⁰⁰ Daniel & Butkus, 2015b, p. 2.

¹⁰¹ Daniel & Butkus, 2015b, p. 8, italics added.

¹⁰² Daniel & Butkus, 2015b, p. 8, italics added.

133. There is another statement,¹⁰³ which was funded by ACP and published in the Annals of Internal Medicine under its “*In the Clinic*” feature, noting that “In the Clinic’ does not necessarily represent official ACP clinical policy.”¹⁰⁴ The document discusses medical transition procedures for adults rather than for children, except to note that “no medical intervention is indicated for prepubescent youth,”¹⁰⁵ “a mental health provider can assist the child and family with identifying an appropriate time for a social transition,”¹⁰⁶ and that “the child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is high than in their cisgender peers.”¹⁰⁷

134. I could find no contradictions between Dr. Josephson’s comments and the content of these documents.

G. American Academy of Pediatrics (AAP)—2018

135. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy 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.¹⁰⁸ Moreover, of all the outcomes research published, the AAP policy cited *none*.

136. I conducted a point-by-point fact-check of the claims asserted in the AAP policy and the references it cited in support of them. I submitted it to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it under-

¹⁰³ Safer & Tangpricha, 2019.

¹⁰⁴ Safer & Tangpricha, 2019, p. ITC1.

¹⁰⁵ Safer & Tangpricha, 2019, p. ITC9.

¹⁰⁶ Safer & Tangpricha, 2019, p. ITC9.

¹⁰⁷ Safer & Tangpricha, 2019, p. ITC9.

¹⁰⁸ Cantor, 2020.

went blind peer review and was published. I append that article as part of this report. See Appendix 3.

137. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated in its policy. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, “Has the AAP responded to Dr Cantor? If not, have you any response now?” The AAP Media Relations Manager, Lisa Black, emailed: “We do not have anyone available for comment.”

H. The ESPE-LWPES GnRH Analogs Consensus Conference Group—2009

138. Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES). Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

139. The effort concluded that “[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation and cannot be suggested routinely.” However, gender dysphoria was not explicitly mentioned as one of those other conditions.

VI. Conclusions

140. In sum, the research literature consists of a relatively small number of studies on a diverse phenomenon, which show mixed results from potential treatments (and non-treatment). Many debates, both public and professional ones, repeatedly provided only selected portions of these findings, thus misrepresenting the state of the science to appear one-sided rather than mixed.

141. Given the only tentative and incomplete nature of the science, the continuing and active misrepresentation of the science by extremists, and the large risks potentially posed to the long-term well-being of children, my field requires not only

additional research, but also vigorous debate among all potential interpretations.

142. The negative effect of shutting down a single side of an issue can be seen best with a specific example. A recent study “estimated homicide rates for transgender residents and transfeminine, Black, Latin@, and young (aged 15–34 years) subpopulations during the period 2010 to 2014 using Transgender Day of Remembrance and National Coalition of Anti-Violence Programs transgender homicide data.”¹⁰⁹ The analyses demonstrated that homicide rates were highly elevated among Black, trans, drug-involved sex workers, but otherwise were lower than among the remainder of the transgender population as compared to the general mainstream population.

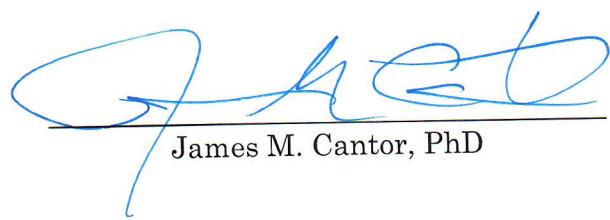
143. If an observer were provided only with the first of these findings, then it would appear that transphobia is adding to the victimization of those in already victimized groups. A policy-maker would want to respond by allocating resources into combatting transphobic violence; however, such efforts would be mostly misapplied, going to portions of the community who don’t need it. Conversely, if the observer were provided only with the second of these findings, then one would conclude that there is no transphobia problem at all—the trans community would already be doing better than average. That, however, would lead to a failure to allocate protections where they are indeed needed to save people who are indeed suffering high rates of homicide. It is only when an observer has access to both of these findings that one can identify the best means to benefit the public: to help drug-involved sex workers, for which the Black transpeople would disproportionately benefit exactly as they are disproportionately victimized.

144. Acknowledging the contested nature of many claims in public and professional discussions of this topic, Dr. Josephson’s claims are uniformly consistent with medical association guidelines and with the contents of the scientific literature. If

¹⁰⁹ Dinno, 2017, p. 1441.

experts and care providers are unable to share the information they have, then clients and their families will be unable to become informed enough to provide informed consent, and policy makers will be led away from applying resources to where they may do their intended good.

Date: 31 March 2021



A handwritten signature in blue ink, appearing to read "James M. Cantor, PhD". The signature is fluid and cursive, with a horizontal line underneath it.

James M. Cantor, PhD

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Appendix 1

James M. Cantor, PhD

Toronto Sexuality Centre
2 Carlton Ave., suite 1820
Toronto, Ontario, Canada M5B 1J3

416-766-8733 (o)
416-352-6003 (f)
jamescantorphd@gmail.com

EDUCATION

Postdoctoral Fellowship Centre for Addiction and Mental Health • Toronto, Canada	Jan., 2000–May, 2004
Doctor of Philosophy Psychology • McGill University • Montréal, Canada	Sep., 1993–Jun., 2000
Master of Arts Psychology • Boston University • Boston, MA	Sep., 1990–Jan., 1992
Bachelor of Science Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY Concentrations: Computer science, mathematics, physics	Sep. 1984–Aug., 1988

EMPLOYMENT HISTORY

Director Toronto Sexuality Centre • Toronto, Canada	Feb., 2017–Present
Senior Scientist (Inaugural Member) Campbell Family Mental Health Research Institute Centre for Addiction and Mental Health • Toronto, Canada	Aug., 2012–May, 2018
Senior Scientist Complex Mental Illness Program Centre for Addiction and Mental Health • Toronto, Canada	Jan., 2012–May, 2018
Head of Research Sexual Behaviours Clinic Centre for Addiction and Mental Health • Toronto, Canada	Nov., 2010–Apr. 2014
Research Section Head Law & Mental Health Program Centre for Addiction and Mental Health • Toronto, Canada	Dec., 2009–Sep. 2012
Psychologist Law & Mental Health Program Centre for Addiction and Mental Health • Toronto, Canada	May, 2004–Dec., 2011

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	
Royal Victoria Hospital • Montréal, Canada	
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. (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
2. 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.
3. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. L. (2019). The Screening Scale for Pedophilic Interest-Revised (SSPI-2) may be a measure of pedohebophilia. *Journal of Sexual Medicine*, 16, 1655–1663. doi: 10.1016/j.jsxm.2019.07.015
4. 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
5. Cantor, J. M. (2018). Can pedophiles change? *Current Sexual Health Reports*, 10, 203–206. doi: 10.1007/s11930-018-0165-2
6. Cantor, J. M., & Fedoroff, J. P. (2018). Can pedophiles change? Response to opening arguments and conclusions. *Current Sexual Health Reports*, 10, 213–220. doi: 10.1007/s11930-018-0167-0z
7. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). Age diversity among victims of hebephilic sexual offenders. *Sexual Abuse*, 30, 332–339. doi: 10.1177/1079063216665837
8. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). The relationships between victim age, gender, and relationship polymorphism and sexual recidivism. *Sexual Abuse*, 30, 132–146. doi: 10.1177/1079063216630983
9. Stephens, S., Newman, J. E., Cantor, J. M., & Seto, M. C. (2018). The Static-99R predicts sexual and violent recidivism for individuals with low intellectual functioning. *Journal of Sexual Aggression*, 24, 1–11. doi: 10.1080/13552600.2017.1372936
10. Cantor, J. M. (2017). Sexual deviance or social deviance: What MRI research reveals about pedophilia. *ATSA Forum*, 29(2). Association for the Treatment of Sexual Abusers. Beaverton, OR. <http://newsmanager.compartners.com/atsa/issues/2017-03-15/2.html>
11. Walton, M. T., Cantor, J. M., Bhullar, N., & Lykins, A. D. (2017). Hypersexuality: A critical review and introduction to the “Sexbehavior Cycle.” *Archives of Sexual Behavior*, 46, 2231–2251. doi: 10.1007/s10508-017-0991-8
12. Stephens, S., Leroux, E., Skilling, T., Cantor, J. M., & Seto, M. C. (2017). A taxometric analysis of pedophilia utilizing self-report, behavioral, and sexual arousal indicators. *Journal of Abnormal Psychology*, 126, 1114–1119. doi: 10.1037/abn0000291
13. Fazio, R. L., Dyshniku, F., Lykins, A. D., & Cantor, J. M. (2017). Leg length versus torso length in pedophilia: Further evidence of atypical physical development early in life. *Sexual Abuse: A Journal of Research and Treatment*, 29, 500–514. doi: 10.1177/1079063215609936
14. Seto, M. C., Stephens, S., Lalumière, M. L., & Cantor, J. M. (2017). The Revised Screening Scale for Pedophilic Interests (SSPI-2): Development and criterion-related validation. *Sexual Abuse: A Journal of Research and Treatment*, 29, 619–635. doi:

10.1177/1079063215612444

15. Stephens, S., Cantor, J. M., Goodwill, A. M., & Seto, M. C. (2017). Multiple indicators of sexual interest in prepubescent or pubescent children as predictors of sexual recidivism. *Journal of Consulting and Clinical Psychology*, 85, 585–595. doi: 10.1037/ccp0000194
16. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2017). Evidence of construct validity in the assessment of hebephilia. *Archives of Sexual Behavior*, 46, 301–309. doi: 10.1007/s10508-016-0907-z
17. Walton, M. T., Cantor, J. M., & Lykins, A. D. (2017). An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior. *Archives of Sexual Behavior*, 46, 721–733. doi: 10.1007/s10508-015-0606-1
18. Cantor, J. M., Lafaille, S. J., Hannah, J., Kucyi, A., Soh, D. W., Girard, T. A., & Mikulis, D. J. (2016). Independent component analysis of resting-state functional magnetic resonance imaging in pedophiles. *Journal of Sexual Medicine*, 13, 1546–1554. doi: 10.1016/j.jsxm.2016.08.004
19. Cantor, J. M., & McPhail, I. V. (2016). Non-offending pedophiles. *Current Sexual Health Reports*, 8, 121–128. doi: 10.1007/s11930-016-0076-z
20. Cantor, J. M. (2015). Milestones in sex research: What causes pedophilia? In J. S. Hyde, J. D. DeLamater, & E. S. Byers (Eds.), *Understanding human sexuality* (6th Canadian ed.) (pp. 452–453). Toronto: McGraw-Hill Ryerson.
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23. Cantor, J. M., Lafaille, S., Soh, D. W., Moayedi, M., Mikulis, D. J., & Girard, T. A. (2015). Diffusion Tensor Imaging of pedophilia. *Archives of Sexual Behavior*, 44, 2161–2172. doi: 10.1007/s10508-015-0599-9
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[Invited article]. *ATSA Forum*, 20(4), 6–10.

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64. 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
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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:	<i>Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria</i>
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:	<i>Are connectivity differences unique to pedophilia?</i>
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:	<i>Investigations into the neural underpinnings and biological correlates of asexuality</i>
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:	<i>Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria</i>
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:	<i>Neuroanatomic features specific to pedophilia</i>
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	\$1,071,920 / 5 years (October, 2008)
Principal Investigator:	James M. Cantor
Title:	<i>A preliminary study of fMRI as a diagnostic test of pedophilia</i>
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. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. Cantor, J. M. (2017, June 9). Pedophilia being in the brain: The evidence and the public's reaction. Invited presentation to *SEXposition at the ROM: The science of love and sex*, Toronto, Canada.
9. 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.
10. 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.
11. 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.
12. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
13. 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>]
14. 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.
15. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole.* Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
16. 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.

17. 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.
18. 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.
19. Cantor, J. M. (2015, June). *Hypersexuality.* Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
20. 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.
21. 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.
22. Cantor, J. M. (2015, March). *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
23. Cantor, J. M. (2015, February). *Hypersexuality.* Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
24. 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.
25. 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.
26. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain.* Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
27. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications.* Invited lecture presented to the Mental Health and Addiction Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
28. 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.
29. Cantor, J. M. (2014, April). *Pedophilia and the brain.* Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
30. 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.
31. 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.
32. 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.

33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.
39. 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.
40. 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.
41. Cantor, J. M. (2013, January). *Pedophilia and child molestation*. Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
42. 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.
43. 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.
44. 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.
45. 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.
46. 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.
47. 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, Regensburg, Germany.
48. 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.

49. 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.
50. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
51. 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.
52. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men*. Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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 meeting of 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., Ptyck, 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., & Pfau, 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., & Pfau, 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

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

Ad hoc Journal Reviewer Activity

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

GRANT REVIEW PANELS

- 2017– 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–Present Member • *Canadian Sex Research Forum*
- 2009–Present Member • *Society for Sex Therapy and Research*
- 2006–Present Member (elected) • *International Academy of Sex Research*
- 2006–Present Research and Clinical Member • *Association for the Treatment of Sex Abusers*
- 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

2017 Elected Fellow, Association for the Treatment of Sexual Abusers

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

- 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 mørke uvettet](#) ["The unknown darkness"]. *Fedrelandsvennen*.
- 13 July 2016. [Paedophilia: Shedding light on the dark field](#). *The Economist*.
- 1 July 2016. Debusschere, B. [Niet iedereen die kindporno 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*.
- 19 Aug 2015. Blackwell, T. [Treat sex offenders for impotence—to keep them out of trouble, Canadian psychiatrist says](#). *National Post*.
- 2 Aug 2015. Menendez, J. [BBC News Hour](#). *BBC World Service*.
- 13 July 2015. [The nature of pedophilia](#). *BBC Radio 4*.
- 9 July 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*.
- 10 Apr 2015. [NWT failed to prevent sex offender from abusing stepdaughter again](#). *CBC News*.
- 10 February 2015. Savage, D. "The ethical sadist." In *Savage Love*. *The Stranger*.
- 31 January 2015. [Begrip voor/van pedofilie](#) [Understanding pedophilia]. *de Volkskrant*.
- 9 December 2014. Carey, B. [When a rapist's weapon is a pill](#). *New York Times*.
- 1 December 2014. Singal, J. [Can virtual reality help pedophiles?](#) *New York Magazine*.
- 17 November 2014. [Say pedófile, busco ayuda](#). *El País*.
- 4 September 2014. [Born that way? Ideas, with Paul Kennedy](#). *CBC Radio One*.
- 27 August 2014. [Interrogating the statistics for the prevalence of paedophilia](#). *BBC*.
- 25 July 2014. Stephenson, W. [The prevalence of paedophilia](#). *BBC World Service*.
- 21 July 2014. Hildebrandt, A. [Virtuous Pedophiles group gives support therapy cannot](#). *CBC*.
- 26 January 2014. [Paedophilia a result of faulty wiring, scientists suggest](#). *Daily Mail*.
- 22 December 2013. Kane, L. [Is pedophilia a sexual orientation?](#) *Toronto Star*.
- 21 July 2013. Miller, L. [The turn-on switch: Fetish theory, post-Freud](#). *New York Magazine*.
- 1 July 2013. Morin, H. [Pédophilie: la difficile quête d'une origine biologique](#). *Le Monde*.
- 2 June 2013. Malcolm, L. [The psychology of paedophilia](#). *Australian National Radio*.
- 1 March 2013. Kay, J. [The mobbing of Tom Flanagan is unwarranted and cruel](#). *National Post*.
- 6 February 2013. [Boy Scouts board delays vote on lifting ban on gays](#). *L.A. Times*.
- 31 August 2012. [CNN Newsroom interview with Ashleigh Banfield](#). *CNN*.
- 24 June 2012. [CNN Newsroom interview with Don Lemon](#). *CNN*.

LEGAL TESTIMONY, PAST 4 YEARS

2019	US vs Peter Bright	Southern District, New York
2019	Probate and Family Court	Boston, Massachusetts
2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, Illinois
2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
2018	Re Commitment of Fernando Little (Frye Hearing)	Utica, NY
2018	Canada vs John Fitzpatrick (sentencing hearing)	Toronto, Ontario, Canada
2017	Re Commitment of Nicholas Bauer (Frye Hearing)	Lee County, Illinois
2017	US vs William Leford (presentencing hearing)	Warnock, Georgia

Appendix 2

1. Phil S. Lebovitz, *Feminine Behavior in Boys: Aspects of Its Outcome*, 128 AM. J. PSYCH. 1283 (1972).
2. Bernard Zuger, *Effeminate Behavior Present in Boys from Childhood: Ten Additional Years of Follow-Up*, 19 COMPREHENSIVE PSYCH. 363 (1978).
3. John Money & Anthony J. Russo, *Homosexual Outcome of Discordant Gender Identity/Role in Childhood: Longitudinal Follow-Up*, 4 J. PEDIATRIC PSYCH. 29 (1979).
4. Bernard Zuger, *Early Effeminate Behavior in Boys: Outcome and Significance for Homosexuality*, 172 J. NERVOUS & MENTAL DISEASE 90 (1984).
5. Charles W. Davenport, *A Follow-Up Study of 10 Feminine Boys*, 15 ARCHIVES OF SEXUAL BEHAV. 511 (1986).
6. Richard Green, THE “SISSY BOY SYNDROME” AND THE DEVELOPMENT OF HOMOSEXUALITY (1987).
7. Robert J. Kosky, *Gender-Disordered Children: Does Inpatient Treatment Help?*, 146 MED. J. AUSTL. 565 (1987).
8. Madeleine S. C. Wallien & Peggy T. Cohen-Kettenis, *Psychosexual Outcome of Gender-Dysphoric Children*, 47 J. AM. ACAD. CHILD & ADOL. PSYCH. 1413 (2008).
9. Kelley D. Drummond et al., *A Follow-Up Study of Girls with Gender Identity Disorder*, 44 DEVELOPMENTAL PSYCH. 34 (2008).
10. Thomas D. Steensma et al., *Factors Associated with Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-Up Study*, 52 J. AM. ACAD. CHILD & ADOL. PSYCH. 582 (2013).
11. Devita Singh et al., *A Follow-Up Study of Boys with Gender Identity Disorder*, 12 FRONTIERS IN PSYCH. 297 (2021).

Appendix 3



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

James M. Cantor

Toronto Sexuality Centre, Toronto, Canada

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

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 unsuccessful³⁸ 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, Giannattesi 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 summarizes 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

No potential conflict of interest was reported by the author.

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Appendix

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

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



Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria

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Paul W. Hruz, MD, PhD¹ 

Abstract

Individuals who experience a gender identity that is discordant with biological sex are increasingly presenting to physicians for assistance in alleviating associated psychological distress. In contrast to prior efforts to identify and primarily address underlying psychiatric contributors to gender dysphoria, interventions that include uncritical social affirmation, use of gonadotropin releasing hormone agonists to suppress normally timed puberty, and administration of cross sex steroid hormones to induce desired secondary sex characteristics are now advocated by an emerging cohort of transgender medicine specialists. For patients with persistent gender dysphoria, surgery is offered to alter the appearance of breasts and genital organs. Efforts to address ethical concerns regarding this contentious treatment paradigm are dependent upon reliable evidence on immediate and long term risks and benefits. Although strong recommendations have been made for invasive and potentially irreversible interventions, high quality scientific data on the effects of this approach are generally lacking. Limitations of the existing transgender literature include general lack of randomized prospective trial design, small sample size, recruitment bias, short study duration, high subject dropout rates, and reliance on "expert" opinion. Existing data reveal significant intervention associated morbidity and raise serious concern that the primary goal of suicide prevention is not achieved. In addition to substantial moral questions, adherence to established principles of evidence based medicine necessitates a high degree of caution in accepting gender affirming medical interventions as a preferred treatment approach. Continued consideration and rigorous investigation of alternate approaches to alleviating suffering in people with gender dysphoria are warranted.

Summary: This paper provides an overview of what is currently known about people who experience a gender identity that differs from their biological sex and the associated desire to engage the medical profession in alleviating associated discomfort and distress. The scientific evidence used to support current recommendations for affirming one's preferred gender, halting normally timed puberty, administering cross sex hormones, and surgically altering primary and secondary sexual traits are summarized and critically evaluated. Serious deficits in understanding the cause of this condition, the reasons for the marked increase in people presenting for medical care, together with immediate and long term risks relative to benefit of medical intervention are exposed.

Keywords

Cross sex hormones, Evidence based medicine, Gender dysphoria, Gender identity, Medical research, Puberty blockade, Risk–benefit analysis, Sexuality, Suicide, Transgender operations

¹ Washington University School of Medicine, St. Louis, MO, USA

Corresponding Author:

Paul W. Hruz, MD, PhD, Washington University School of Medicine, St. Louis, MO 63110, USA.
Email: hruz_p@wustl.edu

Patients who experience a gender identity that is discordant with biological sex have an alarmingly high incidence of serious psychosocial morbidity including depression, anxiety, eating disorders, substance abuse, HIV infection, and homelessness (Connolly et al. 2016). Most concerning, nearly half of all affected individuals will contemplate suicide and a third will attempt suicide (Adams, Hitomi, and Moody 2017). While a need for effective treatment modalities is clear, there are significant deficiencies in understanding the etiology of this condition, the risks and benefits of proposed medical interventions, and the long term success of various approaches in achieving the primary desired goal of preventing suicide (Institute of Medicine 2011; Olson Kennedy et al. 2016). With a desire to provide real and sustained assistance to patients who experience gender dysphoria within established ethical boundaries, it is essential to understand the scientific evidence used to support proposed medical interventions and acknowledge the limits of these data.

To adequately address the role of healthcare providers in treating patients with gender dysphoria, it is necessary to define this clinical condition in a way consistent with established scientific understanding of sex as a biological trait intrinsically ordered to the purpose of procreation. Despite ideologically influenced efforts to portray sex along a continuum, reproductive biology is inherently binary. Specifically, there are only two gonads (testes and ovaries) that contribute to the conception of new human life. The existence of individuals with disorders of sexual development (DSDs) does not alter this basic biological reality (Eid and Biason Lauber 2016). In many individuals with DSDs, fertility is absent or severely impaired (Lee et al. 2006, 2016). When genital ambiguity is present, there are established clinical pathways involving hormonal, genetic, and imaging studies to assist clinicians in determining the sex of the affected child (Lee et al. 2016). In these rare cases, which affect <0.02 percent of all infants, the physician must make a tentative sex assignment at the time of birth. For the remaining 99.9% of infants, sex is not “assigned” at birth but rather is correctly recognized by the observation of the appearance of the external genitalia. Nearly all patients who present to medical establishments for the treatment of gender dysphoria have normally formed and functioning sexual anatomy and function prior to hormonal or surgical intervention.

Although the ability to obtain accurate information on the number of people who experience a gender identity that is discordant with biological sex has remained challenging, several sources have reported

a marked increase in the number of patients presenting to specialized clinics that offer gender affirmation services. In the Fifth Edition of the *Diagnostic and Statistical Manual* (DSM 5) used to classify psychiatric disease, the reported prevalence of “gender dysphoria” was 0.005 percent to 0.014 percent for adult males and 0.002 percent to 0.003 percent for adult females (American Psychiatric Association [APA] 2013). Epidemiologic data from Sweden have demonstrated rising prevalence of individuals claiming a transgendered identity who sought treatment over the past fifty years, with most of the increase since 2000 (Dhejne et al. 2014). Some more recent estimates have suggested a prevalence as high as .4 percent of the US population (Meerwijk and Sevelius 2017).

Assessing the accuracy of these estimates requires consideration of the methodologies used. Higher estimates rely upon patient responses to questionnaires in which answers appear to be influenced by the wording of the questions asked. There is evidence that male to female ratio of individuals with sex gender identity discordance has reversed, with more recent estimates showing that much of the observed increase is due to biological females who identify as male (Zucker 2017). It is frequently claimed, without documented scientific evidence, that this increase is driven by an increase in existing patients coming forward for treatment rather than a change in overall incidence or change in rates of persistence among affected youth. The degree to which social affirmation of transgendered identity has affected these epidemiologic trends is unknown. Recently, the phenomenon of adolescent girls with no prior expression of gender dysphoria presenting as having a transgendered identity in social networks has been reported (aka rapid onset gender dysphoria; Littman 2018). This study is limited by relatively small sample size and a significant risk of ascertainment bias. Further research is required to establish the validity and extent of this phenomenon.

Understanding of the cause of any medical condition greatly assists efforts to develop effective treatment strategies. To date, the cause of discordance between sex and gender identity remains unknown. There is no available blood test or imaging procedure that can be used to determine a person’s self perceived gender identity. Evaluation relies exclusively in the domain of patient report of internally held feelings and beliefs. There are, however, published data that provide potential clues to influencing factors (Saleem and Rizvi 2017). This includes several reports of structural and functional differences between brains of individuals with sex

discordant gender identity compared to brains from people with gender identity that matches sex (Burke et al. 2014; Luders et al. 2009; Kruijver et al. 2000). Among the limitations of these data are significant overlap between male and female brain structures and heterogeneity between individuals. This precludes the ability to determine sex by examining structure alone. Furthermore, the existing data on brain structure and function do not account for the known phenomenon of neuronal plasticity (i.e., environmental stimuli can alter brain structure; Ismail, Fatemi, and Johnston 2017). Thus, it is not clear whether changes in brain structure are the cause or effect of transgendered identity and behavior.

It is known that prenatal and perinatal hormone exposure can alter sexual phenotype (i.e., the physical appearance of the body; Jost et al. 1973). The degree to which these hormones influence gender identity remains an area of active investigation (Berenbaum and Beltz 2016). Although insight has been gained by study of DSDs, there is conflicting evidence on the nature and magnitude of this effect and the dependence upon the etiology of the developmental defect. For example, female infants born with congenital adrenal hyperplasia (CAH), a condition that exposes the developing baby to high levels of male hormones (androgens), often exhibit typical male preferences and behaviors. Several potential explanations for this phenomenon that are independent of prenatal male hormone exposure have been proposed (Jordan Young 2012). Importantly, the vast majority of affected children with CAH historically did not experience self perceived transgender identity or gender dysphoria (Zucker et al. 1996).

Limited data also suggest a role of genetics in gender identity. This includes investigation of identical twins (Heylens et al. 2012). Because identical twins have exactly the same genes, if gender identity is exclusively determined by genetics, one would predict that there would be 100 percent concordance in identical twin pairs (i.e., if one twin experienced transgender identity, the other twin would also share this experience). However, the observed concordance is closer to 40 percent of affected twins. There are ongoing efforts to sequence the genomes of individuals with sex discordant gender identity to find a specific gene (or genes) that contribute(s) to this experience (Yang et al. 2017). The data published to date addressing this question provide potential clues, but similar to the limitations of with brain structures, there is considerable overlap between affected and nonaffected individuals (Foreman et al. 2019). Thus, it is likely that influences, whether primary or secondary, are polygenic (i.e., the

genetic differences are many, with each contributing only a small fraction of the observed phenotype).

The presence of genetic differences does not mean that the genetic variation is the cause of an individual's identity. There are numerous alternate hypotheses that can be proposed (e.g., a genetic difference in resiliency). Several reports have found high co occurrence of autism in children with gender dysphoria (Glidden et al. 2016). Thus, in light of existing data, it can be reasonably concluded that the cause of gender dysphoria is multifactorial with both genetic and environmental contributions. Further research is needed to establish the number of contributing factors and to determine relative influences for individual patients. Heterogeneity among patient populations is likely to complicate efforts to make generalizable outcome predictions in clinical studies, particularly with small randomized trial designs.

In children who express gender discordance, the majority will experience reintegration of gender identity with biological sex by the time of puberty in the absence of directed medical or societal intervention. This is supported by nearly a dozen published studies over the past forty years. Many of the earlier studies included a small number of subjects and used definitions of gender discordance (e.g., gender identity disorder) that differ from current criteria for gender dysphoria as listed in the *DSM V* (APA 2013). In some studies, loss of patients to follow up hinders determination of desistance (Wallien and Cohen Kettenis 2008). The most recent studies report desistance rates near 85 percent (Steensma et al. 2011; Drummond et al. 2008).

There is some evidence that the degree of distress experienced by a gender dysphoric child correlates with the likelihood of spontaneous resolution (Steensma et al. 2013). Whether and to what extent changes in social and medical approaches to dealing with individuals with transgender identity alters the rate of desistance is unclear, but there is indirect evidence that such effects may occur (de Vries et al. 2011). For patients who experience sex discordant gender identity beyond puberty, there are relatively few published reports of desistance. Most of these data are found among case reports and personal testimony outside of peer reviewed journals (Heyer 2018; Meijer et al. 2017). There are several hypotheses that can be put forth to account for this observation including differences between children and adults with respect to underlying etiology and the effects of extended social reinforcement. As in affected children, there are few data on the influence of gender affirming medical procedures on altering desistance rates.

Before addressing specific aspects of medical interventions intended to alleviate gender dysphoria, several general observations can be made regarding the published literature in this field. Despite the endorsement of gender affirmation approaches by several medical organizations including the Endocrine Society (Hembree et al. 2017) and the World Professional Alliance for Transgender Health (WPATH; Coleman et al. 2012), it is important to recognize the low quality of scientific evidence used in generating these treatment recommendations. With the publication of both the initial treatment guidelines by the Endocrine Society guidelines in 2009 and revised guidelines in 2017, the Grading of Recommendations, Assessment, Development and Evaluations system was used to assess data quality (Guyatt et al. 2008). This system ranks evidence into four categories (strong, moderate, low, and very low). Nearly all of the recommendations made were based upon “low” or “very low” quality evidence. By definition, these designations mean that there is a high likelihood that the attainment of new data will necessitate changes to the guidelines provided. The only data that reached the level of “moderate” quality were related to adverse medical outcomes. The limitations of the published studies in the growing field of transgender medicine are many. They include a general lack of randomized controlled trial design, small sample sizes, high potential for recruitment bias, questions regarding the precision of measured parameters, nongeneralizable population groups, relatively short follow up, high numbers of patients lost to follow up, and frequent reliance upon “expert opinion” alone. While such deficiencies are not unique to this field of investigation, the strength of the recommendations made on the basis of this type of evidence is, in many respects, disproportionate. In other areas of medicine, much greater caution is generally applied to advancing a single treatment approach over other potential interventions.

The care of patients who experience gender dysphoria has included efforts to understand and address underlying psychosocial morbidity (Brown and Jones 2016; de Graaf et al. 2018; Kaltiala Heino et al. 2015). Underlying factors that have been investigated include unresolved developmental challenges, underlying depression and anxiety disorders, strained family relationships, sexual abuse, autism, and peer conflicts (Saleem and Rizvi 2017). The pioneering work of Zucker established that many but not all patients who received psychological counseling and support were able to manage and resolve conflicts arising from discordant gender

identity, particularly in affected children (Zucker et al. 2012).

Among contemporary approaches to alleviate gender dysphoria are efforts to support and encourage affected patients to adopt a social role in accord with gender identity irrespective of biological sex. Social transition includes the use of preferred name and pronouns, cross dressing, and access to sex segregated facilities corresponding to perceived gender identity. Since the widespread adoption of interventional strategies directed toward affirming transgender identity, efforts to identify psychological approaches to mitigate dysphoria, with or without desistance as a desired goal, have largely been abandoned. The WPATH has rejected psychological counseling as a viable means to address sex gender discordance with the claim that this approach has been proven to be unsuccessful and is harmful (Coleman et al. 2012). Yet the evidence cited to support this assertion, mostly from case reports published over forty years ago, includes data showing patients who benefited from this approach (Cohen Kettenis and Kuiper 1984). Although largely unstudied, cognitive behavioral therapy in particular may have significant benefit to this patient population by reducing social anxiety (Busa, Janssen, and Lakshman 2018). To date, there have been no randomized controlled trials investigating the risks and benefits of social transition.

There have been studies that report positive effects of nonmedical interventions: cross sectional data on preferred name use have reported significant short term improvement in self reported sense of well being (Russell et al. 2018). Furthermore, children who have undergone social transition with parental support have reported reduced levels of dysphoria (Durwood, McLaughlin, and Olson 2017; Olson et al. 2016). Limitations of these data include small sample size, restriction of study subjects to those with mild dysfunction, reliance on parental report, and lack of long term follow up.

A variety of medical interventions have been introduced to support physical changes in the appearance and function of primary and secondary sexual organs to align with an individual’s desired gender role when this is discordant with biological sex. This includes hormonal blockade of normal pubertal development in adolescent children, administration of cross sex hormones (i.e., testosterone to females desiring to appear male and estrogen to males desiring to appear female), and surgery to alter the appearance of primary and secondary sexual features. While surgical procedures have been available to affected adults for decades, the use of such

interventions in children has only recently been advocated (de Vries and Cohen Kettenis 2012).

Long acting gonadotropin releasing hormone (GnRH) agonists (aka “puberty blockers”) have been recommended to halt pubertal progression when this process occurs prematurely in children (Carel et al. 2009). Purported justification of this intervention for children with persisting dysphoria includes overall safety of these medications, allowance of more time for a child to explore their gender identity, reversibility upon treatment cessation for desisting individuals, and prevention of irreversible changes in secondary sexual characteristics for patients with persistent gender discordance. Yet the use of this intervention remains controversial (Vrouenraets et al. 2015; Giovanardi 2017). There are a few relatively small studies that have demonstrated improved sense of well being and reduced dysphoria in adolescent transgendered youth who receive puberty blocking drugs (de Vries et al. 2011, 2014), but there are also significant concerns related to associated risks (Hruz, Mayer, and McHugh 2017). First, there are limited data specifically assessing the long term safety of delaying normally timed puberty (Schagen et al. 2016). This class of medication has not been approved by the US Food and Drug Administration for use in halting normally timed puberty for gender dysphoric youth (AbbVie 2018). Risks include osteopenia (low bone density), altered adult height, and impaired spatial memory (de Vries et al. 2011; Hough et al. 2017). Rather than merely providing more time for the exploration of gender identity, there is a concern that most if not all children exposed to this intervention will proceed to cross sex hormone therapy (de Vries et al. 2011). While cessation of GnRH agonist administration will allow resumption of the signals that direct gonadal maturation, the interruption of a normal developmental process, which is time dependent, cannot be “reversed.”

In the peer reviewed literature on individuals who have undergone gender affirming medical procedures to change bodily appearance, relatively low rates of regret and desire to “de transition” to a gender role corresponding to biological sex have been observed (Wiepjes et al. 2018). Due to limitations in available data, questions remain regarding long term satisfaction, particularly when initiated in adolescent children (Mahfouda et al. 2019). Most reports are from retrospective chart review or longitudinal study design.

None of the available studies include matched randomized prospective control groups. There is a deficiency of scientific study systematically assessing this patient population to understand factors that

are correlated with and may contribute to failure to achieve lasting relief of dysphoria following the affirmation of discordant gender identity. Affected individuals who desire to transition back to a gender role concordant with biological sex have reported negative social stigma similar to or in some cases exceeding that encountered prior to their initial medical intervention to support transgendered identity (Heyer 2018).

The available data on the long term effects of gender affirmation in this patient population indicate that the most serious concern, suicide, remains significantly elevated above the background population after medical intervention to alter sexual appearance. Specifically, a thirty year follow up study in Sweden on patients who had undergone medical transition showed a rate of completed suicide that was nine teenfold above the backgrounds population (Dhejne et al. 2011). Because this was not a controlled study, it is not possible to assess the impact of the medical treatments themselves on outcomes. However, these data clearly show that this approach did not resolve the problem of depression and suicide.

Further indicating a lack of efficacy of this approach is a recent meta analysis in North American patients, where suicidal ideation was assessed over the course of an individual’s lifetime and within the past year (Adams, Hitomi, and Moody 2017). In this report, suicide rates were similar in both groups. The few studies that examined suicidal ideation before and after gender transition found suicidal ideation to be increased.

In addition to remaining questions regarding the efficacy of hormonal and surgical efforts to align the body of an individual with gender dysphoria to his or her desired sex, the safety of these interventions is only partially understood, particularly when administered to children. A known consequence of cross sex hormone administration is the disruption of gonadal function and the signals that regulate human reproduction. The infertility that results can be irreversible, particularly where this intervention is undertaken prior to full gonadal maturation (Hembree et al. 2017). Androgen levels achieved in female patients given testosterone exceed those observed in women with polycystic ovarian syndrome and frequently reach levels seen in androgen secreting tumors with associated cardiovascular risk (Macut, Antić, and Bjekić Macut 2015). Males receiving estrogen have a fivefold increase in the incidence of thromboembolic stroke (Getahun et al. 2018). Adverse metabolic effects that increase the risk of cardiovascular disease have also been reported (Irwig 2018; Maraka et al. 2017). The

influence of cross sex hormones on cancer risk remains unclear. Potential risks for cancer development include exposure to cross sex hormones, effects of sexually transmitted diseases (i.e., some sexually transmitted diseases increase risk of some cancers), and failure to obtain recommended screening in patients presenting to medical facilities with a gender that does not match biological sex. Further research is needed to adequately address this serious concern (Braun et al. 2017).

In summary, the information presented in this report highlights many of the deficiencies in the existing knowledge base regarding the etiology and prevalence of gender dysphoria and current treatment approaches. Although far from exhaustive, these data provide a rationale for exercising caution in accepting the currently proposed gender affirmation treatment paradigms that have been advocated by the WPATH (Coleman et al. 2012) and other professional organizations (Hembree et al. 2017). With heightened awareness of the suffering experienced by individuals who experience a gender identity that is discordant with biological sex, there remains a strong moral imperative to engage this vulnerable patient population. As increasing numbers of affected people, both children and adults, are presenting to medical centers for help, there is a need to better understand this condition and provide means to address all associated medical needs. This includes efforts to welcome and support individuals claiming a transgendered identity with the provision of routine medical care and treatment (Rahman, Li, and Moskowitz 2019). As in all other areas of medicine, efforts to provide safe and effective clinical care of patients with gender dysphoria should be grounded on sound scientific evidence. Where this evidence is lacking, academic healthcare institutions have an opportunity to contribute to rigorous clinical investigation of novel treatment approaches. This can include efforts to better understand psychological influences on gender identity and the design of properly controlled clinical trials using modern psychiatric approaches such as cognitive behavioral therapy (Butler et al. 2006). Administrators who are charged with developing institutional policy and educating staff on the complexity of this unique condition and diverse patient population can benefit from recognizing the ambiguities present. Physicians who deliver this care can also remain mindful of the long history of the harms that have been done to patients from the use of unproven medical interventions (Johnson 2014). Ongoing critical appraisal of emerging scientific evidence and continued open dialogue regarding potential alternate approaches

to the care of individuals with sex gender discordance provides hope for lasting benefit, both to affected patients and to society as a whole.

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ORCID iD

Paul W. Hruz, MD, PhD  <https://orcid.org/0000-0002-1478-3355>

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Biographical Note

Paul W. Hruz, MD, PhD, is an associate professor of pediatrics and an associate professor of cellular biology and physiology at Washington University in St. Louis. He received his bachelor's degree in chemistry from Marquette University in 1987. He received his PhD in biochemistry and MD from the Medical College of Wisconsin. He completed Residency training in pediatrics at the University of Washington in Seattle and a Pediatric Endocrinology fellowship at Washington University. He has also received certification in healthcare ethics from the National Catholic Bioethics Center. He served as the chief of the Division of Pediatric Endocrinology and Diabetes at Washington University from 2012 to 2017.

The Economic Cost of Abortion

JUNE 15, 2022

Ranking Member Mike Lee (R-UT)

Joint Economic Committee Republicans

jec.senate.gov | G-01 Dirksen Senate Office Building Washington, DC 20510 | (202) 224-5171

KEY POINTS

- In recent weeks, U.S. Treasury Secretary Janet Yellen and other economists have argued that restricting abortion would negatively affect the economy, particularly by diminishing the labor market outcomes of women. These arguments overlook the far greater economic cost of abortion due to the loss of lives of the unborn.
- JEC Republicans estimate that the economic cost of abortion in 2019 alone—due to the loss of nearly 630,000 unborn lives—was at least \$6.9 trillion, or 32 percent of GDP.
 - This economic cost estimate relies on standard methodologies used by federal government agencies to quantify the benefits of policies that affect mortality risks. We apply the same methodology to abortion, which increases the risk of mortality to unborn babies.
- JEC Republicans estimate that the economic cost of abortion due the loss of unborn lives is 425 times larger than the earnings loss mothers would be expected to incur when having a child.
 - Earnings of the average mother fall by approximately \$26,000 over the first six years of her first child's life. If each abortion prevents maternal earnings from falling, all abortions in 2019 could save mothers \$16.2 billion in earnings over the next six years. However, the JEC's \$6.9 trillion cost of abortion estimate far outweighs these projected earnings benefits.
- Abortion imposes external costs on society not reflected in JEC Republicans' \$6.9 trillion cost estimate. In the long run, abortion shrinks the labor force, stunts innovation, and limits economic growth. It also weakens the solvency of social insurance programs like Social Security and Medicare that rely on workers to support a growing elderly population.
- Abortion at its core is a moral issue rather than an economic one. But even in economic terms, the costs of abortion vastly outweigh any claimed benefits.

INTRODUCTION

Since the Supreme Court's 1973 *Roe v. Wade* decision, some economists have argued that unrestricted abortion provides economic benefits for women and the economy at large. Most recently, during questioning for a Senate Banking Committee hearing, U.S. Treasury Secretary Janet Yellen testified that restricting access to abortion "would have very damaging effects on the economy" by harming women's labor market outcomes and increasing the odds they fall into poverty.¹ Similarly, an amicus brief signed by 154 economists for the ongoing *Dobbs v. Jackson Women's Health Organization* Supreme Court case argued that abortion restrictions impose economic costs on women in terms of employment, educational attainment, financial distress, and other outcomes.²

These arguments overlook the far greater economic cost of unrestricted abortion when accounting for the lost lives of the unborn. Applying standard valuation methods used by government agencies to assess the costs and benefits of policy actions that affect mortality risks, we estimate that the economic cost of abortion to unborn babies in the U.S. was \$6.9 trillion in 2019, 32 percent of gross domestic product (GDP) that year.³ This cost is 425 times larger than the \$16.2 billion loss in earnings that new mothers would be expected to incur over the first six years of the child's life. These estimates do not reflect broader economic costs of abortion beyond those incurred by unborn babies, such as reduced economic innovation and increased tax revenue for funding social programs. While abortion remains an inherently moral issue, these findings counter the argument that abortion has a net economic benefit.

This report reviews the existing literature on the effects of abortion access on economic outcomes. We then describe our estimate of the economic cost of abortion from the perspective of unborn babies,

¹ The Financial Stability Oversight Council Annual Report to Congress 117th Congress. 2022. (Testimony of Janet Yellen) <https://www.banking.senate.gov/hearings/05/03/2022/the-financial-stability-oversight-council-annual-report-to-congress>

² *Dobbs v. Jackson Women's Health Organization*. "Brief amicus curiae of economists in support of respondents." September 20, 2021. https://www.supremecourt.gov/DocketPDF/19/19-1392/193084/20210920175559884_19-1392bsacEconomists.pdf

³ U.S. Bureau of Economic Analysis, Gross Domestic Product (GDP), retrieved from FRED, Federal Reserve Bank of St. Louis. May 26, 2022. <https://fred.stlouisfed.org/series/GDP>.

which has been omitted from previous analyses. Finally, we discuss other economic costs of abortion to society more broadly.

EXISTING ANALYSIS OF EFFECTS OF ABORTION ON ECONOMIC OUTCOMES

Secretary Yellen's comments on abortion draw from an academic literature that estimates the impact of abortion restrictions on economic outcomes.⁴ The amicus brief filed by 154 economists reviews this literature, concluding that legalized abortion increases the wages, educational attainment, labor force participation, and marriage rates of women.⁵ Several studies test the effects of abortion access based on the loosening of restrictions in five states in 1970, prior to the 1973 *Roe* decision. These studies generally find that increasing abortion access reduced the number of babies born, and increased women's educational attainment, labor force participation, and wages. A study based on longitudinal data since 2008 finds that women denied an abortion due to narrowly missing the time limit based on the baby's gestational age are more likely to experience financial distress during the next five years.⁶

Likewise, a broader literature studies the effects of having a baby on a mother's economic outcomes, which could imply that abortion restrictions lead women to have babies that impose a "motherhood penalty" on their earnings. While the size of the "penalty" likely depends on whether the baby was planned, the demographic characteristics of the mother, and choices made by the mother and her partner, there is a clear pattern of reduced earnings when motherhood begins. Danielle

⁴ Some authors have attempted to estimate the aggregate effect of existing abortion restrictions on women's earnings. For example, the Institute for Women's Policy Research estimates that abortion restrictions currently in place reduce women's earnings by \$105 billion per year. However, the study design is flawed. Most problematically, it assumes that all differences in women's earnings across states, after adjusting for a set of worker characteristics, are a result of differences in abortion restrictions. In reality, there are almost certainly unobserved factors that affect earnings and are correlated with states' abortion restrictions, biasing their estimates in an unknown direction. A further problem is that the study adjusts for some factors such as women's education that rigorous studies suggest are affected by abortion restrictions, further biasing their estimates. See <https://iwp.org/wp-content/uploads/2021/05/Costs-of-Reproductive-Health-Restrictions-Research-Summary.pdf>.

⁵ *Dobbs v. Jackson Women's Health Organization*. Brief amicus curiae of economists in support of respondents. September 20, 2021. https://www.supremecourt.gov/DocketPDF/19/19-1392/193084/20210920175559884_19-1392bsacEconomists.pdf.

⁶ Sarah Miller, Laura R. Wherry, and Diana Greene Foster. 2022. "The Economic Consequences of Being Denied an Abortion," NBER Working Paper. <https://doi.org/10.3386/w26662>.

Sandler and Nichole Szembrot estimate that for the average mother, earnings fall by a total of approximately \$26,000 over the first six years of the first baby's life.⁷⁸ If motherhood is delayed for less than six years, however, this reduction in earnings may overstate the actual earnings loss caused by a lack of access to abortion.

THE COST OF ABORTION TO UNBORN BABIES

Studies of the economic benefits of abortion fail to consider its far greater cost, the increased risk of mortality of unborn babies.

Economists have developed rigorous methods for quantifying the cost of an increased risk of mortality, and federal government agencies use these values to estimate the costs and benefits of policies that involve mortality risk. Specifically, a value of a statistical life (VSL) is estimated by observing the amount of wealth an individual must be provided in return for accepting an elevated risk of mortality. For example, if the average individual is willing to accept \$10,000 to incur a 1 in 1,000 chance of death, the corresponding VSL would be \$10 million. A large body of economic research has estimated a VSL from survey and real-world data such as the wage premium offered for jobs with significant mortality risks. Federal government agencies have adopted VSL estimates from the academic literature for use in cost-benefit analyses. For example, the Department of Transportation uses a VSL of \$10.9 million (as of 2019), and the Department of Health and Human Services uses a central VSL estimate of \$11.4 million, with a lower bound value of \$5.3 million and an upper bound value of \$17.4 million (as of 2020).⁹

In order to estimate the economic cost of increased mortality risk from abortion to unborn babies, we multiply the number of abortions in a given year by the VSL used by the Department of Transportation. In 2019 the Centers for Disease Control and Prevention (CDC) reported that there were 629,898 legal abortions in the U.S., covering 47 states and the District of Columbia (excluding California, New Hampshire and

⁷ Danielle Sandler and Nichole Szembrot. 2019. "Maternal Labor Dynamics: Participation, Earnings, and Employer Changes," Working Paper 19-33, Center for Economic Studies, U.S. Census Bureau.

⁸ Calculation sums the earnings losses in each of the first 24 quarters after the birth of the first child and the quarter in which the birth occurred.

⁹ "Departmental Guidance on Valuation of a Statistical Life in Economic Analysis." U.S. Department of Transportation, March 23, 2021. <https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis>.

"Appendix D: Updating Value per Statistical Life (VSL) Estimates for Inflation and Changes in Real Income." ASPE. U.S. Department of Health and Human Services, June 29, 2021. <https://aspe.hhs.gov/reports/updating-vsl-estimates>.

Maryland). Multiplying the number of reported abortions by the \$10.9 million VSL, we estimate that in 2019 alone, the economic cost of abortion to unborn babies was \$6.9 trillion, representing 32 percent of GDP that year.¹⁰ This understates the total cost of abortion because it omits illegal and unreported abortions, including all abortions performed in California, Maryland, and New Hampshire.

The \$6.9 trillion cost of abortion to unborn babies far outweighs the labor market benefits of abortion which have been the focus of Secretary Yellen and other economists. As noted in the previous section, first time mothers see their earnings fall by an average of approximately \$26,000 during the first six years of the baby's life. If we apply this change in earnings to all mothers of the 630,000 aborted babies in 2019, abortion would prevent \$16.2 billion in lost earnings during the first six years of the child's life. The \$6.9 trillion cost of the increased risk of mortality to unborn babies due to abortion is 425 times larger. While there are other costs and benefits of pregnancy and child-rearing, it is clear that the economic cost of abortion to the unborn babies who face an increased mortality risk from abortion has an outsized effect on any calculation and should not be ignored.

There are two special considerations for our calculation that applies a VSL in the context of abortion, neither of which changes the conclusion that the cost of increased mortality risk to unborn babies is likely to far outweigh short run labor market benefits of abortion. First, the VSL we apply is estimated based on the decisions of adults in the face of risks to their own lives, not those of much younger unborn babies. However, our application of the VSL to younger populations is consistent with standard practices of federal agencies. An Office of Management and Budget Circular from 2003 states that the VSL should not be discounted for children, and if anything, it should be increased to adjust for the greater number of future life years among children.¹¹ Second, the increased risk of mortality among unborn babies due to abortion is large. There were 3.7 million live births in the United States in 2019, and so eliminating abortion would reduce the risk of mortality among

¹⁰ We apply the VSL to all unborn babies, regardless of whether they would have made it to term absent abortion. Similarly, in other contexts the VSL is applied to all people who are alive at a given time, regardless of whether some die of other causes soon after.

¹¹ Office of Management and Budget, Circular A-4, September 17, 2003.
https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/.

unborn babies by up to 14 percentage points.¹² Since existing VSL estimates are based on tradeoffs individuals make between wealth and much smaller mortality risks, it is not clear that the same VSL estimates should be applied to larger changes in mortality risks. For example, the willingness to pay for very large reductions in mortality risks may imply a lower VSL, because the total amount paid is bound by the total amount of wealth an individual can access. Nonetheless, relying on the central VSL estimates from government agencies can still provide a reasonable estimate for our population and even if VSL estimates were substantially smaller or larger our qualitative conclusions would not change—the costs of abortion far outweigh the benefits.¹³

BROADER EFFECTS OF ABORTION ON ECONOMY

Supporters of unrestricted abortion have argued that a lack of abortion access acts as an economic burden on not only the mother but on the economy more broadly. As Secretary Yellen stated during the Senate Banking Committee hearing, “I believe that eliminating the right of women to make decisions about when and whether to have children would have very damaging effects on the economy and would set women back decades.”¹⁴

While labor force participation may rise in the short run due to mothers choosing to work instead of taking time off to raise kids, unrestricted abortion is likely to decrease labor supply in the long run. Since the *Roe* decision in 1973 an estimated 63 million abortions have occurred in the United States.¹⁵ If all of these aborted babies had been otherwise carried to term and survived until today, they would add nearly 20 percent to the current U.S. population, and nearly 45 million would be of working age (18 to 64). While some portion of these aborted babies

¹² The 14 percentage point reduction in the probability of mortality from eliminating abortion does not account for miscarriages or other terminations of pregnancies that do not result from abortion. Accounting for these factors would shrink the reduction in the probability of mortality from eliminating abortion below 14 percentage points.

¹³ See Cass R. Sunstein, “Valuing Life: A Plea for Disaggregation,” for a discussion of the lack of VSL estimates for children and considerations for applying VSL estimates to large changes in the probability of mortality.

https://heinonline.org/HOL/Page?collection=journals&handle=hein.journals/duklr54&id=399&men_tab=srchresults.

¹⁴ The Financial Stability Oversight Council Annual Report to Congress 117th Congress. 2022.

(Testimony of Janet Yellen) <https://www.banking.senate.gov/hearings/05/03/2022/the-financial-stability-oversight-council-annual-report-to-congress>.

¹⁵ “The State of Abortion in the United States.” National Right to Life. May 5, 2022. <https://www.nrlc.org/stateofabortion/>.

would not have survived pre- and post- birth and others would have displaced their mothers' future children, research has shown that increasing access to abortion substantially reduces the total number of babies born.¹⁶ Thus, abortion has reduced the U.S. population, and in so doing, has shrunk the labor force, prevented innovative ideas from improving American lives, and suppressed total economic output.

The importance of faster population growth is especially pressing given current estimates from John Fernald and Huiyu Li at the Federal Reserve Bank of San Francisco that economic output will grow at a historically slow pace of around 1.5 percent per year over the long-run, in large part due to slowed population growth arising from low fertility levels.¹⁷ The U.S. total fertility rate was 1.7 births per woman as of 2021, which is well below the replacement level of 2.1 births per woman.¹⁸

Reduced fertility due to unrestricted abortion also stresses society's capability to care for older Americans. Older Americans (age 65 and older) comprised a record high of 16.3 percent of the U.S. population as of 2020, and this share is expected to increase to 20.4 percent by 2040.¹⁹ This demographic shift will make it more difficult for the relatively smaller number of children to care for their elderly parents. It will also add more pressure to Social Security and Medicare, which are funded by the wages of Americans who are currently working.

Abortion also limits the diversity of the U.S. population due to differences in abortion rates across demographic groups. Black women have abortions at a rate of 23.8 per 1,000 women, nearly four times the rate at which White women have abortions.²⁰ In 2019, more abortions

¹⁶ Phillip Levine, Douglas Staiger, Thomas Kane, and David Zimmerman. 1999. "Roe v Wade and American Fertility." *American Journal of Public Health*. 89(2): pp. 199–203.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1508542/>.

¹⁷ John Fernald and Huiyu Li. 2019. "Is Slow Growth the New Normal for GDP Growth?" *Federal Reserve Bank of San Francisco Economic Letter*. <https://www.frbsf.org/economic-research/publications/economic-letter/2019/june/is-slow-still-new-normal-for-gdp-growth/>.

¹⁸ "Reports from Vital Statistics Rapid Release Program." Report No. 20, Births: Provisional Data for 2021. Centers for Disease Control and Prevention. May 24, 2022.

<https://www.cdc.gov/nchs/nvss/vsrr/reports.htm>; United Nations, Department of Economic and Social Affairs, Population Division (2017). World Fertility Report 2015 - Highlights (ST/ESA/SER.A/415).

¹⁹ "The US Population Is Aging." Urban Institute. Accessed June 3, 2022.

<https://www.urban.org/policy-centers/cross-center-initiatives/program-retirement-policy/projects/data-warehouse/what-future-holds/us-population-aging>.

²⁰ Katherine Kortsmit, Michele G. Mandel, Jennifer A. Reeves, et al. 2021. "Abortion Surveillance — United States, 2019. Morbidity and Mortality Weekly Report: Surveillance Summaries. 70(9): pp. 1-29. <http://dx.doi.org/10.15585/mmwr.ss7009a1>.

were performed on non-Hispanic Black women (38.4 percent of all abortions) than non-Hispanic White women (33.4 percent of all abortions), even as 12.9 percent of all women are non-Hispanic Black women and 60 percent of all women are non-Hispanic White women.²¹ This disparity results in a U.S. population that is less racially and ethnically diverse than it would otherwise be if abortion were restricted. Abortion also reduces diversity through selective termination of babies with disabilities. A previous JEC Republicans report found that selective abortion will reduce the population of Americans with Down syndrome by over 200,000 people over the next 50 years.²²

CONCLUSION

Abortion at its core is a moral issue rather than an economic one. But even in economic terms, arguments that abortion positively affects the economy fail to recognize the cost of abortion to unborn babies and to society more broadly. These costs far outweigh the short run labor market benefits of abortion frequently cited by economists and policymakers.

²¹ Katherine Kortsmit, Michele G. Mandel, Jennifer A. Reeves, et al. 2021. "Abortion Surveillance — United States, 2019. Morbidity and Mortality Weekly Report: Surveillance Summaries. 70(9): pp. 1-29. <http://dx.doi.org/10.15585/mmwr.ss7009a1>.

²²Alex Schunk. "Down Syndrome and Social Capital: Assessing the Costs of Selective Abortion." United States Congress Joint Economic Committee, March 18, 2022. <https://www.jec.senate.gov/public/index.cfm/republicans/analysis?id=9DAEB2A3-0C2A-45DC-930A-0B954CA8E9AA>.

INVESTIGATE THEIR PLAN

Discover the Difference Between
What Planned Parenthood Says and
What Planned Parenthood *Does*

Alliance Defending Freedom would like to acknowledge the many allied partners whose tireless efforts to defend the sanctity of life have so richly contributed to the creation of this booklet.

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INTRODUCTION

The Value of Brand

When it comes to consumers embracing or rejecting a company and the product or service it provides, there is nothing more valuable, nothing more sacred, and nothing more diligently protected and promoted than a company's brand. And the reason is simple:

The company's brand is its *reputation*.

In the mind of the consumer, the brand defines who that company is. And that, from a marketing perspective, is what advances or destroys the company's future.

Companies whose brands have become ubiquitous have successfully advanced and protected their name for generations. Procter & Gamble, Walmart, General Electric, Ford ... the list is long and prestigious. Others, such as Google, Nike, Apple, and Under Armour, are relative newcomers from a generational perspective. But whether it's a century-old brand or one that was birthed within the last 50 years, one thing is shared by all:

Brand means everything.

From more recent success stories like Under Armour – a company started by a young entrepreneur who worked tirelessly to apply unique new materials and design ideas to athletic wear and, through trial and error, parlayed his idea into a billion-dollar-plus industry juggernaut.

To disastrous failures like Enron – the energy company that misled the public, ultimately losing billions of investors' dollars with the stock's collapse, permanently closing its doors under the cloud of deceit and sending some of its executives to contemplate their actions within the narrow confines of a prison cell.

Those companies that have succeeded – and those that have failed – could look back and identify the clear and undeniable consequences of losing or fulfilling their brands' promise to the public consumer.

Not-for-profit Brands

The power of an organization's brand is not limited to for-profit companies. The same principle applies to not-for-profit companies as well. In fact, it could be argued that a not-for-profit's brand may carry even *greater* import, because the ability to fulfill its unique mission is directly tied to a donor's belief in the quality of work and integrity of the organization. If the organization fails to deliver on what it says it is going to do, or spends more money on administration than it does on actual "in-the-field" work, then a donor can quickly and quietly abandon that non-profit. A consumer, on the other hand, who is unhappy with a product purchased from a for-profit company, generally has more options to remedy his or her disappointment. From returning the product for a refund, to exchanging it, the consumer may be more inclined to give the company or the product another chance.

Many major non-profit organizations have exceptionally high brand recognition and much-deserved, impeccable reputations...from Make-A-Wish Foundation to Habitat for Humanity; Salvation Army to World Vision...all work diligently to protect and promote their brand.

However, because of the philanthropic nature of non-profit work and the altruistic feelings it engenders in donors, it may be easier to paint a more glowing picture of what the organization *says* it is doing without actually delivering the depth, breadth, and quality of

what the brand portrays. An attractive website, a strong marketing budget, a charismatic leader, and friendly media can do wonders to secure and advance that non-profit's reputation ... even if what the organization *says* and what it *does* are inconsistent.

There are watchdog organizations that help the potential donor sort through myriad choices and ferret out non-profits with less-than-reputable operating percentages or practices. But even a less-than-favorable rating by these organizations generally won't quickly dislodge the non-profit's reputation. And, as *fiscal* watchdogs, they can't fully know what may be happening "behind the curtain." They do not have the necessary access and tools, nor is it their mission to evaluate the inherent moral values that may drive the organization.

The Business of Non-profit Organizations

A not-for-profit company, by definition, is an organization that reinvests its surplus revenues into expansion of its altruistic mission. It is not designed, or given its special tax status, for purposes of distributing those "profits" or dividends to unduly enhance the income of the organization's board of directors, executives or employees. But a well-run non-profit still employs all the appropriate business principles that any for-profit would use – income must still be generated and expenses managed effectively and efficiently.

However, when the growth of excess revenues and job security become sacred, a non-profit organization's mission can drift...and the financial bottom line can supplant its philanthropic bottom line.

This booklet explores the business of Planned Parenthood.

As a non-profit organization that promotes itself as a trustworthy source for women's health care, Planned Parenthood enjoys a generally favorable brand reputation nationally. Yet, when examined more closely, the disparity between public perception and the organization's actual delivery of "product" become troublingly apparent for Planned Parenthood – one of the 50 largest non-profits in the world.

O V E R V I E W

Business 101

Imagine for a moment you've created a box manufacturing business. You set up factories around the country where cardboard sits at the ready and workers load machines that spit out your products in rapid succession. Stacks of uniform boxes are piled high.

But no one is buying. The phone is silent, and no one's knocking at the door.

That's because you failed to focus on your business's first and most important job – *creating a customer*.

To create a customer, you must first clearly identify who that target customer is. Discover *who* needs your boxes; and more importantly, if people don't think they need your boxes, then change their perspective. Convince them that the thing their lives have been missing is your boxes.

Of course, your success is tied to your profitability, so you focus your sales and marketing efforts on your target audience, educate your salespeople and set quotas for them to meet.

You also make every effort to keep your costs low to help ensure healthy profit margins.

Finally, you need to be creative. Find unconventional ways to make money and beat the competition. Create critical alliances. Build a brand image that conveys trust. Support that image with a strong visual identity, memorable taglines, engaging advertising, and well-designed, targeted websites. Finally, convince the media of the quality of your product and the altruistic nature of your company, so that you are presented to the public in the best possible light.

You will sell a lot of boxes.

But this box company only exists within the descriptive lines of this booklet. Planned Parenthood, on the other hand, is a very real, very big business. Instead of selling boxes, Planned Parenthood sells sex education, sexual health services, and abortions under its non-profit banner. It has taken its generally favorable reputation and wed that with its deep-pocketed marketing savvy to successfully advance its ideology and business plan.

And that success is palpable. Of the 1.5 million non-profit organizations that exist in the United States, *Forbes* magazine has consistently listed the Planned

Parenthood Federation of America as one of the 50 largest. With \$1.5 billion in assets, it lures 3 million customers a year to its more than 750 facilities.

Though Planned Parenthood certainly can be admired for its business acumen, *its plan demands investigation.*

Business Model

Try to imagine a large hospital chain championing the elimination of mandatory seat belt laws. What if its administrators sponsored smoking advertisements, or its doctors and nurses let patients drive home while under the influence of medication that causes drowsiness? If a hospital promoted unsafe behavior to generate business while publicly proclaiming its commitment to the health of its patients, that dangerous hypocrisy would become self-evident and not go unchallenged.

Yet Planned Parenthood engages in similar practices that escape the attention of most Americans. It claims to provide “preventive services,” aimed at showing young women how to avoid pregnancy while simultaneously promoting risky sexual behavior that increases the likelihood of pregnancy and disease. The profitable outcome of that duality is an expanded market for contraception, testing for sexually transmitted disease (STD), and Planned Parenthood’s biggest income generator – abortion.

The more Planned Parenthood campaigns for risky, unrestrained sexual activity, the more people are lured into

buying and using contraception. When contraception fails or is neglected, the need for STD testing increases. With the rise in sexual activity, pregnancy numbers subsequently increase along with the demand for abortions.

Planned Parenthood has also been shown to reduce its overhead costs by maintaining minimal or unsafe health and medical standards. And if all of these actions don't fully meet the corporation's sizable financial demands, Planned Parenthood appears willing to bend the rules and misuse taxpayer dollars to ensure that it keeps its doors open.

The Planned Parenthood business model is fundamentally simple:

1

Create a customer by promoting risky sexual behavior to children.

2

Provide contraception, STD testing and abortions – enforcing abortion quotas to drive revenue.

3

Minimize costs by failing to uphold safe health standards – putting women's health at risk.

4

Ensure a stronger bottom line by allegedly engaging in the waste and abuse of tens of millions of taxpayer dollars.

CHAPTER 1

Laying the Foundation

PLANNED PARENTHOOD PROMOTES RISKY SEXUAL BEHAVIOR TO CHILDREN

Stand & Deliver, an international report by Planned Parenthood, asserts that “countries should give high priority and attention to all dimensions of the protection, survival and development of children and youth.”

But do Planned Parenthood’s words match its actions?

When you look for the substance behind those seemingly admirable goals, you find that Planned Parenthood’s definition of the “protection, survival and development of children” translates to one thing: the

promotion of sexual experimentation. As the nation's largest provider of sex education, Planned Parenthood pours resources into creating books, videos, social media pages, curriculum, and campaigns targeting young people. Its "Tools for Educators" web page indicates that 90 percent of parents in America support sexuality education in schools. So Planned Parenthood uses the funding it receives from federal and state governments to provide *its* definition of appropriate "age-appropriate sex education" to our nation's children.

Targeted Marketing

Planned Parenthood's campaign to influence children follows a well-crafted sales process that moves with those children through each step of their growth. Planned Parenthood's own words reveal its game plan: "Ideally, medically accurate sexuality education would be taught each year in our schools from pre-kindergarten through 12th grade. Like all school subjects, the information and skills that are taught are age-appropriate, reflect best-practice, and build on the previous year's learning."

Here's a quick summary of what Planned Parenthood's taxpayer-funded, "age-appropriate" sex education teaches young people.

1. The Planned Parenthood sex education program for children starts at age 4 with *It's Not the Stork*, "a book about girls, boys, babies, bodies, families, and friends." This book describes in

visual detail what unique physical parts boys and girls have, and explains that "having sex...[is the] kind of loving [that] happens when the woman and the man get so close to each other that the man's penis goes inside the woman's vagina."

2. At age 7, children move on to *It's So Amazing*, "a book about eggs, sperm, birth, babies, and families," which depicts growing up, explains what happens during sexual intercourse, talks about heterosexual and homosexual relationships, encourages masturbation, tells the reasons why women have abortions, and describes the use of condoms in this way: "A condom can catch sperm before it can meet the egg. A condom fits over the penis. A condom can also keep people from getting or passing on infections like HIV... during sexual intercourse."
3. The book for 10-year-olds is titled *It's Perfectly Normal*. It's about "changing bodies, growing up, sex, and sexual health." It deals with topics including anal sex, how to masturbate, AIDS, and abortion. Though the information within the book is medically accurate, the content offers little in regard to discernment and behavioral consequences.
4. Children are eventually directed to Planned Parenthood's Facebook Page for Teens. This

page provides more specific instruction on how to sexually experiment while re-emphasizing the message “It’s all normal.” One post highlighted hip-hop artist Kreayshawn’s “coming of age.” She says she’s dated both guys and girls, but doesn’t call herself gay, straight or bisexual. “I don’t go searching for girls or guys,” she says. “I just take whatever comes my way, and that’s just genuine.” The page then asks teens, “How do you know who you’re into?”

5. Planned Parenthood’s website also has a special section just for teens, promoting a variety of sexual relationships and activity. Videos and pictures teach about masturbation, going so far as to say, “Experts recommend that parents teach children that it’s normal for people to touch their sex organs for pleasure.” The website also asserts that it’s normal to question one’s sexual identity: “‘Questioning’ means people are not sure of their sexual orientation or gender identity. This is normal, and it’s very common – especially for teenagers.”
6. In addition to being a significant sex educator in elementary, junior high, and high schools, Planned Parenthood has begun to establish facilities inside the walls of schools. One such school is Roosevelt High in Los Angeles, where Planned Parenthood operates a center that

provides free birth control for teens without parents’ knowledge. At similar school facilities, Planned Parenthood distributes the morning-after pill in addition to providing counseling and abortion referrals.

7. Planned Parenthood uses the social media site Tumblr, which targets teens and college students. More than half of Tumblr’s users are under 25, and the site is the perfect place for Planned Parenthood to share more graphic instruction for young people about things like oral sex and how to make their own sex protection.
8. Geared for a college-age audience, Planned Parenthood launched the campaign *Where Did You Wear it?* About 55,000 college students in western Washington were given condoms with tracking codes so they could post and describe online when, where, how, and with whom they had had a sexual experience.
9. Many college campuses host Planned Parenthood events that purport to teach students how to “properly” engage in sexual activity. Many events feature all-night bars, with no-pants-required dress codes.
10. Many of Planned Parenthood’s facilities are located in the inner city or within walking distance of

universities. To that end, it has launched clever, targeted, and expensive ad campaigns to generate clients. The “We’re Your ...” transit ad campaign communicates that Planned Parenthood can be a trusted, hush-hush partner in sexual encounters, no matter the outcome.



**WE'RE YOUR
QUICKIE**
Convenient sexual health appointments with respect and privacy. PPNNE.ORG

Planned Parenthood
of Northern New England

**WE'RE YOUR
AFTERNOON
DELIGHT**
Flexible sexual health appointments when you're in the mood. PPNNE.ORG

Planned Parenthood
of Northern New England



Marketing Outcomes

Planned Parenthood’s material for young people promotes an obsession with sex. From pre-adolescence to the years of early adulthood, Planned Parenthood’s business plan has a strategic marketing approach that encourages children and young people to explore, experiment, and pursue risky sexual behavior. The long-term and saturated approach to communicating with youth teaches them that all expressions of sexuality should be indulged and celebrated.

And with that indulgence comes an increased demand for contraception. From free condoms to birth control pills, Planned Parenthood profits when young people are sexually active.

When sexual activity is unrestrained, and sexually transmitted diseases become viral, Planned Parenthood becomes the profitable benefactor through the increased STD testing it provides. In 2011, Planned Parenthood performed nearly 4.5 million STD tests and treatments.

If, in the midst of all this sexual activity, a teenager discovers she’s pregnant, Planned Parenthood profits from that as well, by making abortion an easy and accessible option.

In a youth culture where being sexually healthy means doing whatever you want with no fear of consequences, the demand for contraception, STD testing, and abortion increases –and so does Planned Parenthood’s financial bottom line.

Care. No Matter What.

Planned Parenthood's tagline is "Care. No matter what." This implies a non-judgmental commitment to provide young people with health care services. So when minors are in need of STD testing, looking for contraception, or are pregnant, Planned Parenthood treats their medical need and sends them on their way.

Unfortunately, being "non-judgmental" can lead to bad judgment. Instances of sexual abuse of minors have been overlooked by Planned Parenthood staff – despite the laws that require medical providers to report it – and that disregard of the law can cause a child to become trapped in an ongoing cycle of exploitation. If there are no consequences to the sexual predator, then the abuse keeps happening. And if it keeps happening, Planned Parenthood's services are needed repeatedly.

An Alliance Defending Freedom allied attorney filed a lawsuit on behalf of the parents of a 14-year-old girl impregnated by her 22-year-old soccer coach, who had taken her to a Planned Parenthood facility for an abortion.

The lawsuit charged that neither Planned Parenthood nor the soccer coach notified the parents of the abortion or of the sexual relationship. Planned Parenthood allegedly did not notify authorities, although this was a clear case of statutory rape, and gave the girl a contraceptive shot that made it easier for the soccer coach to continue having sex with her without getting her pregnant.

The suit, *Roe v. Planned Parenthood of Southwest Ohio Region*, was filed when the girl's parents learned that

Planned Parenthood had allowed their daughter to go through with an abortion demanded by her coach. They charged that Planned Parenthood did not question the coach when he posed as the girl's father over the phone, or when the coach paid for the abortion with a credit card in his name. Planned Parenthood had never contacted the girl's parents.

The court determined that Planned Parenthood had violated the law by failing to give the girl at least a 24-hour waiting period prior to the abortion, as required in that state. A psychologist said the abortion had caused the girl significant psychological harm, including post-traumatic stress disorder. The coach was convicted of sexual battery and served three years in prison.

Planned Parenthood is not unaware of the outcomes from childhood sexual abuse. In fact, the organization reports that abused teens have a higher rate of pregnancy and that 4.5 out of 10 pregnant teens likely have a history of abuse. Its fact sheet notes that "teen girls with a history of abuse are more than twice as likely to become pregnant as peers who do not experience abuse."

Half of the babies born to minor mothers are fathered by adult men. And 75 percent of girls under 14 who have been sexually active report forced sexual experiences.

Planned Parenthood can and should intervene to protect minor girls. All 50 states have some form of mandatory reporting laws for suspected sexual abuse, and Planned Parenthood should be the leader in applying them.

But instead, by ignoring mandatory reporting laws, the judgment of Planned Parenthood's personnel may

trump that of the parent and the police. The organization claims that mandatory reporting laws don't reduce teenage pregnancy rates and such laws only discourage teens from seeking reproductive health care out of fear that they will get in trouble or that their partner will be criminally indicted.

So when a blind eye is turned, the adult is free to continue the relationship with the child with no consideration for the psychological damage foisted on the child. And if pregnancy ensues, an abortion may be performed in complete secrecy...and the cycle of abuse continues.

Behind Closed Doors

According to its website, Live Action is a "new media movement dedicated to ending abortion and building a culture of life. [It uses] investigative journalism to expose the threats against the vulnerable and defenseless." The organization has created a series of videos called the Mona Lisa Project, in which a young woman visits a Planned Parenthood clinic posing as an underage girl.

One video shows Lila Rose, the group's founder, posing as 13-year-old "Brianna," who tells an Indiana Planned Parenthood worker she is pregnant. The worker confirms the girl's age, determines that she's had a positive pregnancy test, and listens as Brianna tells her that her boyfriend is 31.

"It doesn't matter...okay, I didn't hear the age," the Planned Parenthood worker responds. "I don't want to

know the age." The worker holds out her hand in a "stop" gesture. She explains to Brianna that she would have to report the situation to Child Protective Services, and that it would be classified as child abuse because Brianna is only 13. She tells Brianna to lie if anyone asks about the father, and to say that Brianna has "seen him around, you know he's 14, he's in your grade, whatever, so that's that problem solved."

She advises Brianna, correctly, that because of her age a parent's signature is needed for an abortion. Brianna explains that her parents would demand to know who the father is and that he'd be in big trouble, so the Planned Parenthood worker stops talking about a parent's signature. Then the Planned Parenthood adviser shows the girl how her boyfriend can take her across state lines to get an abortion. Rather than communicating with words, she circles the abortion clinic on a map and shows it to Brianna.

After the video was released, the employee was rightly suspended and then fired. The Indiana attorney general then opened an investigation into Planned Parenthood.

Videos similar to this one show Planned Parenthood employees circumventing state laws and concealing the sexual abuse of young girls in Arizona, Indiana, Kentucky, Tennessee, Alabama, Wisconsin, and California.

In a lawsuit filed by Americans United for Life against Planned Parenthood of Central and Northern Arizona, details emerged of an event in which a 13-year-old girl was raped by her 23-year-old foster brother, who then took her to a Planned Parenthood facility for

an abortion. The clinic performed an abortion, but did not notify authorities about the abuse.

The abuse continued. Six months later, the girl returned to the same Planned Parenthood facility for a second abortion. She later filed a lawsuit, saying the second abortion would not have been needed if the clinic had reported the abuse the first time. The judge agreed.

Parental Involvement

In October 2012, a court in Alaska upheld a state law that requires at least one parent to be notified before a minor can obtain an abortion. The Alaska Superior Court in Anchorage concluded that “minors may be pleasantly surprised when underestimated parents support, comfort, and affirm them. Or a teen might overlook available resources. Her parents might help raise the child, and so make college or military service feasible. Parental notification undoubtedly can open doors to unconsidered options for an otherwise isolated young woman.”

Thirty-eight states currently have parental involvement laws. Twenty-one states require parental consent for minors seeking abortion, and 12 additional states require parental notice. Despite these laws, cases of failing to notify parents are common. According to the Alabama Department of Public Health’s 2009 report, staff at a Planned Parenthood affiliate in Birmingham failed to obtain parental consent in a manner that complies with state legal requirements for *all* of the nine minor patients it processed.

Additionally, the law states that no group may receive Title X federal funds for family planning unless it certifies that it encourages family participation in the decision of minors to seek family planning services. With its claim to “Care. No Matter What,” it seems reasonable to expect Planned Parenthood affiliates to comply with the law by ensuring that parents have been notified.

Without doing so, children are allowed to act as adults, and no parental voice speaks into their decision about having an abortion or continuing in a harmful relationship.

Planned Parenthood turned a blind eye to such a case in Ohio.

Family Affair

Denise, 16, was taken by her father to the Planned Parenthood of Southwest Ohio facility for an abortion in 2004. He reportedly gave consent for the abortion, helped his daughter complete the paperwork, and stayed by her side nearly the entire time.

This time, Planned Parenthood’s negligence was not related to parental consent or notification. This was an instance of failing to report a case of rape/incest. Denise’s dad was the father of her baby. Seeking help, Denise told a Planned Parenthood employee that her father had been sexually abusing her since she was 13. Planned Parenthood had never reported the abuse to the police.

Eventually, Denise notified the police herself, but by then her father had continued the abuse for two more years. Alliance Defending Freedom allied attorneys filed a lawsuit against Planned Parenthood and won. Her father was eventually sentenced to five years in prison.

Children for Sale

Planned Parenthood is also accused of having failed to comply with federal laws that prohibit practices such as sex tourism and interstate and international trafficking of people for sexual purposes. Another series of videos from Live Action reveals that Planned Parenthood employees in seven facilities were willing to help a man claiming to be involved in sex trafficking of girls as young as 14. They also advised an alleged pimp on how to obtain secret abortions, STD testing, and contraceptives, and how to circumvent state parental involvement laws for abortion.

In one video, Amy Woodruff, LPN, manager of the Planned Parenthood of Central New Jersey's Perth Amboy Center, talks with a man and woman who claim to be a pimp and a prostitute. Woodruff advises them on how to get abortions for the girls they exploit. She tells them to take the girls to the Metropolitan Medical Association, where, she says, "They don't get audited the same way that we do."

The couple tells Woodruff some of the girls don't speak English and implies they aren't citizens. The pair inquire about how to make their operation look as

legitimate as possible. Woodruff tells them to instruct the girls to lie about their ages and the ages of their partners, to avoid mandatory reporting laws.

"Just say, 'Oh he's the same age as me, 15,'" she advises, adding, "It's just that mainly 14 and under we have to – doesn't matter if their partner's the same age, younger, whatever – 14 and under, we have to report."

Children of the World

Planned Parenthood is a global corporation. Not only does it offer services in more than 750 centers in the U.S., its influence is present around the world – in Peru, Guatemala, Nicaragua, Costa Rica, Ecuador, Nigeria, Sudan, South Sudan, Ethiopia, and Kenya.

In 2012, in Peru, Planned Parenthood campaigned to lower the age of sexual consent to 14. The measure was condemned by Episcopal, Roman Catholic, and Protestant spokesmen. They contended that lowering the age would encourage early sexual activity in minors, irresponsible paternity, and abortion.

"Approving this bill would mean a retreat regarding the protection that the government owes to minors," said Archbishop Salvador Piñeiro Garcia-Calderon, president of the Peruvian Episcopal Conference.

"A girl of 14 or 15 years of age is very easily convinced or tricked by a clever adult," said Evangelical Pastor Humberto Lay, who heads the ethics committee of Peru's Congress. "Despite cultural changes and the fact that sexual awakening is much earlier than before, we

should not weaken or relax the rules, permitting people with bad intentions or who are sick to take advantage of these cases and give free rein to their lower instincts.”

In its international report *Stand & Deliver*, Planned Parenthood takes the opposite view and explains that “young people have the right to privacy, which is essential to the exercise of sexual autonomy.” So, when a young person is pregnant, “comprehensive family planning services must be available to ensure that in [the] future, these women do have a choice. And when that choice is abortion, all women, not only the wealthy, should have access to safe abortion services.”

CHAPTER 2

The Profit Center

PLANNED PARENTHOOD ENFORCES
ABORTION QUOTAS TO DRIVE REVENUE

Planned Parenthood – the name certainly seems appealing and who wouldn’t applaud an organization whose professed mission is to promote the health of women and families?

In a national online survey of 2,000 people conducted by Alliance Defending Freedom, 49 percent of participants gave a “very positive” favorability rating to Planned Parenthood. One of the primary factors responsible for the favorable rating was the perception that Planned Parenthood is committed to providing “reproductive health care.”

However, when participants were asked what services Planned Parenthood provides, the results were as follows:

- Sixty percent mistakenly believed that Planned Parenthood provides education for new and expectant parents.
- Thirty-seven percent incorrectly thought that Planned Parenthood provides counseling for parents interested in adoption.
- Only 36 percent were aware that Planned Parenthood performs abortions, yet it *performs more abortions than any other organization in the nation.*

Respondents who gave Planned Parenthood the highest favorability ratings were more likely to believe that the organization educated new and expectant parents and provided adoption services. They were also less likely to think that Planned Parenthood performed abortions.

So why is there confusion around the services and purposes of Planned Parenthood? Despite being the largest seller of abortion in the nation, Planned Parenthood does not aggressively advertise its big abortion business – that is, until it comes to lobbying for more tax dollars or launching legal challenges to any laws that would make abortions safer, involve parents in their daughters' decisions, or provide any protection for preterm children.

Planned Parenthood Favorability Ratings Compared to Perceived Services Provided

Services	Provides	Initial PP Rating Low N=472	Initial PP Rating Med N=389	Initial PP Rating High N=598
Pregnancy testing.	68%	79%	80%	92%
Education and counseling for new and expectant parents.	60%	55%	78%	85%
Sex education.	60%	64%	72%	85%
Abortion referrals to other medical facilities.	46%	67%	51%	57%
Adoption counseling.	37%	33%	48%	54%
Abortion at their clinics.	36%	63%	32%	41%
Fertility services.	22%	25%	20%	34%

Results from national online survey by Alliance Defending Freedom

Survey Question: "Please read the following list of services and mark if it is a service Planned Parenthood provides, a service Planned Parenthood does not provide, or if you don't know, please mark that and move to the next service.

Abortion advocates claim they want abortion to be "safe, legal and *rare*." But does it really make business sense for Planned Parenthood to make abortion rare?

The 2011-2012 Planned Parenthood annual report shows it performed 333,964 abortions during that fiscal year. The Guttmacher Institute states that the average abortion patient pays \$470 for a first-trimester procedure. Abortion costs increase each week of pregnancy, but if you were to assume that every patient had a first-trimester abortion and paid the average price, this service alone would have generated nearly \$157 million for Planned Parenthood in just one year.

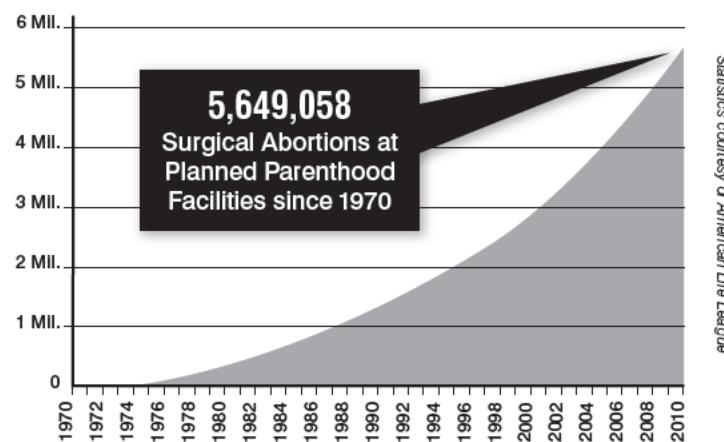
Abortion is the single largest cash-generating service Planned Parenthood provides. It accounts for around half of the roughly \$300 million generated in revenue from its patients.

Market Share

Successful businesses must secure a growing share of the market they serve. Over the years, Planned Parenthood has claimed an increasingly larger share of the abortion market.

Alliance Defending Freedom's *Planned Parenthood by the Numbers Report* shows that in 1973, Planned

Cumulative Number of Surgical Abortions at Planned Parenthood Federation of America



Planned Parenthood opened the first freestanding abortion clinic in U.S. on July 2, 1970. All data from Planned Parenthood Federation of America Annual Reports and Service Reports.

Parenthood performed only 0.67 percent of abortions done in this country. In 1993 it performed 8.98 percent, and in 2009 it performed roughly 27 percent. Translate those percentages to human lives, and you see a dramatic rise from 4,988 babies aborted by Planned Parenthood in 1973 to 329,445 aborted in 2009.

A 2012 report released by Planned Parenthood showed that the organization exceeded all of its previous targets by performing 333,964 abortions that year.

Purely measured by the numbers, Planned Parenthood is a business success story. But the price of that success is paid by the millions of babies lost to abortion.

Other Options

As a self-described "pro-choice" organization, Planned Parenthood's website rightly offers these thoughts:

"If you are pregnant, you have three options to think about – abortion, adoption, and parenting."

Having noted these options, you would expect that they would be presented to a female client with equity. But that simply isn't the case.

Abby Johnson, the former director of a Texas Planned Parenthood facility, worked at Planned Parenthood because she cared about getting women the help they needed. She took to heart the many Planned Parenthood advertisements about "options counseling." But she noticed there wasn't a process for helping women with adoption information.

"I felt like it was important," she says. She wrote a 75-page protocol for options counseling, and sent it to Planned Parenthood's national headquarters. She requested that the protocol be implemented in all of Planned Parenthood's facilities.

Some weeks later, she learned that her request had been rejected. A superior explained that it would be strange for someone to come to Planned Parenthood for an adoption referral, because "that's not what we do." The supervisor likened it to taking a car with a broken muffler to a transmission shop for repair.

Adoption, Johnson was told, would not be revenue-generating, so the organization was not going to put the protocol forward. Other former Planned Parenthood employees have come forward with similar stories. Adoption is simply not central to Planned Parenthood's strategic plan.

Abortion is central.

Abortion Quotas

According to Sue Thayer, a former Planned Parenthood facility director, each Planned Parenthood affiliate has *mandated* abortion goals and quotas for its centers. With abortion as the organization's primary money generator, the mandate helps ensure continued revenue.

Abby Johnson recalls the organization's continual focus on money – and on the way to obtain it – during her time as a center director. In staff meetings, leaders would say, "We don't have enough money – we've got

to keep these abortions coming.'

"It's a very lucrative business, and that's why they want to increase numbers," she says. "One of the things that kept coming up was how family planning services were a drain on the budget, but abortion services were really running up the budget, and that was keeping the center afloat."

It's understandable why Planned Parenthood would *talk* about adoption and parenting, but the profitability of abortion would ultimately trump those options. According to Sue Thayer, "Adoptions are actually the only thing that Planned Parenthood *doesn't* have a goal for."

Insider Information

When Sue Thayer worked for Planned Parenthood, she thought it was a helpful and caring organization, and one of the few health care options in her small, rural town.

She started in 1991 as a family planning assistant at a Planned Parenthood facility in Storm Lake, Iowa, and later rose to the position of manager. At that time, her facility provided family planning services for women and did not perform abortions. Thayer took the job because she desired to help low-income women obtain affordable health care, and she remained there for 17 years.

"In my mind, Planned Parenthood was the 'trusted friend' it claimed to be, educating and providing women with effective contraceptives so that abortion could be avoided," Thayer said.

In the early years, health care seemed to be the emphasis. But Thayer watched as the business structure changed. Conglomerates of Planned Parenthood facilities were formed, and along with them, larger numbers of high-dollar leadership positions were created.

Her Iowa facility was absorbed into the conglomeration known as Planned Parenthood of the Heartland. Its rural location was a barrier in attracting doctors willing to do abortions. So, according to Thayer, Planned Parenthood leadership got creative. In 2008, the organization required the clinic to begin webcam-based “Telemed abortions.”

Cheap and Quick

Abortions are done in one of two ways – either surgically or chemically. The first method cuts the preterm child into parts and removes it from the womb. The second uses one prescription chemical to detach the child from the uterine wall, causing it to die, and a second chemical to induce contractions to expel the child.

Planned Parenthood wanted a quicker and less expensive way to perform abortions, Thayer said, because doctors’ time is expensive and not always available in rural areas. A new concept was the solution: “Telemed.”

Telemed abortion uses the chemical method. It makes the procedure quicker (for the abortionist) and cheaper (for the facility), because no doctor, nurse, or other medical personnel are physically present with the patient.

After a brief webcam consultation, a doctor in a remote location pushes a button that opens a drawer in front of the female patient. Inside are two pills – the first taken on the spot, and the second taken later at home. The abortion process takes place outside the clinic, over a painful period of days.

Because some rural clinics are open only 15 hours a week, a woman may not have the option to return for medical help if she needs it. Instead, women are instructed to go to an emergency room if they experience problems. According to Thayer, women were encouraged not to admit taking the abortion pills, because miscarriage follow-up is covered by Medicaid but abortion follow-up is not.

According to FDA reports, the abortion pills have caused the deaths of 14 women and the hospitalization of 612 women, many with severe blood loss requiring transfusion. This is because the actual abortion takes place outside the clinic.

Nevertheless, Planned Parenthood championed the telemed method.

The reason?

Low overhead costs, said Thayer.

“My superiors justified telemed abortions, lauding the financial benefits of not having to worry about or pay for specialized equipment, staff, and a traveling physician – all required with surgical abortions,” she says.

After more than 17 years with Planned Parenthood, Thayer’s confidence in the organization had waned. She began asking questions, such as “Is this legal?” and

"How can we do follow-up care?" But she didn't receive answers. Just as her center was about to start providing telemed abortions, she was fired. Planned Parenthood called it downsizing, but supervisors showed up with boxes, waiting to escort her out.

"Webcam was a tipping point for me," Thayer says. "I couldn't see how I was going to ever...do webcam abortions." She admits that she felt "relieved" about being fired.

The organization tried to motivate her to stay quiet about her experiences at the clinic.

"They did offer me a...tidy little sum...if I'd sign a statement that I would never talk about Planned Parenthood – never even acknowledge that I had worked there," she says. The offer was a significant sum, and as a single mother, Thayer admits it was tempting.

Instead, she contacted Alliance Defending Freedom. That connection resulted in filing a "whistleblower" lawsuit against the facility, alleging millions of dollars in fraudulent billing and other improper practices.

Thayer's testimony contributed to the Iowa Board of Medicine's August 30, 2013, decision to ban Telemed abortions. This came five years after Iowa became the first state in the nation to offer the program.

But in early November 2013, an Iowa District Judge ordered a stay on that decision...potentially reopening the door to telemed abortions.

Abortion on Demand

Planned Parenthood advertises "nonjudgmental" care for all who come. Ultimately this means that no woman who wants an abortion is turned away, whatever her situation may be. And that situation can be tricky if the woman wants to abort a baby because of the child's gender.

Planned Parenthood apparently does not judge even this decision.

A 2012 opinion poll conducted by the Charlotte Lozier Institute found that 77 percent of respondents believed that abortion should be illegal if the sole reason for seeking the abortion is the fact that the developing baby is a girl.

But even though a majority of Americans don't like the idea of ending lives because they happen to be female, a Planned Parenthood official stated that while the group opposes sex-selection abortion, it doesn't rule it out. Chloe Cooney, Planned Parenthood's director of global advocacy, says abortion is always a complex decision best left to the private realm. In other words, if a woman wants an abortion for gender selection, Planned Parenthood won't interfere.

Another challenging situation for Planned Parenthood is when a woman is being pressured into getting an abortion she doesn't want.

Planned Parenthood appears to go both ways on this subject. On one hand, in 2012 after Chinese dissident Chen Guangcheng made a legal stand against China's

one-child/forced abortion policy, Planned Parenthood in the U.S. issued a statement claiming to be opposed to both forced abortion and coerced birth control.

But on the other hand, Planned Parenthood also supports funding for the United Nations Population Fund (UNPFA), the international group that cooperates with Beijing's population control measures.

When the U.S. House of Representatives considered eliminating its contribution to UNPFA's \$39 million budget, Planned Parenthood opposed the measure and prevailed.

Statistics Can be Misleading

Planned Parenthood claims that abortions account for only 3 percent of the services it provides. But the actual numbers tell a very different story.

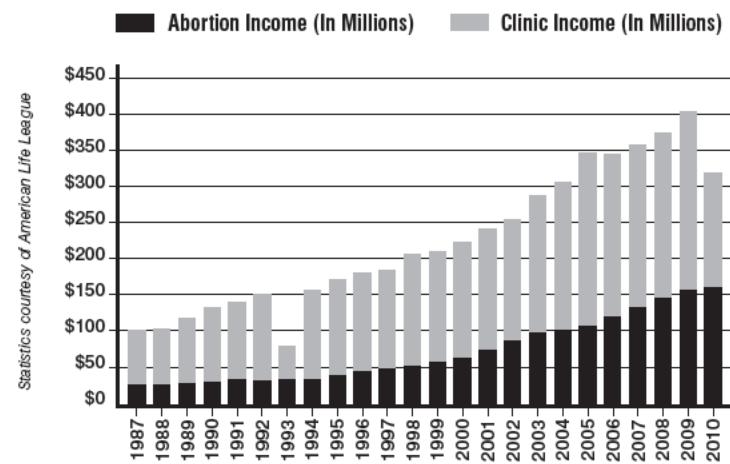
Planned Parenthood reports it provides about 11 million services for nearly 3 million clients in a given year. A total of 333,964 of those services are abortion procedures. This means that 11 percent of women who come to Planned Parenthood have an abortion.

Dispensing birth control represents a significant portion of those 11 million services. For example, by its standard of measure, when Planned Parenthood gave out 55,000 condoms on college campuses in the state of Washington, it could have counted that as 55,000 "services." Every pregnancy test, STD test, or treatment for a urinary tract infection is counted as well. If *every* service, small or large, is weighted equally, you could

statistically assert that abortion makes up just over 3 percent of what the organization does. But it is difficult to reasonably equate the simple act of handing out a single condom with that of performing an abortion.

If you move away from statistical manipulation and examine the *income* generated by Planned Parenthood from each service, the picture becomes more clear: abortion makes up about 50 percent of its revenue. If the statistical percentages are more specifically defined as services provided to women who are pregnant, the numbers are even more dramatic.

Planned Parenthood Federation of America Annual Clinic Income and Abortion Income



Clinic income from PPFA Annual Reports. Abortion income calculated using PPFA annual reports and average price for abortion at Planned Parenthood each year. In 1993 PPFA changed fiscal years — this number represents six months of data. In 2010, PPFA altered the way it reports clinic income, and the data for this year is not deemed reliable.

As noted earlier, Planned Parenthood accurately says that a pregnant woman has three choices: keep the child, give the child up for adoption, or abort the child. Here is a statistic that casts a clear light on the organization's priorities: Planned Parenthood states that it performed 333,964 abortions in the 2011-2012 fiscal year, and made 2,300 adoption referrals. That simply means that *92 percent of the services provided to pregnant women by Planned Parenthood were abortions.*

The profitability and promotion of abortions is one of the key strategies for strengthening Planned Parenthood's bottom line and securing its income growth. But growing costs are always a threat to a corporation's viability. How Planned Parenthood handles cost-cutting measures also gives a chilling glimpse into their corporate soul.

CHAPTER 3

Health vs. Money

PLANNED PARENTHOOD PUTS WOMEN
AT RISK BY FAILING TO UPHOLD SAFE
HEALTH STANDARDS

Planned Parenthood promotes itself as "a trusted health care provider" and the organization is frequently praised by close allies in the media. The public is led to believe that when a woman goes to Planned Parenthood, she will encounter a clean, safe, professional facility.

But many court cases, health inspections, and medical board citations have revealed that the organization has a pattern of pitting profits against safety.

Substandard Facilities

It goes without saying that abortion facilities are unsafe for babies. But shouldn't those facilities at least be safe for the women?

The murder trial of Philadelphia doctor Kermit Gosnell provided a shocking glimpse into the inner workings of his abortion clinic. Unsanitary conditions, unsterilized instruments, fetal remains, dried blood on instruments and floors, padlocked emergency exits, lack of qualified healthcare personnel, and other serious health risks to women were revealed. While some abortion defenders have tried to convince the public that this clinic was atypical, data suggests that substandard health conditions are prevalent in the abortion business.

When the Virginia Board of Health inspected abortion facilities in its state for the first time in two decades, Planned Parenthood strongly objected to the inspections. The results reveal why.

The Board of Health's report detailed issues involving infection prevention, personnel, improper dispensing of drugs, maintenance problems, and building code violations. In all, 80 citations were issued to the nine abortion centers. Examples of findings included:

- Fetal remains and blood in freezers
- Sponges used to clean surgical implements for a full week without being replaced or disinfected

- Uncertainty of clinic staff about which instruments were clean and which were dirty
- Failure of personnel to use personal protective equipment
- No policies requiring experience and training for staff
- Improper labeling of drugs
- Equipment not in good repair
- Hallways too narrow for gurneys to pass through, requiring women to be hand-carried to an ambulance in cases of medical emergency

An inspection of Planned Parenthood's Roanoke Health Center revealed a brownish red splatter on an operating table. Staff members admitted that it was dried blood, and that the table had not been disinfected between patients, according to the report.

Another inspection of the Planned Parenthood of Metropolitan Washington, D.C., facility revealed that one employee was cleaning the tops of medication vials prior to the first puncture with the needle, but not cleaning them prior to the second puncture.

"The current research says it doesn't make any difference," the employee reportedly said, when asked about the practice. "You could lick the tops of the vials,

and the infection rate would be the same.” She also explained that when she mixed medications, applied a label, and took the vials to the procedure room, no one verified the medications she was mixing. Verification is a common health and safety precaution, according to the report.

The additional troubling twist in this story is that these were not surprise inspections. They had been announced well in advance, likely allowing the facilities to clean up other violations before being inspected.

The bottom line is...the bottom line. Health and safety standards can be expensive and cut into profits. Maintaining medical equipment is costly, training staff is time-consuming, and implementing failsafe procedures is inefficient for a business model built on quantity, speed and profit. Planned Parenthood performs abortions at the rate of one every 95 seconds, and on average, its doctors reportedly spend no more than a few minutes with any patient who is having an abortion. The system seems streamlined to generate revenue, and that can mean safety is sometimes compromised in the process.

“Abortion facilities should be held to the same health and safety standards as all other medical facilities,” says Casey Mattox, senior counsel with Alliance Defending Freedom. “Their resistance to such standards exposes their real attitude toward women. Planned Parenthood is a billion-dollar corporation. If they are going to profit from killing innocent life, is it too much to expect that they meet basic standards to protect women’s health?”

Women at Risk

Early in its history, Planned Parenthood told women that abortions were not safe. A brochure issued in 1952 answers the question “Is birth control an abortion?”

“Definitely not,” Planned Parenthood said. “An abortion requires an operation. It kills the life of a baby after it has begun. It is dangerous to your life and health. It may make you sterile so that when you want a child you cannot have it. Birth control merely postpones the beginning of life.”

Today, Planned Parenthood tells a different story. Women are frequently not told about all of the risks to health and fertility associated with abortion, nor are they often told of the substantial increases to the risks that come with a botched abortion.

In October 2012 Ayanna Byer, after learning she was pregnant, made an appointment at Planned Parenthood in Colorado Springs to learn about her options. She decided to proceed with an abortion, but was anxious when she was told that she was too far along for a chemical abortion. But, she said, Planned Parenthood assured her it could do a surgical abortion and that she would be under anesthesia so that she would not even be aware of the surgery.

Planned Parenthood nurses, under the supervision of abortionist Dr. James Boyd, had trouble administering the anesthesia, Byer said. She told the doctor and nurses she didn’t want to proceed with the abortion without the anesthesia. The nurses continued to try to

administer the anesthesia, but without success. Before the actual abortion started, Byer told the doctor to stop, but he told her it was too late, turned on the vacuum suction machine, and began the procedure.

Ultimately, Ms. Byer filed a lawsuit where the painful details of the abortion were outlined. “Byer, fully awake, was forced to feel the full pain of the procedure against her will and without the promised anesthesia.” During the procedure she asked repeatedly, “Why are you doing this to me?”

After seven minutes, the abortionist stopped the vacuum machine and sent her home. But tissue associated with the pregnancy was mistakenly left in her womb.

Two days later Byer ended up in an emergency room, undergoing high-risk surgery to remove the remaining tissue. Because of her continued pain and heavy bleeding, the on-call doctor was concerned that she might have had an ectopic pregnancy. When he contacted Planned Parenthood the next day to ask about pathology results, he learned that, in Planned Parenthood practice, no pathology is done on abortion patients. The doctor merely looks at the remains of the baby and decides whether the abortion is complete.

“It is medically inappropriate for a physician to remove products of conception and not confirm the diagnosis with pathology,” the emergency room doctor said. “I know of no physician or hospital that would allow the removal of a specimen of this nature and assume what the diagnosis was by just ‘looking’ at it.”

Alliance Defending Freedom allied attorneys represented Byer in this medical malpractice case against Planned Parenthood of the Rocky Mountains and its doctor, James Boyd.

Mothers Who Did Not Survive

Many documented medical emergencies like Ayanna Byer’s have occurred at Planned Parenthood facilities. Sadly, some of those emergencies led to patients’ deaths.

TONYA REAVES

Tonya Reaves, 24, reportedly went to Planned Parenthood on Michigan Avenue in Chicago on July 20, 2012. She was 16 weeks pregnant and was scheduled for a second-trimester abortion, according to news sources.

Planned Parenthood did a dilation and evacuation (D&E) abortion, dismembering the child and removing it one part at a time, reports say. But in recovery, Reaves bled significantly.

Planned Parenthood allegedly did not make a call to 911. It’s unclear who ultimately called for an ambulance. But five hours later, Reaves was taken to Northwestern Memorial Hospital, where an ultrasound showed the abortion was incomplete. Part of the baby was reportedly still inside her womb. Doctors at the hospital did a second abortion, but the pain did not subside.

A second ultrasound showed that Reaves had also suffered a perforation, sources say. She went into

immediate surgery, where an uncontrollable bleed was found. Doctors performed an emergency hysterectomy, but it was too late. According to reports, Reaves died at 11:20 p.m., just a little more than 12 hours after she entered the Planned Parenthood facility.

The autopsy report indicated about 30 percent of Reaves' total volume of blood had bled into her abdomen.

DIANA LOPEZ

On February 28, 2002, Diana Lopez, 25, sought an abortion at Planned Parenthood in Los Angeles. She was 19 weeks pregnant.

During the D&E procedure, her cervix was punctured, and Lopez bled profusely. She was taken to Women's and Children's Hospital at Los Angeles County LAC+USC Medical Center, and underwent an emergency hysterectomy in an attempt to save her life. But it was too late. Lopez died.

After an investigation, the California Department of Health Services cited Planned Parenthood for several violations, including inadequate advice regarding the danger of a D&E abortion in the second trimester. Lopez's hemoglobin levels were below standards for a safe D&E. Low levels often lead to excessive bleeding. Planned Parenthood was also cited for administering a drug to Lopez during the *first day* of the usual two-day abortion process, when the facility's treatment protocols required that the drug be given on the second day, *90 minutes* before the surgical part of the procedure.

HOLLY PATTERSON

Holly Patterson, 18, went to a Planned Parenthood facility in Hayward, California, for a chemical abortion on September 10, 2003.

Planned Parenthood workers gave her 200 milligrams of mifepristone, instead of the 600 milligrams recommended by the FDA to begin the three-day process. Mifepristone is meant to block nutrients from the womb, eventually starving the developing child. If the clinic had followed FDA recommendations, Patterson would have been instructed to return to the facility to receive 400 micrograms of misoprostol to begin contractions and expel the aborted child.

Instead of advising Patterson to return to the abortion clinic on the third day to complete the treatment orally with 400 micrograms of misoprostol, Planned Parenthood workers instructed her to insert 800 micrograms of misoprostol vaginally at home the next day.

Patterson did as she was told.

On September 14 she was treated at an emergency room for bleeding and pain, and sent home. Three days later she was admitted to the hospital. Septic shock overtook her body, and she died that afternoon. Her death was the result of a severe bacterial infection caused by an incomplete abortion.

Since 2010, because of stories like these, 15 states have started investigations into abortion facilities and individual abortionists for substandard patient care.

Fully Informed Consent

We live in a health- and safety-conscious world. Every visit to a medical facility, for any reason, requires paperwork, the presentation of insurance information and medical history, and the review of a long list of specific complications that could arise during the procedure.

So it seems counterintuitive that Planned Parenthood, a company that describes itself as a “trusted health care provider,” would not follow, or encourage, health and safety protocols.

Abortion is a complicated procedure – not only physically, but mentally and emotionally as well. Women who have had an abortion can face substantial increase in the risk of depression, mental stress, self-harm, and suicide. So why wouldn’t Planned Parenthood, the nation’s largest abortion provider, inform women of the risks they could face?

Many states have passed laws requiring that women be informed of the risks associated with abortion before they undergo the procedure. But when this happens, Planned Parenthood regularly files lawsuits to block their implementation. South Dakota enacted such a law in 2005, and Planned Parenthood sued. Although the U.S. Supreme Court has affirmed that there is “a substantial governmental interest justifying a requirement that a woman be apprised of the health risks of abortion and childbirth,” Planned Parenthood continues to resist any laws requiring full informed consent.

The U.S. Supreme Court’s ruling pointed out that “psychological well-being is a facet of health,” and a woman should not be put in a position of choosing an abortion and later suffering significant psychological effects from the procedure because she had not been informed about these risks.

In 2007 the U.S. Supreme Court held, “It seems unexceptionable to conclude some women come to regret their choice to abort.... The State has an interest in ensuring so grave a choice is well-informed.”

Many studies show links between abortion and depression, and abortion and suicide. Among them:

- A British study in 1995 found that in women with no history of psychiatric illness, the rate of deliberate self-harm was 70 percent higher after abortion than after childbirth.
- A California study in 2002 found that suicide risk was 154 percent higher among women who had gone through abortion compared with those who had gone through childbirth.
- A British study in 2012 found an 81 percent increased risk of mental trauma after abortion.

Planned Parenthood tells women that abortion is very safe, and that it is in fact “safer than labor and childbirth.” It does not inform them that induced abortion increases the risk of miscarriage by 55 percent

in subsequent pregnancies. And it doesn't tell them that risks associated with abortion include psychological harm and increased rates of suicide. Instead, Planned Parenthood files lawsuits against states that pass laws requiring the disclosure of this information.

In the South Dakota lawsuit, Planned Parenthood sued to avoid having to communicate the risks associated with abortion. In the suit, the Planned Parenthood medical director testified that she had not read the medical literature that provided evidence that abortion places a woman at risk for psychological harm. And a state blue ribbon panel had previously reported, "The abortion providers give misleading information about the psychological and physical risks to the mother, and do not disclose the direct injury to the child that leads to its death." One party to the lawsuit said, "The evidence in this case is shocking in how poor, even non-existent, any meaningful counseling is, at the Planned Parenthood facility in Sioux Falls."

Opposing laws that require women to be informed of the health risks of surgical procedures is in keeping with a Planned Parenthood business model that relies heavily on the contribution of abortion procedures to the corporate bottom line.

Emergency Contraception

"Accidents happen," says Planned Parenthood. "That's why we have emergency contraception." The Planned Parenthood website claims that "emergency

contraception is a safe and effective way to prevent pregnancy after unprotected intercourse."

What it doesn't spell out quite so clearly is that emergency "contraception" isn't actually contraception when a woman may already be pregnant. Emergency contraception can end a life that has already been created. It can prevent a human embryo from implanting in the mother's womb, or end the life of the embryo after it implants.

Planned Parenthood makes emergency contraception readily available to people who are sexually active, promising a quick fix to those who are concerned they might be pregnant. Planned Parenthood's Facebook page for teens advertises the advantages of emergency contraception, and commits to having it "always on sale."



Planned Parenthood distributes two types of emergency contraceptives:

- Plan B
- ella

Plan B, or the “morning-after pill,” was approved by the FDA for use within 72 hours of intercourse. But Planned Parenthood affiliates often use it for up to 120 hours, or five days, after sexual intercourse.

Planned Parenthood has successfully advocated for Plan B now to be available without a prescription or parental notification to girls as young as 11.



Ella is a second type of emergency contraception available at Planned Parenthood. The FDA states that ella should not be used if a woman is pregnant or suspects she could be pregnant, and should not be used multiple times in one menstrual cycle. But Planned Parenthood has chosen to ignore the FDA recommendations. On

its website, Planned Parenthood says there are no advisements against the use of this treatment, and that “any woman who has had unprotected intercourse can use UPA [ella] within 120 hours (five days) to reduce the risk of becoming pregnant.”

Emergency contraception is a unique classification of drugs that was born out of the redefinition of pregnancy by the American College of Obstetrics and Gynecology (ACOG). In 1965, ACOG changed the definition of pregnancy from beginning at fertilization to beginning at implantation of the embryo in the womb. This allows for abortion-inducing drugs to be given out as “contraception” even after a new life has begun. Government funding cannot be used to cover abortions in most cases, but it can be used to cover abortion-inducing drugs in family planning programs. So Planned Parenthood financially benefits from women using these drugs as often as possible.

CHAPTER 4

Bottom-Line Maintenance

PLANNED PARENTHOOD UNDER
INVESTIGATION FOR FRAUD

A corporation that accepts government funding can be accused of financial fraud if it receives and spends money it is not entitled to, or uses taxpayer money for purposes outside the restrictions associated with the funding.

Former Planned Parenthood employees and concerned U.S. taxpayers have come forward with allegations that Planned Parenthood routinely commits this kind of fraud. Several former employees of Planned Parenthood are currently involved in lawsuits that have been

brought against the organization on behalf of taxpayers. Among these employees are a former chief financial officer, former clinic directors, and former employees who managed billing and records. Collectively, these lawsuits allege that hundreds of millions of dollars have been taken from taxpayers unlawfully. If proven in court, these allegations could result in Planned Parenthood being charged billions of dollars in fines, which they would be required to pay back to the government and the American people.

Behind Closed Doors

For about two years, Abby Johnson had system-wide access to patient records and billing activities at the center where she worked. Under a whistleblower lawsuit, Johnson is accusing 10 facilities in her Planned Parenthood Gulf Coast affiliate of submitting about \$6 million in false claims to Medicaid.

Johnson said she learned in a monthly management meeting that improper billing had been going on for some time. She asked how the money would be paid back. "My supervisor said, 'We are going to hope we don't get caught,'" Johnson said.

She and other facility managers were told to continue to bill for ineligible products and services. More than 87,000 claims for reimbursement were made that are alleged to be false, fraudulent, and/or ineligible for reimbursement from the Texas Women's Health Program under Medicaid, according to Johnson.

The lawsuit claims Planned Parenthood Gulf Coast knowingly committed Medicaid fraud. The facility's main function was to offer women an annual family-planning exam and consultation, and only office visits related to contraceptive management were reimbursable by Medicaid. But, Johnson said, due to financial pressures, the facility leaders and staff collaborated to register ineligible services – such as pregnancy tests, STD tests, and Pap smears – for Medicaid reimbursement. She said the bosses admitted to her and others that they knew these claims were not eligible but told them, "We have to keep these people as patients" and "We must turn every call and visit into a revenue-generating client."

When Johnson left her job at Planned Parenthood after eight years, she was asked to come back and was offered more money, but she said she'd left for personal and moral reasons. A short time later she received a fax indicating Planned Parenthood was seeking a permanent injunction against her – a gag order. Their lawsuit to silence her was dismissed.

Medicaid

Unless you're an accountant, billing practices and financial fraud may seem complicated. Here's a simple example of how it works.

Planned Parenthood received \$542 million dollars in taxpayer money in 2012, an amount that has more than tripled since 1998. Most of that money comes from the federal government, and some comes from state funding.

Planned Parenthood receives much of its money through Medicaid reimbursement. Two-thirds of Planned Parenthood's clients qualify for some type of federal help, often Medicaid. According to Planned Parenthood President Cecile Richards, "We see 3 million patients a year and 2 million qualify for some type of federal assistance."

Medicaid was established in 1965 to help low-income citizens receive necessary health care. It's funded both by federal and state governments. In 1976, Congress added the Hyde Amendment to the appropriations bill that funnels dollars into Medicaid. Henry Hyde was a member of the U.S. House of Representatives from Illinois, 1975 to 2007, and the amendment that bears his name bans states from using federal funds for abortion except in cases of rape, incest, or danger to a mother's life. Congress has renewed the amendment in some form every year since its original passage.

Here's how Medicaid reimbursements play out at Planned Parenthood.

Planned Parenthood uses Medicaid funding mainly for what it calls "family planning services." In 2001, according to Planned Parenthood's sister organization The Guttmacher Institute, Medicaid dollars made up \$60 of every \$100 of public dollars spent on family planning.

Significantly, the federal share for most Medicaid services is between 50 and 76 percent, but for family planning, the federal government pays 90 percent. If an expense is billed under family planning, the clinic

usually gets reimbursed at a higher rate than if it is billed as a non-family planning service.

The temptation for a Planned Parenthood facility is obvious – list an expense in the column that gets the best payback.

In 2010, the potential for this kind of abuse got a boost when the Patient Protection and Affordable Care Act expanded the number of people able to qualify for Medicaid in many states. That means Planned Parenthood has the potential to bill more expenses to the federal government at the financially advantageous family planning reimbursement rate.

Title X

Since 1970, Title X of the Public Health Services Act has been on the books, providing federal funding for family planning. It is specific about what it will cover, and what it won't: "The law prohibits the use of Title X funds in programs where abortion is a method of family planning." It can be used only to support preventive family planning methods, (i.e., birth control) and services such as population research, infertility help, and other related medical, informational, and educational activities.

Just like Medicaid and the Hyde Amendment, a Title X grant recipient agrees that federal dollars cannot be used to fund abortion. For many years, Congress and the courts required that to ensure compliance with this law, any organization receiving Title X money

that also did abortions, had to maintain complete separation between the abortion and non-abortion services of the business, including facilities, personnel, and accounting records. This bright line of delineation was relaxed during the 1990s, and the law was changed to require that Title X-funded organizations performing abortions only be responsible for making sure that no part of that taxpayer money supports the abortion side of their business.

Unfortunately, even with these restrictions, Title X funds that go to Planned Parenthood arguably support and promote abortion, because the money doesn't swim in separate streams as it flows out to different services. Abby Johnson states, "As clinic director, I saw how money received by Planned Parenthood affiliate clinics all went into one pot at the end of the day – it isn't divvied up and directed to specific services." By combining the various funding sources to pay common expenses, such as rent, utilities, personnel and other shared overhead expenses, it is virtually impossible for those Title X dollars not to support or subsidize the abortion operations.

Reports to Congress

In October 2011, an exhaustive report produced by Alliance Defending Freedom with assistance by the Susan B. Anthony List was submitted to Congress. It alleged that waste, abuse, and potential fraud by Planned Parenthood may reach multiple millions of dollars.

"Americans deserve to know if their hard-earned tax money is being funneled to groups that are misusing it," says Michael J. Norton, former U.S. attorney and current Alliance Defending Freedom senior counsel, who assisted in drafting the report and litigates fraud cases against Planned Parenthood. "Planned Parenthood has to play by the same rules as everyone else. It certainly isn't entitled to a penny of public funds, especially if it is committing Medicaid fraud."

The report is based on publicly available audits and suggests that Planned Parenthood is motivated to take advantage of overbilling opportunities to boost its bottom line, partly because federal and state funding programs are complex and understaffed. Mostly, these programs rely on the integrity of the provider for compliance. But if the provider lacks integrity, who's going to know?

The report lists 12 types of potential fraud that are alleged to be committed by family planning providers like Planned Parenthood, including billing and receiving reimbursement from government agencies for medications and services connected with abortions – a practice that is illegal under federal law.

Other violations include billing more than actual costs for contraceptives and other products, inappropriate billing for services that were not medically necessary, billing for multiple initial prenatal care visits (there can be only one initial visit), and incorrectly billing first, follow-up, and postpartum services.

The numbers listed in the report are staggering:

- Federal and state audits of family planning funding found a minimum of \$95.7 million in waste, abuse, and potential fraud from 1995 to 2009.
- Of this amount, at least \$7.8 million was identified in separate state audits of Planned Parenthood affiliates in four states: New York, California, Washington, and Texas. Reported abuses ranged from extensive overbilling to illegal billing for abortion-related procedures that are ineligible for federal funding.
- In addition, federal audits of family planning programs from 1995 to 2009 identified a total of nearly \$88 million in overbilling. That sum may actually be as high as \$99 million, according to the Inspector General's Office at the U.S. Department of Health and Human Services.
- Of the 38 federal family planning audits covering federal funding streams and 19 states, two audits – in New Jersey and New York – specifically called out Planned Parenthood alone as a source of overbilling in the family planning programs. The combined waste in these two audits alone was \$1.5 million.

- All told, extensive waste, abuse, and potential fraud have been identified to date in more than 25 percent of Planned Parenthood's U.S. affiliates that have been reviewed so far. Five others are the subjects of federal whistleblower lawsuits by former Planned Parenthood employees alleging fraud.

The extent of possible waste, abuse, and potential fraud at the nation's remaining Planned Parenthood affiliates is unknown. Alliance Defending Freedom has encouraged a full review and report by the House Energy and Commerce Committee, which is investigating Planned Parenthood.

The report notes the House investigation is especially pertinent, because Planned Parenthood Federation of America exercises the necessary oversight over the billing practices of its many affiliates, which collectively receive over half a billion dollars of taxpayer funds each year.

Audits and Cases

“Health care fraud is not limited to blatant fraud by career criminals and sham providers,” says Lewis Morris, chief counsel to the Inspector General. Healthcare institutions “have also committed fraud, sometimes on a grand scale.”

Here are a few examples:

CALIFORNIA: The 2004 audit of Planned Parenthood of San Diego and Riverside Counties found that the affiliate overbilled the government in excess of \$5 million in the fiscal year ending in 2003. Instead of billing family planning services at cost as required, the affiliate marked up the price of drugs. That resulted in government overpayment of at least \$5.2 million in one fiscal year. The affiliate was never held accountable by the state.

In 2008, an action was brought by the American Center for Law and Justice against Planned Parenthood affiliates in California on behalf of Victor Gonzalez, the vice president of Finance and Administration with Planned Parenthood of Los Angeles.

In this False Claims Act lawsuit, Gonzalez alleges the overbilling practice was a statewide problem for Planned Parenthood. Gonzalez says Mary-Jane Wagle, then CEO of the Planned Parenthood affiliate, asked him to assess the impact of these overbilling practices. He found approximately \$2.1 million in additional income from improper billing, which he says was for only one year and for only one of the 10 California affiliates. He estimates that in the course of six years starting in 1999, overbilling by Planned Parenthood's California affiliates exceeded \$180 million.

Following this discovery, he came forward and exposed this hidden information to the public.

WASHINGTON: An audit by the state's Department of Social and Health Services found

excess payments totaling \$629,143 were made to Planned Parenthood of the Inland Northwest (PPINW) from 2004 through 2007. Doug Porter, Washington's Medicaid director, had noticed a problem. "Most birth control clinics will see a woman and usually determine what method of birth control is best, and then they will prescribe six months to a year right then and there," says Porter. But at this facility, clients were coming in every month, allowing the clinic to overcharge for multiple office visits.

Other improper billing was found, including allegations that antibiotics were routinely prescribed as part of a surgical abortion but incorrectly billed under the family planning program.

PPINW was ordered to reimburse the government \$629,143, but in 2010 the state announced a settlement with PPINW for \$345,000. A settlement was neither an admission of guilt, nor was it exoneration, but the amount was obviously a compromise of these very serious claims.

In addition, a lawsuit brought by Alliance Defending Freedom on behalf of Jonathan Bloedow, a citizen whistleblower, against Planned Parenthood of the Great Northwest, was unsealed in March 2013. After conducting personal research on Planned Parenthood and the Medicaid reimbursement system, Bloedow discovered that the corporation had allegedly committed more than 2 million instances of Medicaid fraud that allowed it to wrongfully receive more than \$46 million from taxpayers.

His research showed that Planned Parenthood is permitted to charge Medicaid only for the actual cost for the oral contraceptives and emergency contraceptives it dispenses to women. In the Washington state area, it is estimated that Planned Parenthood pays under \$3 per cycle of oral contraceptives, but actually charged the government more than \$22, bringing in millions of dollars in profit.

This federal False Claims Act lawsuit against Planned Parenthood of the Great Northwest carries with it the potential for Planned Parenthood to owe the American people in excess of \$377 million.

IOWA: The Alliance Defending Freedom lawsuit on behalf of Sue Thayer against Planned Parenthood of the Heartland accuses the corporation of submitting “repeated false, fraudulent, and/or ineligible claims for reimbursements” to Medicaid, and of failing to meet acceptable standards of medical practice.

One portion of the Thayer False Claims Act lawsuit alleges that Planned Parenthood pressed women to help pay for services even if they could not cover the whole cost – calling it a “donation,” but then charged Medicaid for the whole cost of the service, thereby receiving pay multiple times for the same services.

The lawsuit accuses Planned Parenthood of the Heartland of defrauding taxpayers with half a million Medicaid claims over 10 years, unlawfully netting the organization \$28 million.

If Thayer’s claim is upheld, Planned Parenthood could be ordered to pay the federal and state governments up to \$5.5 billion (including fines).

TEXAS: In addition to the case brought by Abby Johnson against Planned Parenthood of Houston and Southeast Texas, another former employee of the same Planned Parenthood affiliate, Karen Reynolds, brought a False Claims Act lawsuit against the organization. The lawsuit alleges Planned Parenthood “defrauded the government by charging state and federal governments for services not actually provided, medically unnecessary services, and services that are not covered under Medicaid and other programs.”

Planned Parenthood tried to have the charges thrown out, but the federal court in Texas denied that attempt, and in July 2013, the Texas Attorney General’s office obtained a \$1.4 million settlement against Planned Parenthood Gulf Coast for Medicaid fraud.

ILLINOIS: A Planned Parenthood medical director, Caroline Hoke, is being investigated for over-billing Medicaid. The state Department of Healthcare and Family Services is withholding payments to Dr. Hoke until what it calls “billing issues” are resolved.

Carole Brite, head of Planned Parenthood of Illinois, called the inquiry a routine review, but admitted the organization will have to repay the state. That raises the question: If nothing wrong was done, why would there need to be any repayment?

Despite Planned Parenthood's denial of any wrongdoing, Linda Gombac, an auditor at BlickenStaff LLC in Lafayette, Indiana, and a spokesperson at a healthcare compliance consulting firm, said medical officials typically suspend payments only when additional payments would be improper.

NEW JERSEY: Misuse of federal funds by approved health care providers, including New Jersey Planned Parenthood affiliates, was uncovered. The governor of New Jersey twice de-funded Planned Parenthood, citing concerns about waste and abuse.

NEW YORK: In 2009, the Office of the Medicaid Inspector General for the State of New York released reports showing "a pattern of overbilling at the [Planned Parenthood] Margaret Sanger Center in New York City." A letter dated January 20, 2009, confirmed Planned Parenthood's request to settle one audit for \$207,809. Americans United for Life called on Congress to investigate this further.

Susan G. Komen Foundation

In 2012, Susan G. Komen for the Cure announced that it would no longer provide grants for breast cancer screening to Planned Parenthood, in keeping with the desire "to fulfill our fiduciary duty to our donors by not funding grant applications made by organizations under investigation," said president and founder Nancy Brinker.

Komen had previously given about \$700,000 annually to Planned Parenthood to pay for manual breast exams of patients. Because *no Planned Parenthood facility provides mammograms*, any woman examined must also be sent to a doctor to verify if she has breast cancer.

Generally, cancer screenings of this manual nature are covered by taxpayer funding as part of an annual physical exam. But they may also be covered by grants issued from Susan G. Komen. Evidence provided by former Susan G. Komen and Planned Parenthood employees indicates that money from the grants was never used to offset the costs reimbursed for these services by American taxpayers. This raises a legitimate question of whether Planned Parenthood is receiving payment more than once for the same service.

More than one in four Planned Parenthood affiliates have already been implicated in fraud or over-billing of the government and disregard for laws requiring federal funds *not* to be used for abortion.

C O N C L U S I O N

One More Time

Let's take one last inventory of what comes in the neatly wrapped package marked "Planned Parenthood."

Planned Parenthood is a massive corporation with \$1.5 billion in assets and over 750 facilities nationwide. It received more than half a billion dollars from taxpayers and made upwards of \$87 million in profits in 2012. Its business model and marketing plans drive more than 3 million women and young people – many of them in crisis – through Planned Parenthood's doors each year.

Planned Parenthood's significant success is built on four foundational pillars:

Creating a Customer by Promoting Dangerous and Unhealthy Behavior

Planned Parenthood creates a customer by cleverly and aggressively marketing its services and ideology. It promotes what it calls “values-neutral” sex education, and advocates for its curriculum to be in public schools. Planned Parenthood leads young people to believe that all sexual activity, in any form or context, is appropriate and acceptable, and can be experienced without consequences or repercussions if done “safely.” However, that promise collapses under the weight of reality: the more that promiscuous sexual activity is encouraged, the more demand increases for contraceptive devices, STD testing, and abortions, all of which Planned Parenthood is more than happy to provide – usually at a price.

Statistically speaking, Planned Parenthood’s “preventive” services appear to do just the opposite. Non-marital birth rates, along with testing and treatment for sexually transmitted diseases, keep growing. Yet Planned Parenthood receives hundreds of millions of taxpayer dollars each year, and communicates that all sexual activity can be experienced without consequences.

Provocative sex education, proliferation of easy-to-obtain contraceptives, and clever campaigns promise an escape from consequences, but are exploited to build customers from the ground up and ensure a steady stream of revenue for years to come.

Enforcing Abortion Quotas to Strengthen the Bottom Line

Planned Parenthood takes advantage of existing laws that allow an abortion to be done for virtually any reason.

Each year, the abortion giant earns, at a minimum, \$150 million in abortion revenue, which constitutes around 50 percent of the organization’s total annual revenue earned from medical services provided. Abortion is big business, and every year since its inception, Planned Parenthood has worked to increase its percentage of the market share of abortion providers.

Planned Parenthood offers a bundle of what it calls “pregnancy services” (abortion, adoption referrals, and prenatal care), but neither parenting education nor adoption referral generates revenue for Planned Parenthood. When compared against the highly profitable 300,000-plus abortions each year, it’s clear why 90 percent of Planned Parenthood’s services to pregnant women end in abortions. And it’s the profit margin that has driven Planned Parenthood to create abortion quotas, helping ensure a prosperous financial future for the organization.

That profit margin is also behind Planned Parenthood’s resistance to laws informing women of the risks of abortion as well as Planned Parenthood’s opposition to parental consent laws and its persistent failure to notify law enforcement authorities of ongoing abuse.

For Planned Parenthood, the bottom line is ... the bottom line.

Putting Women at Risk by Keeping Health Standards Low

For an organization whose brand is built on being a trusted source for women's health issues, you would assume Planned Parenthood would reinforce that image by pursuing the highest standards of safety in health care. But Planned Parenthood has chosen to do just the opposite. At every turn, Planned Parenthood opposes legislation requiring the most basic health standards. The fact is that higher health standards are costly and would threaten the corporation's viability. As a result, dirty facilities, misuse of drugs, and botched abortions are likely to continue at Planned Parenthood facilities.

In California, Planned Parenthood affiliates successfully ran a radio ad to garner support for legislation that would allow non-physicians to perform early-term abortions. Unfortunately, that bill was passed and signed into law by the governor. Now midwives, nurse practitioners, and physician assistants may perform aspiration (suction) abortions.

"Never before ... has any state purposed to decrease the standard of care for women in order to expand the practice of abortion," says Ron Prentice of California Family Council. "In the case of complications, the absence of a physician can be harmful and possibly deadly for the women."

For the woman who chooses to have an abortion, not only is her physical health at risk, but her mental/

emotional health as well. Yet Planned Parenthood resists warning women about these risk factors. After all, every abortion not performed impacts Planned Parenthood's bottom line.

Planned Parenthood is Accused of Fraud, Waste, and Abuse

Planned Parenthood affiliates nationwide have been accused of committing at least 12 types of waste, abuse, and potential fraud, including illegally billing for drugs and/or services provided in connection with abortions, over-billing for prescription drugs, improperly claiming services were related to family planning, and billing for medically unnecessary services. Multiple former Planned Parenthood leaders have come forward with evidence of this misuse of taxpayer dollars.

This systematic abuse by Planned Parenthood translates to the improper appropriation of millions of taxpayer dollars. If these allegations are proven true, Planned Parenthood could owe the American people a refund of millions of dollars, and would be responsible for potentially billions of dollars in fines.

Encouraging News

Thankfully, more and more people are embracing life. The current generation has grown up with ultrasound technology that allows children to actually see their preterm siblings. They have grown up with a clearer,

more complete picture of when life begins and its intrinsic, eternal value.

We live in a time when pro-life legislation is increasing and it is having a measured effect. Just since December 2012, more than 50 Planned Parenthood abortion facilities have permanently closed...and more closures are anticipated.

What We are Doing

In the legal arena, Alliance Defending Freedom is holding Planned Parenthood accountable. In over 45 lawsuits litigated involving the abortion giant, Alliance Defending Freedom has exposed hundreds of millions of dollars in alleged fraud, opposed its efforts to avoid accountability, enforced requirements for parental notification prior to performing abortions on minors, reduced its ability to meet its abortion quotas, and defended laws enacted to protect women whose health and safety have been put at risk by abortion clinics.

*For all sources and citations, please visit
www.InvestigateTheirPlan.org*

What **YOU** can do

For Planned Parenthood, the time has come to *investigate its plan*. Concerned citizens need to challenge the contradictory claims of this non-profit giant. Get the facts for yourself. Go to www.InvestigateTheirPlan.org

ALLIANCE DEFENDING FREEDOM is holding Planned Parenthood legally accountable in courtrooms throughout our nation. In over 45 lawsuits litigated involving the abortion giant, Alliance Defending Freedom has exposed hundreds of millions of dollars in alleged fraud, opposed its efforts to avoid accountability, enforced requirements for parental notification prior to committing abortions on minors, reduced its ability to meet its abortion quotas, and defended laws enacted to protect women whose health and safety have been put at risk by abortion clinics. To learn more and partner with us, visit *www.InvestigateTheirPlan.org*



