# IN THE UNITED STATES DISTRICT COURT EASTERN DISTRICT OF ARKANSAS CENTRAL DIVISION

### DYLAN BRANDT, et al.,

v.

#### No. 4:21-CV-00450-JM

# PLAINTIFFS,

LESLIE RUTLEDGE, et al.,

#### **DEFENDANTS.**

## **DECLARATION OF DR. MARK REGNERUS**

Pursuant to 28 U.S.C. 1746, I declare:

## I. CREDENTIALS & SUMMARY OF OPINIONS

1. I am Professor of Sociology at the University of Texas at Austin. I received my Ph.D. from the University of North Carolina at Chapel Hill in 2000. I became an Assistant Professor of Sociology at UT-Austin in 2002, an Associate Professor in 2007, and a full Professor in 2018.

2. I have published numerous articles and four books on sexual relationship behavior and decision-making since 2003.<sup>1</sup> The books, peer-reviewed journal articles, and essays I have written include material on sexual orientation and, more recently, perspectives on transgender medicine. I am an experienced peer reviewer, having reviewed dozens of manuscripts in the past decade on these and related topics—including for top journals in both sociology and sex/sexuality studies (e.g., *Archives of Sexual Behavior, Journal of Homosexuality*, etc.). I have extensive survey administration experience as well, having fielded three nationally-representative surveys since 2011, and consulted on survey construction for several others, including the National Study

<sup>&</sup>lt;sup>1</sup> Regnerus, M. D. (2007). Forbidden fruit: Sex & religion in the lives of American teenagers. Oxford University Press.; Regnerus, M. & Uecker, J. (2011). Premarital sex in America: How young Americans meet, mate, and think about marrying. Oxford University Press.; Regnerus, M. (2017). Cheap sex: The transformation of men, marriage, and monogamy Oxford University Press.; Regnerus, M. (2020). The future of Christian marriage. Oxford University Press.

of Family Growth and the National Longitudinal Study of Adolescent to Adult Health (or Add Health). A more complete review of my professional experience, publications, and research is provided in my curriculum vitae, a copy of which is attached hereto as Exhibit A.

3. My experience in the area of transgender research primarily concerns basic methodological matters, involving design, measurement, statistical inference, interpretation of data, and reflections on the research and publication norms that have developed in this new domain in conjunction with media interest and professional and organizational pressures. This leans not only on my knowledge of the research in this domain, but also on the details of quantitative and qualitative research, subjects I have taught to sociology majors at least 20 times since my appointment on the faculty at the University of Texas at Austin.

4. I have been retained as an expert witness by the State of Arkansas in connection with this litigation. I have actual knowledge of the matters stated in this report. I base the following opinions on my own knowledge, research, experience, and publications, and the work of other academics and writers. The materials I have used to research and write this report are the standard sources used by other experts in my field. I am receiving \$250 per hour for my time spent preparing this report. My compensation is not dependent upon the outcome of this litigation or the substance of my opinions.

5. The focus of this report is on science: scientific evidence, researcher conduct, the culture of scientific organizations, the role of values in scientific inquiry, and a review of the declarations (original and supplemental) submitted by the plaintiffs' witnesses (Deanna Adkins, Armand H. Matheny Antommaria, and Jack Turban) during the preliminary-injunction stage of this litigation. In particular, I focus on the unscientific process by which "affirmative" treatment of transgender-identifying adolescents has come to be the default position advocated by various

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professionals and organizations. This is what the sociology of science concerns—an evaluation of how science operates. In this case, I probe how the nascent field of transgender research has, in the United States, come to make premature claims about "standards of care" and profess a level of "consensus" about affirmative care that is not only uncharacteristically rapid for such a new scientific subfield, it's also untrue. The actual practice of many gender clinicians (and surgeons, etc.) continues to shift toward earlier and more invasive treatments, even while the "standards of care" counsel patience. Something is amiss.

- 6. A summary of the key points I discuss in this statement includes:
  - a. The science of the origins and course of gender identity remain in flux.
  - b. The demographics of transgender-identifying adolescents is shifting in ways that are not yet understood.
  - c. Adolescent gender transition treatments are not supported by randomized clinical trials—an absence that is difficult to account for.
  - d. There is a great deal of evidence that discussion of gender dysphoria and its treatment has been captured by the assumptions of activists promoting what is sometimes called "gender ideology."
  - e. The evidence for suicide risk among gender dysphoric minors is ambiguous at best, and the evidence for claims that treatments for adolescent gender transition lead to sustained improvement in mental health is remarkably weak.
  - f. The practice of "affirmative" treatment for young people with gender dysphoria is characterized by dubious assumptions and questionable value

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judgments that increasingly result in a consumer-driven medical culture out of step with science.

7. My intention is not to offer a comprehensive literature review of the entire field of research in transgender science—or even that which is focused on minors. That is a task unsuited to this document. Rather, one of the central purposes of my report is to describe how and why any supposition that there is a legitimate scientific consensus about treatment for adoles-cents is unmerited. The research I cite and discuss is compelling evidence favoring a proper interpretation of this field as "in development" rather than as "settled science."

8. In the declaration of Dr. Deanna Adkins, dated June 11, 2021 ("Adkins"), she identifies affirmative care as treatment for gender dysphoria that is "aimed at eliminating the clinically significant distress a patient experiences by helping the patient live in alignment with their gender identity."<sup>2</sup> The same treatment is referred to both in the medical literature and in this report using similar terms, including "gender transition," "gender affirming care," and "affirmative" treatment—an approach that (typically) recommends the hormonal and surgical procedures that Arkansas has prohibited doctors from performing on minors.

9. I make no claims here about the most prudent course of treatment for a particular patient, and I have no desire to stoke identity politics or foster moral panic. Instead, as a sociologist, my claims highlight the unscientific processes by which "gender affirming" treatments have come to appear not simply as the dominant approach but increasingly the only permitted approach. And even among its proponents there is growing pressure to skip the psychological evaluations first and move to offer treatments to minors at younger and younger ages. All of this has

<sup>&</sup>lt;sup>2</sup> Adkins, D. (2021) Declaration, U.S. District Court, Eastern District of Arkansas, Case No.: 4:21CV450-JM, p. 4.

happened amid a surge in cases of gender dysphoria and transgender identity that emerged suddenly, was unanticipated, and remains demonstrably undertheorized.<sup>3</sup> In other words, most scholars have been insufficiently curious about these recent developments and appear instead to be more interested in connecting research strategies and conclusions to fit affirmative care prescriptions. This is the "elephant in the room" that ought to give pause to practitioners and their professional societies. But, instead, many have pressed ahead without sufficient interest in understanding why the current realities have come to be. This is not how medical science works in nearly every other branch. Indeed, medical science is often accused of being too cautious and conservative, preferring—as it typically does—wide and consistent confirmation of stably discernible patient benefits that outweigh the risks involved.

10. Since pubertal blockers are already permitted and prescribed for the treatment of precocious puberty in one's natal sex, the plaintiffs' witnesses frame Arkansas's law as discrimination regarding who can access such treatments. But the issues at stake are even more fundamental than a question of fairness. Those fundamental issues include: First, has affirmative care been—and is it now—demonstrably and consistently helpful to minors, in terms of enhanced long-term psychological and physical health? Second, ought minors be permitted to make such consequential, life-altering decisions?

11. Lurking in the background are other inexplicable patterns besides a rapid surge in gender dysphoria. Twenty years ago, far more natal males than females exhibited gender dys-

<sup>&</sup>lt;sup>3</sup> Bernadette Wren, who was a senior clinician at the UK Tavistock gender clinic until her retirement, described the situation this way: "There are morally complex, there are clinically complex, there are politically complex issues that we are grappling with and there aren't any easy answers. One of the things about the gender field is you can't plausibly develop a foundational theory of gender identity in which to ground the work." See Gossling, G. (2020). Bernadette Wren: On change. *In mind*. https://100years.tavistockandportman.nhs.uk/bernadette-wren-on-change

phoria. Ten years ago, comparable numbers of natal males and females sought help for it. Today, the sex ratio has reversed: for every one natal male seeking help, approximately three natal females do. Why? And why aren't certain researchers more interested in understanding this than in shuttling patients (regardless of their natal sex) toward "affirmative" care?

12. The plaintiffs' witnesses repeatedly reference current treatment regimens, "consensus," "standards of care," etc. But at a basic level, the question is whether any putative consensus has been formed without undue pressure. The evidence suggests that it has not.

13. Meanwhile, there is no global or even Western "consensus" on transgender treatments for adolescents. There is, rather, a coalition of organizations in the United States, Canada, the Netherlands, the United Kingdom, and Australia that use multiple platforms—scientific, medical, legal, and media—to suggest there is a consensus and employ language intended to reinforce the claim of a professional consensus backing "affirmative" care.

14. In reality—that is, when you include numerous pediatricians, psychotherapists, some researchers and endocrinologists, together with national health care systems in several European countries—there is no wide, shared consensus about the prudence and intelligence of giving puberty blockers and cross-sex hormones to adolescents. Only professional organizations whose assertions are partial to transgender activists would suggest there is a consensus. Indeed, how could a scholarly consensus emerge so quickly in a domain where research barely existed two decades ago, where much of what has been written is less than 7 years old, and is experiencing a surge in cases? Even some of the most well-known pioneering researchers in the field

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acknowledge this: "...in actual practice, no consensus exists whether to use these early medical interventions."<sup>4</sup>

15. Moreover, the consensus that is purported to exist is tentative and fragile, divided over age standards and whether putting patients in the driver's seat of their own care is a good idea.<sup>5</sup> Although supporters of "affirmative" treatment approaches tend to *formally* endorse the experimental "Dutch protocol," the contemporary practice of American gender clinics is not consistent even with that approach. In the Dutch protocol, baseline health and high functioning are required for adolescent patients to proceed through treatment. Psychiatric co-morbidities and the absence of childhood gender dysphoria (i.e., adolescent-onset only) are grounds for exclusion from subsequent treatment.<sup>6</sup> American gender clinics, however, increasingly offer treatment ondemand and with a much lower threshold for medical intervention than the Dutch protocol prescribes. That protocol is more rigorous and exclusive than the majority of patients who make up published American transgender research samples-in other words, most of the American patients would not qualify for the (experimental) procedures even under the Dutch protocol. Hence, when Dr. Turban appeals to the results of studies employing the Dutch protocol-including numerous references to Dr. de Vries's research—to support affirmative gender medical treatments, this is sleight of hand, since the momentum in pediatric gender medicine that Turban endorses now disregards central aspects of the Dutch protocol that de Vries has long followed.

<sup>&</sup>lt;sup>4</sup> Vrouenraets, L. J., Fredriks, A. M., Hannema, S. E., Cohen-Kettenis, P. T., & de Vries, M. C. (2015). Early medical treatment of children and adolescents with gender dysphoria: An empirical ethical study. *The journal of adolescent health : Official publication of the Society for Adolescent Medicine*, *57*(4), 367–373, p. 367. https://doi.org/10.1016/j.jadohealth.2015.04.004

 <sup>&</sup>lt;sup>5</sup> Edwards-Leeper, L., & Anderson, E. (2021). The mental health establishment is failing trans kids. *Washington Post*, November 24. https://www.washingtonpost.com/outlook/2021/11/24/trans-kids-therapy-psychologist.
 <sup>6</sup> For a description of the protocol, see: Delemarre-van de Waal, H. A., Cohen-Kettenis, P. T. (2006). Clinical management of gender identity disorder in adolescents: A protocol on psychological and paediatric endocrinology aspects. *European journal of endocrinology*, *155*(suppl 1):S131–S137.

16. In essence, Drs. Adkins, Antommaria, and Turban are endorsing "affirmative" gender treatment based on research conclusions from a literature whose criteria for inclusion has long been quite different-more selective and rigorous-than it is today. To say, as does Thomas Steensma of the Dutch Center of Expertise on Gender Dysphoria, that "more research is really necessary, and very much needed" is an understatement.<sup>7</sup> Moreover, Steensma identifies the experimental nature of it all: "Little research has been done so far on treatment with puberty blockers and hormones in young people. That is why it is also seen as experimental." The nature of the research, given it is "still being evaluated for efficacy, safety, and acceptability," qualifies it as experimental under the American Psychological Association's definition of experimental treatment."8

How do adolescents fare when they are not screened for psychiatric co-morbidi-17. ties? Finnish researchers can answer this question.<sup>9</sup> "Those who had psychiatric treatment needs or problems in school, peer relationships and managing everyday matters outside of home continued to have problems..." Indeed, "[p]sychiatric comorbidities, particularly depression, anxiety disorders and autism spectrum disorders as well as suicidality and self-harming behaviors are common among adolescents seeking gender reassignment." Can "affirmative" treatment help them? We would have to suspend our attention to any study conclusions that employ the experimental Dutch protocol in order to make this assessment.

<sup>&</sup>lt;sup>7</sup> Tetelepta, B. (2021, February 27). More research is urgently needed into transgender care for young people. Where does the large increase of children come from? Voorzij.https://www.voorzij.nl/more-research-is-urgently-neededinto-transgender-care-for-young-people-where-does-the-large-increase-of-children-come-from/ <sup>8</sup> https://dictionary.apa.org/experimental-treatment

<sup>&</sup>lt;sup>9</sup> Kaltiala, R., Bergman, H., Carmichael, P., de Graaf, N. M., Egebjerg Rischel, K., Frisén, L., Schorkopf, M., Suomalainen, L. & Waehre, A. (2020). Time trends in referrals to child and adolescent gender identity services: A study in four Nordic countries and in the UK. Nordic journal of psychiatry, 74(3), 213-219. The quotes are from page 213. doi: 10.1080/08039488.2019.1667429. See also Kaltiala-Heino, R., Sumia, M., Työläjärvi, M., & Lindberg, N. (2015). Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. Child and Adolescent Psychiatry and Mental Health, 9(1), 1-9.

18. Fundamentally, the ground has shifted here. Moves to medically treat adolescent gender dysphoria are being endorsed based on conclusions from studies whose sample inclusion criteria were far stricter than is commonly the case in practice today. The American medical establishment is being bamboozled by a bait-and-switch tactic, in service to a politicized movement to open up transgender medicine to adolescent patients who previously would not have been eligible for it.

# II. DOCUMENTING GENDER IDENTITY AND EXPLAINING THE RECENT SURGE IN GENDER Dysphoria and Transgender-identifying Adolescents

19. Transgender self-identifications have surged in the United States, and throughout much of the West, in the past 10 years. What had once comprised around 0.3 percent of the total population as recently as 2011 doubled to 0.6 percent by 2016 (with adolescent transgender self-identification comprising 0.7 percent). Since then, the pace of increase has accelerated further, especially among youth. Population-based survey data from 10 states and nine urban school districts found that an average of 1.8 percent of high school students currently identify as transgender.<sup>10</sup> A study in *Pediatrics*, leaning on a 2016 statewide survey in Minnesota, revealed a figure of 2.7 percent.<sup>11</sup> A 2018 application of the CDC's Youth Risk Behavior Survey to just

<sup>&</sup>lt;sup>10</sup> The states are as follows: Colorado, Delaware, Hawaii, Maine, Maryland, Massachusetts, Michigan, Rhode Island, Vermont, and Wisconsin; the nine large urban school districts are: Boston, Broward County, Cleveland, Detroit, District of Columbia, Los Angeles, New York City, San Diego, and San Francisco; see Johns, M. M., Lowry, R., Andrzejewski, J., Barrios, L. C., Demissie, Z., McManus, T., Rasberry, C. N., Robin, L., & Underwood, J. M. (2019). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students - 19 states and large urban school districts, 2017. *MMWR Morbidity and mortality weekly report*, 68(3), 67–71. https://doi.org/10.15585/mmwr.mm6803a3

<sup>&</sup>lt;sup>11</sup> Rider, G. N., McMorris, B. J., Gower, A. L., Coleman, E., & Eisenberg, M. E. (2018). Health and care utilization of transgender and gender nonconforming youth: A population-based study. *Pediatrics*, *141*(3) e20171683. https://doi.org/10.1542/peds.2017-1683

under 5,000 high schoolers in a Northeastern city school district yielded 9.2 percent who reported "incongruence between gender identity and sex assigned at birth."<sup>12</sup> This is no uptick; this is an inexplicable explosion that demands attention.

20. Countries like the UK—with a national health system—are better poised to keep centralized statistics about adolescent gender clinic patients. In 2009-10, a total of 32 natal females and 40 natal males were referred to the country's Gender Identity Development Service (or GIDS).<sup>13</sup> A mere five years later, those figures rose to 399 natal females and 250 natal males. At the most recent year of data reporting (2018-19), the numbers had climbed to 1,740 natal females and 624 natal males. Beginning in 2011-12, the share of natal females outnumbered those of natal males, but by 2018-19, the sex ratio of referrals had exploded to 2.8 females for every male. This includes 171 children under age 10, 52 of whom are ages 3-6. A similar sex ratio is reported in North American gender clinics.<sup>14</sup>

21. Between 2015 and 2019, there was also a 27% increase among American high school boys in the share that identified as nonheterosexuals (from 4.5 to 5.7 percent). The same estimate among girls was even larger: a 46% increase (from 12.2 to 17.8 percent).<sup>15</sup> But the pace of growth in adolescent transgender self-identifications far eclipses the climb in rates of nonheterosexual orientations.

<sup>&</sup>lt;sup>12</sup> Kidd, K. M., Sequeira, G. M., Douglas, C., Paglisotti, T., Inwards-Breland, D. J., Miller, E., & Coulter, R. W. S. (2021). Prevalence of gender-diverse youth in an urban school district. *Pediatrics*, 147(6): e2020049823

<sup>&</sup>lt;sup>13</sup> Tavistock & Portman NHS Foundation Trust. (2019, 28 June). Referrals to the gender identity development service (GIDS) level-off in 2018-19. https://tavistockandportman.nhs.uk/about-us/news/stories/referrals-gender-identity-development-service-gids-level-2018-19/

<sup>&</sup>lt;sup>14</sup> Sorbara, J. C., Chiniara, L. N., Thompson, S., & Palmert, M. R. (2020). Mental health and timing of gender-affirming care. *Pediatrics*, *146*(4) e20193600. https://doi.org/10.1542/peds.2019-3600

<sup>&</sup>lt;sup>15</sup> Rapoport, E., Athanasian, C. E., & Adesman, A. (2021). Prevalence of nonheterosexual identity and same-sex sexual contact among high school students in the US From 2015 to 2019. *JAMA pediatrics*. doi:10.1001/jamapediatrics.2021.1109

22. Dr. Turban, in his supplemental declaration submitted during the preliminary injunction phase of this litigation, balks at any use of the term "social contagion" to describe the rapid surge in transgender identity. "In contrast," he writes, "transgender identity has been shown to be primarily influenced by innate biological factors." While I have no reason to contest the presence of biological factors in the etiology of transgender identity, it strains the imagination to suggest there is nothing "social" going on here, especially since we are talking about something that once affected less than 1 in 10,000 children, according to DSM-5 prevalence rates.<sup>16</sup>

23. Intersex cases, often used to call attention to transgender cases, are distinctive and occur in roughly one in every 5,000 births, an estimate consonant across three continents.<sup>17</sup> They are considered a type of disorder of sex development (DSD), and are not, as has sometimes been suggested, evidence of a "spectrum" of biological sex.

24. The plaintiffs' preliminary-injunction filings in this litigation described gender identity as both "innate" and "immutable," as well as "durable and cannot be altered through medical intervention," citing Dr. Adkins's declaration as its sole support. Although Adkins appears to have characterized gender identity using the term "innate" before,<sup>18</sup> the report she submitted during the preliminary-injunction stage makes no use of that term (nor of "immutable"), instead describing a person's gender identity merely as "fixed." It is fair to say the terminology,

<sup>17</sup> Kim, K. S., & Kim, J. (2012). Disorders of sex development. *Korean journal of urology*, *53*(1), 1-8. doi: 10.4111/kju.2012.53.1.1; Thyen, U., Lanz, K., Holterhus, P. M., & Hiort, O. (2006). Epidemiology and initial management of ambiguous genitalia at birth in Germany. *Hormone research in paediatrics*, *66*(4), 195-203. https://doi.org/10.1159/000094782; Sax, L. (2002). How common is intersex? A response to Anne Fausto-Sterling. *Journal of sex research*, *39*(3), 174-178. https://doi.org/10.1080/00224490209552139

<sup>18</sup> Adkins, D., (2016). Declaration, U.S. District Court, Middle District of North Carolina, Case 1:16-cv-oo236-TDS-JEP https://www.aclu.org/sites/default/files/field\_document/AdkinsDecl.pdf.

<sup>&</sup>lt;sup>16</sup> Tavistock & Portman NHS Foundation Trust (2021, June 3). Reply to Freedom of Information request for Charing Cross and GIC waiting and intake figures made by Harry Burns. https://www.whatdotheyknow.com/request/re-quest\_for\_charing\_cross\_gic\_wa?nocache=incoming-1805111#incoming-1805111

together with the science of the origins and course of gender identity, remain in flux. Indeed, this fact is acknowledged. The *Standards of Care* (version 7) published by the World Professional Association for Transgender Health (WPATH), for example, recognizes that "[t]erminology in the area of health care for transsexual, transgender, and gender-nonconforming people is rapidly evolving; new terms are being introduced, and the definitions of existing terms are changing."<sup>19</sup> The Endocrine Society's guidelines likewise acknowledge that "[t]erminology and its use vary and continue to evolve."<sup>20</sup>

25. Categorical claims about the immutability of sexual orientation have fared well in recent legal decisions, as University of Utah psychology professor Lisa Diamond observed.<sup>21</sup> To invoke "immutability" in the absence of a genuine consensus on the etiology of gender dysphoria—especially amid the sudden surge in cases and its sex ratio disparity reversal—suggests political calculation is at work. There is little to suggest that experts in this domain are operating without particular interests.

26. Neither adolescent-onset gender dysphoria nor the rise in nonbinary self-identities fit the narrative that gender identity is "immutable" or "durable." Rather, it suggests profound fluidity. What is durable or immutable about a "nonbinary" gender self-identity? Dr. Adkins, on the other hand, maintains that a person's gender identity "is fixed, is not subject to voluntary control, cannot be voluntarily changed, and is not undermined or altered by the existence of other sex-related characteristics that do not align with it," an assertion that seems out of step with the

<sup>&</sup>lt;sup>19</sup> World Professional Association for Transgender Health. (2012). *Standards of care for the health of transsexual,transgender, and gender nonconforming people* [7th Version]. https://www.wpath.org/publications/soc The quote is from p. 95.

<sup>&</sup>lt;sup>20</sup> Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Hassan Murad, M., Rosenthal, S. M., Safer, J. D., Tangpricha, V., & T'Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: An endocrine society clinical practice guideline. *The journal of clinical endocrinology & metabolism*, 102, 11, 3869–3903, p. 3874. https://doi.org/10.1210/jc.2017-01658

<sup>&</sup>lt;sup>21</sup> Diamond, L. M. & Rosky, C. J. (2016). Scrutinizing "immutability": Research on sexual orientation and its role in legal advocacy for the rights of sexual minorities rights? *Journal of Sex Research*, *53*, 363-391.

American Academy of Pediatrics (AAP) policy statement on the care and support for transgender and gender diverse children and adolescents, which holds that the self-recognition of gender identity "develops over time" and yet "[f]or some people, gender identity can be fluid, shifting in different contexts."<sup>22</sup> Meanwhile, Columbia University sociologist Tey Meadow reports in her article on the production of legal gender classifications: "Many courts look to medical definitions of sex.... yet there is no consensus about when gender change actually happens."<sup>23</sup>

27. Accounting for the surge in adolescent transgender cases has been very challenging for two reasons. First, it was an unexpected development. Ten years ago, there was simply no clinical literature on females ages 11 to 21 suffering from gender dysphoria.<sup>24</sup> Second, early onset gender dysphoria has been documented for years, but primarily in natal boys—and those typically lacking in extensive comorbidity (that is, co-occurring psychological problems such as anxiety or depression).

28. The new surge in adolescent transgender cases cannot be simplistically attributed to "pent-up demand"—that is, by suggesting that gender dysphoria and transgender self-identification exhibited longstanding manifestations that simply went undiagnosed or were entirely stigmatized. If that were true, we should be witnessing a parallel and documentable rise in gender dysphoria among, say, middle-aged adults. But no such rise has been observed. As recently as 2020, a Pew research study noted that only 0.2 percent of Gen X respondents (i.e., 40-55-year-olds) identify as transgender.<sup>25</sup> Dr. Turban, in his supplemental declaration, implies that were it

<sup>&</sup>lt;sup>22</sup> Rafferty, J. & Committee on Psychosocial Aspects of Child and Family Health.(2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents, 142 *Pediatrics* 4 e20182162; doi: https://doi.org/10.1542/peds.2018-2162.

<sup>&</sup>lt;sup>23</sup> Meadow, T. (2010). "A rose is a rose": On producing legal gender classifications, *Gender & society* 24(6), 814–837, p. 824. https://doi.org/10.1177/0891243210385918

 <sup>&</sup>lt;sup>24</sup> Shrier, A. (2020). *Irreversible damage: The transgender craze seducing our daughters*. Regnery Publishing.
 <sup>25</sup> Jones, J. M. (2021, February 24) LGBT identification rises to 5.6% in latest U.S. estimate. *Gallup*. https://news.gallup.com/poll/329708/lgbt-identification-rises-latest-estimate.aspx

not for longstanding stigma—now diminishing, he admits—a similar surge in transgender selfidentification would have materialized among adults as well (page 34). This is unlikely.

29. Second, the surge makes for a very sensitive research environment, all the more so given the rapid clinical shift from a "watchful waiting" approach to adolescent gender dysphoria to an "affirmative care" approach in which a swifter move to puberty blockers and cross-sex hormones is suggested. Among "affirmative care" backers, there is a further division that has materialized—between those who would press for psychological evaluations and monitoring, and a more aggressively affirming model characterized by a "trust the patient" (and treat promptly), with few questions asked. This ongoing shift appears to constitute much of the political struggle being witnessed over adolescent gender dysphoria, and it makes research efforts in this domain difficult to monitor, since research conclusions based on data about one approach (watchful waiting) are being used to foster endorsements of altogether different approach ("standard" as well as aggressive affirmative care).

30. In an attempt to understand this surge, Brown University public health scientist Lisa Littman explored possible "cluster outbreaks" of what she identified as "rapid onset gender dysphoria" (ROGD) among adolescents, meaning that the dysphoria happens suddenly either during or after puberty among teenagers who displayed no indications of such tendency in their childhood.<sup>26</sup> (Others identify this as "adolescent-onset" gender dysphoria.<sup>27</sup>) The study, which inquired of parents of teens, noted that ROGD tended to occur within groups of friends: more

<sup>&</sup>lt;sup>26</sup> Littman, L. (2018). Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports. *Plos one*, *13*(8), e0202330. https://doi.org/10.1371/journal.pone.0202330

<sup>&</sup>lt;sup>27</sup> de Vries, A. L. (2020). Challenges in timing puberty suppression for gender-nonconforming adolescents. *Pediatrics*, *146*(4). doi: https://doi.org/10.1542/peds.2020-010611; Sevlever, M., & Meyer-Bahlburg, H. F. (2019). Lateonset transgender identity development of adolescents in psychotherapy for mood and anxiety problems: Approach to assessment and treatment. *Archives of sexual behavior*, *48*(7), 1993-2001. https://doi.org/10.1007/s10508-018-1362-9

than one-third of the friendship groups in the study witnessed half or more of the group identifying as transgender in a similar time frame. This, Littman noted, is about 70 times higher than the expected (0.7%) prevalence rate. Only 13 percent of parents noted no evidence at all of a "social influence."

31. Parents of the adolescents in the study tended to describe "a process of immersion in social media, such as 'binge-watching' YouTube transition videos and excessive use of Tumblr, immediately preceding their child becoming gender dysphoric."<sup>28</sup> Littman also observed that 22 percent of adolescents in her study "had been exposed to online advice about what to say to doctors to get hormones." Moreover, "the vast majority of parents were reasonably sure or positive that their child misrepresented their history to their doctor or therapist."<sup>29</sup> A recent study about the surge in adolescent demand for gender dysphoria treatment in the UK and four Nordic countries similarly noted a potential role of social and media influences.<sup>30</sup>

32. Studies like Littman's are exploratory, however, and not designed to discern causation. Professor Littman did not draw hard conclusions from her survey, which was nonrepresentative and relied on an opt-in sampling strategy that is very common in the study of transgender patients. Rather, she documented the associations between what she describes as the phenomenon of ROGD and certain social and psychiatric conditions.

33. An outcry on social media emerged after the Littman study was published. The journal's editors pledged to "seek further expert assessment on the study's methodology and analyses." That is, they re-reviewed the study, a very unusual move in the sciences. This post-

<sup>&</sup>lt;sup>28</sup> Littman (2018), p. 3.

<sup>&</sup>lt;sup>29</sup> Littman (2018), p. 36.

<sup>&</sup>lt;sup>30</sup> Kaltiala, R., Bergman, H., Carmichael, P., de Graaf, N. M., Egebjerg Rischel, K., Frisén, L., Schorkopf, M., Suomalainen, L. & Waehre, A. (2020). Time trends in referrals to child and adolescent gender identity services: A study in four Nordic countries and in the UK. *Nordic journal of psychiatry*, *74*(1), 40-44. doi: 10.1080/08039488.2019.1667429

publication review resulted in no substantive changes to the study's results, suggesting the motivation was rooted in political rather than scientific concerns. This example highlights the challenging atmosphere for documenting, understanding, and attempting to explain what is going on.

34. WPATH mildly criticizes Littman's study in their draft version 8 of their Standards of Care—which became available for preview and comment in December 2021 after 10 years of Version 7. While WPATH claimed Littman's study "contained significant methodological challenges which must be considered as context for the findings," it nevertheless admits much of what Littman revealed, noting that "social influence on gender is salient" and that "by clinical observation an increasing number of youth are coming to self-identify as gender diverse in later adolescence."<sup>31</sup>

35. Dr. Turban's disregard for Professor Littman's inquiry about the social cues of adolescent-onset gender dysphoria is obvious: her work is dismissed because "the scientific current understanding...does not focus on 'social contagion." Perhaps the problem is less with Littman than with purveyors of a "science" that is more interested in safeguarding particular answers than it is with asking questions.

36. On page 7 of his report, Dr. Turban favorably cites a study published in a 2015 issue of *Psychoendocrinology* that measured Child Behavior Checklist scores based on parental self-report. Thus, Dr. Turban, whose previous declaration (on page 32) criticizes Littman's reliance on a parental questionnaire, has no trouble with parental self-reports as a measurement technique so long as they support his position.

<sup>&</sup>lt;sup>31</sup> World Professional Association for Transgender Health. (2021). *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People* [DRAFT 8th Version]. https://www.wpath.org/publica-tions/sochttps://www.wpath.org/media/cms/Documents/SOC% 20v8/SOC8% 20Chapters% 20for% 20Public% 20Comment/Letter% 20eBlast% 20-% 20SOC8% 20Public% 20Comment% 20Period% 20December% 202021% 20FINAL.pdf?\_t=1638464778

37. Dr. Turban seems far less curious about understanding surging gender dysphoria and the sex-ratio reversal than one would expect a purported expert about transgender identity to be. This matters. Professor Littman's exploratory research was lambasted because it introduced the possibility that transgender identity is—at an unknown rate—not innate but developmentally responsive to social cues for an unknown but significant number of cases. If Littman is right, it means greater attention to the diverse origins of gender dysphoria is in order, with likely ramifications for treatment options. But her research is disparaged because this is not in accord with claims of those advocating for aggressively "affirmative" treatment. This isn't how science is supposed to work.

38. Dr. Turban's own attempt (beginning on page 33) to explain the surge in gender dysphoria and self-identified transgender cases is odd and under-documented, suggesting that he too—like most researchers in this domain—gives this important matter little thought. He claims that the "increase in referrals" is due to several causes. Among these, Dr. Turban suggests that "parents in the past may have had limited literacy regarding gender diversity," something that has been ameliorated today. In other words, he claims that in the past parents neither had the language nor the interest in aiding their children to live as their authentic selves, except perhaps in "extreme types" of gender dysphoria. But today, he claims, "owing to media attention and the internet, it is easier to access information…making the threshold lower to search for help" (page 34). Dr. Turban thus appeals to the effects of media attention and the internet while simultaneously maintaining that Professor Littman's interest in understanding the role of "social" forces and "transgender-related content" on the internet "is a fringe view not supported by evidence" (page 32). This is an obvious double standard.

39. Finally, Dr. Turban attempts to explain why clinics are "seeing more birth-assigned females than males in recent years"—which is a rather mild way of describing what is not a mere uptick but a radical reversal and surge, as I previously described. Dr. Turban begins with the observation that "tomboys" were much more likely to be "accepted in society, whereas feminine boys are ridiculed." Perhaps so. But then he speculates that this phenomenon "likely led to more transgender males being satisfied with pushing gender expression toward more male [*sic*] without seeking support from a gender clinic…" (page 35). In asserting this, Dr. Turban categorically and anachronistically redefines tomboys as transgender males who simply had no access to a gender clinic. Where are they today? Still hidden—having suppressed their true identity? This explanation beggars belief. Perhaps instead, yesterday's tomboys are largely content to have avoided medical dependency, living without health implications or impairments from lifelong treatments that were, at the time, unavailable. Their gender non-conformity fostered their own resilience.

40. Dr. Turban claims that "sex ratios that favor birth-assigned females" among the population of transgender patients is not unprecedented. While I can appreciate the subsequent international citations and consideration of international data, the sample sizes are simply too small (24 total cases of "female-to-male transsexuals" who "came from different parts of Poland" over four years in the study Dr. Turban cites<sup>32</sup>) to suggest anything about the sex ratio of transgender Poles in the 1970s. The rate of the much larger number seeking "sexologic" treatment from which this small pool is drawn, however, revealed the standard male-dominated pattern.

<sup>&</sup>lt;sup>32</sup> Godlewski, J. (1988). Transsexualism and anatomic sex ratio reversal in Poland. *Archives of sexual behavior*, *17*(6), 547-548.

41. It is also ironic for Dr. Turban to have criticized Littman's use of an opt-in, recruited "anonymous online survey," when he has published extensively—including citations in his previous declaration—from the 2015 United States Transgender Study. The USTS recruited networked, self-identified transgender or nonbinary participants by advertising their survey among "active transgender, LGBTQ, and allied organizations."<sup>33</sup> Now, there's nothing inherently wrong with collecting data using a nonrandom approach like this, and it is common in this domain.<sup>34</sup> The problem, in this case, is when the conclusions based on such data are delivered to the reader in a way that suggests they are consonant with everyone who has identified as transgender or experienced gender identity disorder or dysphoria. Hence, to impugn Littman's strategy is to impugn Dr. Turban's own extensive use of the same method of collecting data from "some anonymous people recruited from the Internet..." (page 32).<sup>35</sup>

42. That Dr. Turban should commend the Almazan and Keuroghlian study (on page 25 of his initial declaration) is another irony, since it too is based on the USTS. Talk of a "control group" in the Almazan and Keuroghlian study connotes an experimental design, a randomi-

<sup>&</sup>lt;sup>33</sup> James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

<sup>&</sup>lt;sup>34</sup> Littman, L. (2020). The use of methodologies in Littman (2018) is consistent with the use of methodologies in other studies contributing to the field of gender dysphoria research: Response to Restar (2019). *Archives of sexual behavior*, 49(1), 67-77. https://doi.org/10.1007/s10508-020-01631-z

<sup>&</sup>lt;sup>35</sup> See, for example: Turban, J. L., King, D., Li, J. J., & Keuroghlian, A. S. (2021). Timing of social transition for transgender and gender diverse youth, K-12 harassment, and adult mental health outcomes. *Journal of adolescent health*. https://doi.org/10.1016/j.jadohealth.2021.06.001; Turban, J. L., Loo, S. S., Almazan, A. N., & Keuroghlian, A. S. (2021). Factors leading to "detransition" among transgender and gender diverse people in the United States: A mixed-methods analysis. *LGBT health*, 8(4), 273-280. https://doi.org/10.1089/lgbt.2020.0437; Turban, J. L., King, D., Carswell, J. M., & Keuroghlian, A. S. (2020). Pubertal suppression for transgender youth and risk of suicidal ideation. *Pediatrics*, *145*(2), e20191725. https://doi.org/10.1542/peds.2019-1725; Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry*, *77*(1), 68-76. doi:10.1001/jamapsychiatry.2019.2285; Turban, J. L., King, D., Reisner, S. L., & Keuroghlian, A. S. (2019). Psychological attempts to change a person's gender identity from transgender to cisgender: Estimated prevalence across US States, 2015. *American journal of public health*, *109*(10), 1452-1454. https://doi.org/10.2105/AJPH.2019.305237

zation process, and/or some sort of multi-wave analysis in order to establish an obvious time order to events. The USTS and, by extension, the Almazan and Keuroghlian study, offers none of these methodological strengths and characteristics.

43. Moreover, the USTS creates the impression that the data collection effort was a population-based random sample, like the US Census. It is not. Indeed, the USTS yields information about the transgender population that is decidedly different from that which can be learned from the 2014 CDC's Behavioral Risk Factor Surveillance System (BRFSS) data, which is the product of a probability sample from 19 states (and Guam).<sup>36</sup> When the two are compared, stark differences are revealed, further suggesting that the empirical "truth" about the transgender population is simply difficult to discern—a fact of life in this domain of research. For example:

- a. Unemployment: 15% in the USTS vs. 8% in the BRFSS
- b. Sexual orientation: 47% of male-to-female identify as LGB in the USTS vs. 15% in the BRFSS; 24% of female-to-male identify as LGB in the USTS vs. 10% in the BRFSS
- c. Currently married: 18% in the USTS vs. 50% in the BRFSS
- d. Child in the household under 18: 14% in the USTS vs. 32% in the BRFSS
- e. General health rated as fair or poor: 22% in the USTS vs. 26% in the BRFSS

44. There are two conclusions to draw from this comparison of the USTS and BRFSS samples. First, opt-in samples like the USTS are for understanding processes and possibilities, not populations (as in the BRFSS). Second, Littman's use of an opt-in sample was hardly inappropriate. She sought to understand a process (that of rapid-onset gender dysphoria, or as others

<sup>&</sup>lt;sup>36</sup> Meyer, I. H., Brown, T. N., Herman, J. L., Reisner, S. L., & Bockting, W. O. (2017). Demographic characteristics and health status of transgender adults in select US regions: Behavioral Risk Factor Surveillance System, 2014. *American journal of public health*, *107*(4), 582-589. https://doi.org/10.2105/AJPH.2016.303648

call it, late-onset or adolescent-onset gender dysphoria), one that curiously few scholars seem interested in understanding.

45. The general surge—and particular reversal of the anticipated sex ratio—in cases of adolescent gender dysphoria (commonly with comorbid conditions) has not simply escaped scholars and clinicians. Many seem actively hesitant to explore the matter, and quick to criticize those researchers who do. In most other domains of medicine, there is a rush to understand new developments. Professional, political, and cultural interests appear to be at stake here, putting the long-term flourishing of patients at risk.

# III. STUDY CONCLUSIONS OF TRANSGENDER TREATMENT EFFECTS ARE DEMONSTRABLY INADEQUATE.

46. Despite ample scientific resources—adequate funding, the interest of professional organizations, and competent researchers—the science of gender identity (and transgender outcomes) is often characterized by modest evidence followed by overreaching conclusions. Any talk of "consensus" or of enduring "standards" are baseless assertions. It is more accurate to say the field is rapidly evolving.

47. It remains the fact that little is understood about the long-term physical effects of puberty blockers and cross-sex hormones, especially when they are administered during those years that are critical for biological and brain development.<sup>37</sup> This is in part a function of (1) how few minors experienced these treatments in the past—a small pool to study, and (2) the fact that the surge in such treatments remains less than a decade old. In other words, too few and too new.

<sup>&</sup>lt;sup>37</sup> Wren, B. (2014). Thinking postmodern and practising in the enlightenment: Managing uncertainty in the treatment of children and adolescents. *Feminism & psychology*, 24(2), 271–291, p. 287. https://doi.org/10.1177/0959353514526223; Heneghan, C., & Jefferson, T. (2019, February 25). *BMJ EBM spotlight*. Gender-affirming hormone in children and adolescents. https://blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-in-children-and-adolescents-evidence-review/

48. Adolescence is also a crucial period of social development. Artificially holding a child in a pre-pubescent state for several years while his or her peers navigate the social milestones and minefields of adolescence is likely to have at least some "subtle negative psychosocial and self-confidence effects."<sup>38</sup> Indeed, the American Academy of Pediatrics recognizes that "[d]elaying puberty beyond one's peers can also be stressful and can lead to lower self-esteem and increased risk taking."<sup>39</sup> And the Endocrine Society's guidelines recognize "the sense of social isolation from having the timing of puberty be so out of sync with peers."<sup>40</sup>

49. But what the research does not tell us is the isolated effect of puberty blockers (and similarly, of subsequent cross-sex hormones), since today gender dysphoria infrequently appears apart from other (possibly confounding) psychiatric conditions and the experience of traumas.<sup>41</sup>

50. Seven endocrinologists and psychologists recently discussed the clinical characteristics of 79 children presenting to a new gender clinic in Australia, noting a high number of conflicted family situations and documented trauma.<sup>42</sup> Only five percent of their sample was believed to exhibit "healthy" levels of functioning.

51. Despite this, many of the new clinic's patients and their families openly pressed the clinicians to begin medical (hormonal, etc.) treatments, believing that method was the only solution and "that their distress would be completely alleviated if they pursued the pathway of

<sup>&</sup>lt;sup>38</sup> Levine, S. (2020) Declaration, U.S. Circuit Court, Dane County, Wisconsin, Case No.: 20-CV- 454, p.41.

<sup>&</sup>lt;sup>39</sup> Rafferty, J. & Committee on Psychosocial Aspects of Child and Family Health.(2018), p. 5.

<sup>&</sup>lt;sup>40</sup> Hembree et al. (2017), p. 3885.

<sup>&</sup>lt;sup>41</sup> E.g. In Littman (2018), 62 percent of parents reported their child had been previously diagnosed with a psychiatric disorder, while 48 percent reported a traumatic or stressful event occurring prior to the onset of their child's gender dysphoria, p. 13.

<sup>&</sup>lt;sup>42</sup> Kozlowska, K., McClure, G., Chudleigh, C., Maguire, A. M., Gessler, D., Scher, S., & Ambler, G. R. (2021). Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*, 1(1), 70-95. https://doi.org/10.1177/26344041211010777

medical treatment." This frustrated the seven scholar-clinicians: "Lost were our efforts to highlight the many different pathways in which gender variation could be expressed, to explain potential adverse effects of medical treatment, to explore issues pertaining to future fertility and child rearing, and to highlight the importance of ongoing psychotherapy." The authors attributed this now-predictable pattern to information that patients received from (1) their peers, (2) previously encountered health workers, and (3) the internet. Many children, they noted, arrived with "strongly entrenched beliefs and with no interest in further exploring their medical, psychological, social, or familial situation." The study's authors also asserted that many of the patients "did not have the cognitive, psychological, or emotional capacity to understand the decisions they were making."<sup>43</sup>

52. These forces complicate treatment of gender dysphoria. A market increasingly characterized by patient demand for puberty blockers and, later, cross-sex hormones does not make for an atmosphere conducive to addressing pertinent co-occurring diagnoses. But this is exactly what is now developing in the "affirmative care" approach—an emerging split between those clinicians who want to (continue to) include psychological evaluations, counseling, and observation prior to hormonal and surgical treatments, and those clinicians—including researchers like Dr. Johanna Olson-Kennedy—who wish to skip those first steps and instead endorse (earlier) procedures.

53. As psychotherapist Robert Withers observes, "failure to address relevant psychological issues can result in trans people making unnecessary, permanent changes to their bodies, without adequate scientific justification for doing so."<sup>44</sup> Withers additionally notes that "[m]any

<sup>&</sup>lt;sup>43</sup> Kozlowska et al. (2021). All quotes are from p. 15.

<sup>&</sup>lt;sup>44</sup> Withers, R. (2020) Transgender medicalization and the attempt to evade psychological distress. *Journal of analytical psychology*, 65: 865–889, p. 865. https://doi.org/10.1111/1468-5922.12641

of today's young people have also made 'gender affirming' medical treatment their goal. Unfortunately, the evidence base supporting the efficacy of such treatment is extremely poor."<sup>45</sup>

54. In his previous declaration Dr. Turban offered the unsubstantiated claim that "[a]ll existing published data...points to the fact that gender-affirming medical interventions improve mental health for transgender adolescents." Such a categorical claim is simply untrue.

55. As an example of this erroneous categorical claim, Dr. Turban immediately highlights on the very same page an example of how "research has shown that sexual functioning (along with romantic development) improves" after gender-affirming medical interventions on adolescents.<sup>46</sup> But the study he cites reveals no such thing. "Improvement" cannot even be measured here, since the study was a cross-sectional one, not longitudinal. The study, rather, asked transgender youth a series of questions about sexual and romantic experiences and satisfaction (at a mean age of 14, no less). The results revealed that, in comparison to the general population, transgender youth displayed less sexual and romantic experience. It is an odd study to reference in support of his (ironic) claim about state's experts' purported mischaracterizations.

56. Large, longitudinal data collection efforts on the psychological health effects of transgender medicine remain rare but do exist. The Swedish Total Population Register, a massive longitudinal survey effort that collected information from over 9.7 million Swedes, is an example. A study based on this data appeared in 2020 in the *American Journal of Psychiatry*, and purported to constitute high-quality evidence in favor of medical transition for gender dysphoric patients.<sup>47</sup> Its authors tracked dysphoric respondents over time and assessed their subsequent use

<sup>&</sup>lt;sup>45</sup> Withers (2020), p. 869.

<sup>&</sup>lt;sup>46</sup> Bungener, S. L., Steensma, T. D., Cohen-Kettenis, P. T., & De Vries, A. L. (2017). Sexual and romantic experiences of transgender youth before gender-affirmative treatment. *Pediatrics*, 139(3) e20162283. https://doi.org/10.1542/peds.2016-2283

<sup>&</sup>lt;sup>47</sup> Bränström, R., & Pachankis, J. E. (2020). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: a total population study. *American journal of psychiatry*, *177*(8), 727-734. https://doi.org/10.1176/appi.ajp.2019.19010080

of mental health treatment (for a mood or anxiety disorder), as well as other related measures (such as hospitalization after a suicide attempt). There was no evidence that initiating hormone treatment paid benefits in reduced subsequent use of mental health treatment, but the authors concluded that "gender-affirming" surgery is associated with reduced demand for subsequent mental health treatment in a sample of persons diagnosed with "gender incongruence."

57. However, a cursory reading of the study itself tells a far less optimistic story than the authors' own confident interpretations of the post-surgical data. From the available published data, I was able to calculate the "Number Needed to Treat," or NNT, which is a measure of clinical impact. It helps relate the actual size of the effect of the treatment back to the realities of clinical practice to aid physicians in decisions about whether a particular treatment is "worth it."<sup>48</sup> A high NNT accompanied by significant risk (in the treatment) is considered high-risk, low payoff. On the other hand, a high NNT accompanied by modest risk (such as prescribing a daily statin pill to reduce risk of a subsequent heart attack) is considered low risk, low payoff. In this study, the NNT appears to be a staggering 49, meaning the beneficial effect of transgender surgery (or more commonly, a series of surgeries) is so small that a clinic may have to perform 49 gender-affirming surgeries before they could expect to witness one additional post-surgical patient's reduction in subsequent mental health assistance. If no other treatment was available, or if the treatment was non-invasive and the hazards were insignificant, clinics might consider surgery a low-risk but low-payoff approach. But even the most common surgeries here (e.g., bi-

<sup>&</sup>lt;sup>48</sup> Citrome, L. (2014). Quantifying clinical relevance. *Innovations in clinical neuroscience*, 11(5-6), 26–30.

lateral mastectomy) are considered major surgeries—and particular ones are exceptionally challenging, with elevated likelihood of suffering a complication.<sup>49</sup> Conducting surgery on 49 patients in order to secure one patient who modestly benefits in slightly less psychological services? It ought to give physicians considerable pause, but in an industry increasing characterized by demand-driven care of patients, it does not.

58. The journal received numerous letters pointing out that the study's analysis was flawed and its conclusions unsupported by the data. Almost one year later, the *American Journal of Psychiatry* published seven letters of critique, an editorial note on the subsequent statistical review those critiques prompted, and the resulting correction that nullified the study's claim of a post-surgical mental health benefit. The correction curbed what conclusions the authors had originally made—that "this study provides timely support for policies that ensure coverage of gender-affirming treatments."<sup>50</sup> This example is indicative of a wider trend of "looking" for statistical significance, however weak, to support claims that are consonant with the wishes of transgender medical practitioners.

59. The correction the Bränström and Pachankis study merited is far more significant than the "correction" (or more accurately, clarification) of Professor Littman's original study, of which Dr. Turban speaks (on page 31 of his supplemental declaration during the preliminary injunction phase). Simply because Littman's is an opt-in sample is no cause for implying it is

 <sup>&</sup>lt;sup>49</sup> A recent study revealed that while just over 10 percent of a group of 1,212 adult "transmasculine" patients elected to undergo genital reconstruction surgery, those 129 patients reported 281 complications—more than two per patient, on average—requiring 142 "revisions." The three most common complications? Urethral fistulas or strictures, and worsened mental health. The only documentable benefit? A surge in their "genital self-image." See Robinson, I. S., Blasdel, G., Cohen, O., Zhao, L. C., & Bluebond-Langner, R. (2021). Surgical outcomes following gender affirming penile reconstruction: Patient-reported outcomes from a multi-center, international survey of 129 transmasculine patients. *The journal of sexual medicine*, *18*(4), 800-811. https://doi.org/10.1016/j.jsxm.2021.01.183
 <sup>50</sup> Bränström, R. & Pachankis, J. E. (2020) Correction to Bränström and Pachankis. *American journal of psychiatry* 177(8): 734. https://doi.org/10.1176/appi.ajp.2020.1778correction

without value, or that—unlike the Bränström and Pachankis study—its conclusions are incommensurate with its data. Professor Littman's study was simply demonstrative—to highlight a surge in adolescent (or late onset) gender dysphoria cases. Four years later, her results are no longer surprising.

60. While Dr. Turban is correct to note that the Bränström and Pachankis study concerns adults rather than minors, my discussion of it is intended to highlight the unsettledness of the science here, and to suggest that the line between activists and academics is a rather thin one, provoking contests over the meaning of a study's results. Given that it is arguably the largest longitudinal dataset capable of tracking the long-term effects of hormones and surgery, its lack of positive findings (following the editor's requested correction) has ramifications for the treatment of adult and adolescent patients alike.

61. There are some cracks forming in the coerced consensus about aggressively treating youthful gender dysphoria. In just the past two years, three countries' national gender medicine councils have commissioned focused studies on the efficacy of the "affirmative" approach to treating minors. These in-depth reviews by Finland, Sweden, and the UK's National Institute for Health and Care Excellence (NICE) in Britain have all concluded that claims of benefit for medical gender interventions in children are based on "low quality evidence."<sup>51</sup>

62. Sweden's review of the evidence base and ethics considerations found "knowledge gaps and uncertain knowledge" to be a "central theme."<sup>52</sup> A summary of their review of the literature reported the following: "No studies explaining the increase of children and

<sup>&</sup>lt;sup>51</sup> Society for Evidence Based Gender Medicine. (2021, May 5). Sweden's Karolinska ends all use of puberty blockers and cross-sex hormones for minors outside of clinical studies. https://segm.org/Sweden ends use of Dutch protocol

<sup>&</sup>lt;sup>52</sup> Swedish National Council on Medical Ethics. (2019, April 26). Letter to the Ministry of Health and Social Affairs re: treatment of gender dysphoria among children and adolescents (unofficial translation), p.2. https://smer.se/wp-content/uploads/2019/04/Skrivelse-konsdysfori-eng-%C3%B6vers%C3%A4ttning.pdf

adolescents seeking [treatment] for gender dysphoria were identified. The literature on management and long-term effects in children and adolescents is sparse, particularly regarding gender affirming surgery. All identified studies are observational, and few are controlled or followed-up over time."<sup>53</sup> They conclude by observing that "scientific activity in the field seems high," meaning extensive, but that a "large part of the literature that was considered relevant" was only published after 2017.

63. The UK's Royal College of General Practitioners issued a report in mid-2019 asserting that "[t]he significant lack of evidence for treatments and interventions which may be offered to people with dysphoria is a major issue facing this area of healthcare."<sup>54</sup> After the report highlights characteristics of the "affirmative" approach, it notes "a significant lack of robust, comprehensive evidence around the outcomes, side effects and unintended consequences of such treatments for people with gender dysphoria, particularly children and young people, which prevents (general practitioners) from helping patients and their families in making an informed decision."

64. The UK NICE pair of reports each concluded that invasive treatment of youth doesn't result in a confident determination of demonstrable success. Those studies, one report notes, "that found differences in outcomes could represent changes that are either of questionable clinical value, or the studies themselves are not reliable and changes could be due to confound-ing, bias, or chance." The studies "all lack appropriate controls." Moreover, the claims of "clin-

<sup>&</sup>lt;sup>53</sup> Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU). (2019). Gender dysphoria in children and adolescents: An overview of the literature. *SBU*. Report No. 307: SBU 2019/427. https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/report 307

<sup>&</sup>lt;sup>54</sup> Royal College of General Practitioners. (2019). The role of the GP in caring for gender-questioning and transgender patients, RCGP position statement. https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-pol-icy/2019/RCGP-position-statement-providing-care-for-gender-transgender-patients-june-2019.ashx?la=en

ical effectiveness, safety, and cost-effectiveness" of such treatments clearly are not substantiated.<sup>55</sup> Hence, claims of benefit for medical gender interventions in children are based, the reports observe, on "low quality evidence."<sup>56</sup> These assessments offer reasons to be far more cautious about treating underage persons in such a way that permanently alters bodies as a response to problems of the mind.

65. Beginning on page 41 of his previous supplemental declaration, Dr. Turban makes much of the fact that the reports from the U.K., Sweden, and Finland "were not peer-re-viewed" on his way to suggesting that each report "omits key studies," and/or were "poorly re-searched," before asserting that he would not recommend relying on their conclusions. A similar claim characterizes his remarks about the Swedish report: "No studies explaining the increase of children and adolescents seeking [treatment] for gender dysphoria were identified.... All identified studies are observational, and few are controlled or followed-up over time."<sup>57</sup> It is plausible that they omitted particular studies, including Dr. Turban's own 2020 USTS-based *Pediatrics* study not as an oversight but intentionally, due to the NICE reports' elevated quality standards.

66. A cavalier manner characterizes how Dr. Turban brushes off the conclusions of each of these European medical decision-making bodies, as if admitting any weakness undergirding the "consensus" of American professional societies is potentially fatal to the "aggressive

 <sup>&</sup>lt;sup>55</sup> National Institute for Health and Care Excellence (NICE). (2021). Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria, p.13. https://www.evidence.nhs.uk/document?id=2334888&returnUrl=search%3fq%3dtransgender%26s%3dDate; National Institute for Health and Care Excellence (NICE). (2021). Evidence review: Gender-affirming hormones for children and adolescents with gender dysphoria. https://www.evidence.nhs.uk/document?id=2334889&returnUrl=search%3Fq%3Dgender%2Bdysphoria
 <sup>56</sup> Society for Evidence Based Gender Medicine. (2021, May 5). Sweden's Karolinska ends all use of puberty blockers and cross-sex hormones for minors outside of clinical studies. https://segm.org/Sweden\_ends\_use\_of\_Dutch\_protocol

<sup>&</sup>lt;sup>57</sup> Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU). (2019). Gender dysphoria in children and adolescents: An overview of the literature. *SBU*. Report No. 307: SBU 2019/427. https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/

affirmative" treatment strategy he represents. Turban simply claims that these too are "outlier views" not supported by the list of professional organizations—which do not even agree among themselves on definitions, terms, and issues such as minors' ability to consent. There's no trust in science here—only in patron professional associations and their client scholars.

67. Referring to the UK, Swedish, and Finnish reports, Dr. Turban previously concluded that, together with the other (state's) experts, I "have inflated the importance of these reports..." (page 45). I see nothing to substantiate this. Rather, my modest original intention is to highlight how, despite advocates' rhetoric, there is both individual and organizational dissent to any purported "consensus" about "affirmative" gender treatment for minors.

68. One conclusion is increasingly obvious in this dispute. We have rapidly reached a stage in the study of transgender medicine where the phrase "peer review" no longer guarantees quality analyses, apt measures, appropriate samples, thoughtful interpretations, and measured conclusions.

69. In sum, the science of transgender medicine—including but not limited to adolescents—does not speak with a univocal voice about the long-term psychological and physical benefits of hormonal and surgical treatment of dysphoria. Much published research in this domain is very recent, relies on nonrepresentative, opt-in samples, "loaded" survey questions, and/or exhibits overreaching conclusions. To suggest the existence of any obvious "consensus" or "standards" from existing research would make little scientific sense.

#### IV. THE ABSENCE OF RANDOMIZED CLINICAL TRIALS RESEARCH

70. In his previous declaration dated June 11, 2021, plaintiffs' witness Dr. Antommaria claims that, in Arkansas, "adolescents with gender dysphoria are not being subject to...ex-

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perimentation."<sup>58</sup> The FDA, however, has not approved hormonal therapies for treatment of gender dysphoria. Hence, it is undeniable that the protocol of treatments for transgender-identifying youth, including its hormonal regimens, remains at least technically experimental by definition.

71. It's not as if hormonal treatments have never been put to a clinical trial. The hormones estradiol and testosterone certainly have. The same is true of GnRH agonists (i.e., puberty blockers), which have been evaluated for adult infertility, prostate cancer, ovarian protection during chemotherapy, and even for tests of male contraceptives.<sup>59</sup> But these drugs have not been tested in randomized clinical trials as treatments for adolescent gender transition procedures. Puberty blockers have been approved only for treatment of precocious puberty.

72. Dr. Antommaria is right when he states that, "With respect to study design, randomized trials generally provide "high" quality evidence and observational studies, in comparison, "low."<sup>60</sup> But the entire gender medicine industry merits criticism for complicity in failing to conduct such a rigorous clinical trial. Invasive, and even life-threatening, clinical trials are regularly conducted in the quest for lifesaving treatments among children with serious diseases or conditions.

73. Dr. Antommaria maintains that to propose and carry out "randomized placebocontrolled trials (trials that compare pharmacological treatment to no pharmacological treatment) in gender dysphoria are currently unethical." He appeals to the principle of clinical "equipoise," namely, the assumption (underlying the ethics of randomized control groups) that there is no

<sup>&</sup>lt;sup>58</sup> Antommaria, A. H. M. (2021). Declaration, U.S. District Court, Eastern District of Arkansas, Case No.: 4:21CV450-JM, p. 11.

<sup>&</sup>lt;sup>59</sup> Garner, C. (1994). Uses of GnRH agonists. *Journal of obstetric, gynecologic, & neonatal nursing*, 23(7), 563-570. https://doi.org/10.1111/j.1552-6909.1994.tb01922.x

<sup>&</sup>lt;sup>60</sup> Antommaria (2021), p. 7.

clear "better" intervention present.<sup>61</sup> That is, he maintains that there is no clinical equipoise in the case of treating gender dysphoria; a control group in such a randomized trial would, he believes, receive an inferior, less-effective treatment as compared with the "affirmative" approach.

74. But this claim is in no small part a function of the putative "consensus" mentioned above and discussed more fully below. That is, since "affirmative" treatments are sometimes the subject of patient demand and are now endorsed by certain American professional organizations, there is indeed an assumption that clinical equipoise is not present. But that is a situation based not on longitudinal medical and social science research but on media-fostered patient demand and premature professional organizational claims and pressure. In other words, any lack of equipoise is more a psychological or cultural than a scientific development.

75. Further, even if (as Dr. Antommaria claims) equipoise were lacking for randomized *placebo-controlled* trials (i.e., trials that compared groups that did and did not receive hormones), that would be no obstacle to randomized trials *without* placebo groups to "compare different types, dosages and methods of administration of active treatments."<sup>62</sup> But no such trials have been conducted.

76. This assertion is not, as Dr. Turban states, irrelevant.<sup>63</sup> It is yet another piece of evidence demonstrating the many ways in which randomized clinical trials research can be conducted here—but are not. Dr. Turban is correct that such a study "would not answer the question regarding the efficacy or effectiveness of the class of medications in general," but the lack of

<sup>&</sup>lt;sup>61</sup> Antommaria (2021), p. 8; Cook, C., & Sheets, C. (2011). Clinical equipoise and personal equipoise: two necessary ingredients for reducing bias in manual therapy trials. *Journal of Manual & Manipulative Therapy*, *19*(1), 55-57. doi: 10.1179/106698111X12899036752014

<sup>&</sup>lt;sup>62</sup>Haupt, C., Henke, M., Kutschmar, A., Hauser, B., Baldinger, S., Saenz, S. R., & Schreiber, G. (2020). Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women. *Cochrane database of systematic reviews*, p. 10. https://doi.org/10.1002/14651858.CD013138.pub2

<sup>&</sup>lt;sup>63</sup> Haupt, C., Henke, M., Kutschmar, A., Hauser, B., Baldinger, S., Saenz, S. R., & Schreiber, G. (2020). Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women. *Cochrane database of systematic reviews*, p. 10. https://doi.org/10.1002/14651858.CD013138.pub2

even dosage studies with control groups highlights the near lawlessness that this field of medicine seems to operate with, and provides further evidence of the "ideological capture" that I have thoroughly documented herein.

77. In his own previous response on this topic, Dr. Antommaria continued his appeal to clinical equipoise, adding a pitch for off-label drug use, which "may be well-supported by evidence" and "does not mean that the use is experimental, untested, or unsafe."<sup>64</sup> In the abstract, that is true. But there's a significant gap between "may be" and "is" in particular circumstances. Perhaps a clinical trial really is in order.

#### V. THE IDEOLOGICAL CAPTURE OF GENDER DYSPHORIA

78. There is a great deal of evidence that the clinical discussion of gender dysphoria has recently become unmoored from empirical assessments and instead has been captured by the activist assumptions of those advocating for what is sometimes called "gender ideology." Ideological capture operates not unlike "regulatory capture," a more familiar phrase. The end is the same—the corruption of authority by the successful co-opting of political or professional organizations to serve the aims of a particular interest group. Ideological capture is characterized by incorrigible commitments to certain conclusions regardless of the data and can lead whole organizations to disregard outcomes that are not consistent with the ideologically-motivated sense of rightness.<sup>65</sup> Ideological capture is inimical to the dissent and open debate that is critical to healthy medical and social science.

79. Although the plaintiffs in this case have tried to dismiss observations concerning the ideological capture of gender dysphoria as mere "conspiracy theory," it is quite real and a

<sup>64</sup> Antommaria, A. H. M. (2021), p. 4.

<sup>&</sup>lt;sup>65</sup> Chuang, J. A. (2010). Rescuing trafficking from ideological capture: Prostitution reform and anti-trafficking law and policy. *University of Pennsylvania law review*, *158*(6), 1655–1728.

thoroughly documented phenomenon. As I explain below, the ideological capture of gender dysphoria is evidenced by efforts to re-educate people in the use of identity language, by the entrepreneurial explosion of gender clinics across the nation, by pressure-based suppression of open debate (including among most affirmative clinicians and scholars), by inconsistent claims concerning adolescents' ability to give informed consent, by the tacit endorsement of social media "peer education" about transgender life, and even by the Department of Justice's recent inconsistent actions. It has contributed to suppressing any sense of "watchful waiting," a once-standard harm-reduction move that is now accused of fostering suicidality, and has tagged psychological counseling as bordering on "reparative therapy." It fosters the belief that invasive medical that is, hormonal and surgical—treatments should be performed at earlier ages, as the draft version of WPATH's 8<sup>th</sup> edition of their Standards of Care reveals.

#### A. Re-education in the Parlance of Gender Ideology

80. To classify something in the social world is to penetrate the imagination, to alter public frameworks of knowledge and discussion, and to shift the perception of everyday life. It is why French sociologist Pierre Bourdieu understood this elite-driven effort as the power of "le-gitimate naming."<sup>66</sup> In the domains of gender and sexuality—fraught as they are with great moral valence—there is poignant and bitter struggle over words and terms, and the politics of using them or avoiding them. This suggests we are not witnessing a simple quest for better understanding of an emergent population. We are also seeing social and cultural change fostered through scholarship wed to political activism.

81. The complaint and reports submitted by the plaintiffs in the preliminary-injunction stage of this case reflect this ideological effort. For example, Adkins' claim that

<sup>&</sup>lt;sup>66</sup> Bourdieu, P. (1985). The social space and the genesis of groups. *Theory and society*, 14(6), 723-744.

"[e]veryone has a gender identity"<sup>67</sup> is freighted with dubious ideological assumptions, as the following considerations show. The Endocrine Society guidelines describe "[e]xamples of conditions with similar features" to gender dysphoria, including "body identity integrity disorder (a condition in which individuals have a sense that their anatomical configuration as an able-bodied person is somehow wrong or inappropriate)."<sup>68</sup> Dr. Anne Lawrence, who identifies as transgender, has also noted the parallels between gender dysphoria and body integrity identity disorder (BIID).<sup>69</sup> A person with BIID is able-bodied but identifies as an amputee and reports feeling trapped in a fully functional body. Such persons "often assert [that] their motives for wanting to change their bodies reflect issues of identity."<sup>70</sup>

82. Now, it is one thing to recognize that some people with BIID make such identity claims. But it is something else altogether to say that, because *some people with BIID* make that claim, therefore *everyone* has to be defined in terms of whether they identify as able-bodied, as an amputee, or as something in between. To make this further claim is to advocate a highly disputable ideology that says an able-bodied person's identifying as an amputee is not a disorder at all, but simply one of multiple "functional identities" that an able-bodied person may happen to have. But it is another thing (and altogether inappropriate) to use the terms in which persons experiencing mental distress or a pathology understand themselves as the new prism through which *all persons* must be defined. Claiming that "everyone has a gender identity" is an effort to do precisely that: to define everyone who does *not* suffer gender incongruence in terms of the self-experience of those who do.

<sup>&</sup>lt;sup>67</sup> Adkins (2021), p. 3.

<sup>&</sup>lt;sup>68</sup> Hembree et al. (2017), p. 3878.

<sup>&</sup>lt;sup>69</sup> Lawrence, A. A. (2006). Clinical and theoretical parallels between desire for limb amputation and gender identity disorder. *Archives of sexual behavior*, *35*, 263-78.

<sup>&</sup>lt;sup>70</sup> Lawrence (2006), p. 263.

83. One of the reasons why advocates include (in their articles, briefs, reports, etc.) sections defining terms is because new words are a source of social change itself. They are not simply illuminating but indoctrinating. Certainly, the challenges of measurement and data collection can benefit from clarification of terms. But they can become vehicles of cultural change themselves by endorsing particular ways of speaking about matters of gender identity that are highly contested. Even official surveys, the root source of so much social science raw data, are not only not exempt from politicization and the fostering of "legitimate naming," but are now a medium of the same.<sup>71</sup>

84. Plaintiffs' complaint is also saturated with references to "well-established standards of care," "best practices," and lists a litany of terms and statements like these in a section entitled "Standards of Care..." where one might expect to see prescriptions rather than definitions. Such rhetoric fosters a sense that the plaintiffs are attempting to re-educate the reader rather than convince them of the merits of a position through sound argument and evidence. What was meant to map and understand the experience of gender dysphoria—particularly but not only in adolescents—has turned instead to name (new terms and protocols) and shame (the cautious or contrarian voice).

85. I concur with psychiatrist Dr. Stephen Levine, who has explained that "clinical work in the gender identity arena, which used to be based on symptoms and social, vocational, and educational dysfunction, is now based on sociopolitical concepts. Cultural forces have provided a new narrative about the vital importance of having strict consonance between one's

<sup>&</sup>lt;sup>71</sup> The GenIUSS Group. (2014). Best practices for asking questions to identify transgender and other gender minority respondents on population-based surveys. J.L. Herman (Ed.). The Williams Institute.

sexed body and gender identity."<sup>72</sup> This new narrative is not grounded in evidence-based science but in political activism.

## B. The Rapidly Evolving "Consensus"

86. In her report, Dr. Adkins writes, "All of the major medical professional groups in the United States ... agree that [gender transitioning] is safe, effective, and medically necessary treatment for the health and wellbeing of children and adolescents suffering from gender dysphoria."<sup>73</sup> But, despite the fact that American professional associations have endorsed the (general) "affirmative" approach to treating dysphoric adolescents, there is no wide, international consensus about its superiority. Nor is there evidence that the consensus is stable;<sup>74</sup> rather, there is an uneven evolution among advocates toward affirming treatments "on demand," with decreasing regard for the Dutch protocol's commitment to (1) a slower pace, with more listening and observation, and (2) the refusal to pursue medical treatments in the absence of childhood gender dysphoria and in the presence of psychiatric co-morbidities. That any purported "consensus" on hormonal and surgical interventions at earlier ages should have developed so rapidly among American professional associations-and with so much projected confidence-in the absence of obvious, consistent indicators of treatment efficacy, and amid a surge in cases of gender dysphoria, is suspicious. It suggests, instead, a concerted effort to suppress alternative (or even decade-old) treatment approaches in favor of a demand-driven endorsement of hormonal and surgical treatments.

<sup>&</sup>lt;sup>72</sup> Levine, S. B. (2019). Informed consent for transgendered patients. *Journal of sex & marital therapy*, 45(3), 218-229, p. 219.

<sup>&</sup>lt;sup>73</sup> Adkins, D. (2021), p. 6.

<sup>&</sup>lt;sup>74</sup> Vrouenraets, L. J., Fredriks, A. M., Hannema, S. E., Cohen-Kettenis, P. T., & de Vries, M. C. (2015).

87. Closely connected to the idea of ideological capture is that of a "Castro consensus," wherein a consensus "is viewed as a proxy for truth."<sup>75</sup> Certainly, "when a consensus is fashioned via the independent and free deliberations of many, it is a strong indicator of truth." But "not all consensuses are independent and freely formed." Some are pieced together by "external pressure," while "dependence among individuals can force consensus around an issue, regardless of the underlying truth of the affirmed position." Indeed, simple bias can lead to a purported (and premature) consensus, given that decision-makers (and researchers) "are both human and political."<sup>76</sup> This is an accurate description of what has occurred in the domain of medicine concerned with the treatment of gender dysphoria.

88. For instance, WPATH, formed in 1979, has evolved from its beginnings as a group of professionals seeking to understand and assist those with gender dysphoria to acting as a professional association that purports to offer "consensus" clinical guidelines while simultaneously acknowledging that "WPATH is committed to advocacy for . . . changes in public policies and legal reforms."<sup>77</sup> WPATH's treatment recommendations shape the recommendations of other professional organizations; the APA's guidelines, for example, follow WPATH's recommendations and label any approach other than "affirming" to gender dysphoric youth as "unethi-cal."<sup>78</sup>

<sup>&</sup>lt;sup>75</sup> Allen, J., Lay, C., & Montanez, G. (2020) A Castro consensus: Understanding the role of dependence in consensus formation, 1-9, p. 1. https://www.researchgate.net/publication/344703449\_A\_Castro\_Consensus\_Understanding\_the\_Role\_of\_Dependence\_in\_Consensus\_Formation

<sup>&</sup>lt;sup>76</sup> Socol, Y., Shaki, Y. Y., & Yanovskiy, M. (2019). Interest, bias, and consensus in science and regulation, *Dose-response*, *17*, 1-5. https://doi.org/10.1177/1559325819853669

<sup>&</sup>lt;sup>77</sup> World Professional Association for Transgender Health (2012), p. 2; Levine, S. B. (2018). Ethical concerns about emerging treatment paradigms for gender dysphoria. *Journal of sex & marital therapy*, 44(1), 29-44; Vrouenraets et al. (2015).

<sup>&</sup>lt;sup>78</sup> American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American psychologist*, *70*(9), 832-864.

89. Despite WPATH's purported "consensus" building, the organization continues to struggle with both the research and clinical communities, as well as their own penchant for establishing—not just recognizing—new ground to cover. Such appears to be the case in the December 2021 preview of their forthcoming Standards of Care version 8, where they devote an entire chapter to "eunuch-identified people," most often natal males who exhibit a "strong urge to live without testicles."<sup>79</sup> If a 17-year-old male presents as "eunuch-identified," this is a valid transgender identity under WPATH guidance, and he should be eligible for "affirming" orchiectomy or more for castration to align his body with his mind. In a 2007 study of this unusual community, researchers noted that the typical time from development of interest to actual castration—physically or chemically—was 18 years.<sup>80</sup> The researchers identified four factors at work in the minds of such persons: sustained abuse during childhood, homosexuality, exposure to animal castration during youth, and religious condemnation of sexuality. The authors noted both BIID and GID among self-identified eunuchs.

90. My point about this group is only this. It is beyond ironic that Professor Littman is professionally scourged for observing an exploding number of post-pubertal adolescent dysphoria cases, while WPATH devotes more attention to eunuchs, who as recently as 2015 were considered to be so uncommon as to merit single-case discussion in professional journals.<sup>81</sup>

91. The WPATH "consensus" is not stable. It is clearly evolving in the direction of aggressive affirmation. In their preview of Standards of Care version 8, WPATH has lowered some of the recommended ages for treatment. No one can suggest anymore that surgery is not

<sup>&</sup>lt;sup>79</sup> Hermann, M., & Thorstenson, A. (2015). A rare case of male-to-eunuch gender dysphoria. *Sexual medicine*, *3*(4), 331–333. https://doi.org/10.1002/sm2.81

<sup>&</sup>lt;sup>80</sup> Johnson, T. W., Brett, M. A., Roberts, L. F., & Wassersug, R. J. (2007). Eunuchs in contemporary society: Characterizing men who are voluntarily castrated (Part I). *The journal of sexual medicine*, *4*(4), 930-945, https://doi.org/10.1111/j.1743-6109.2007.00521.x.

<sup>&</sup>lt;sup>81</sup> Hermann, M., & Thorstenson, A. (2015).

being authorized for minors, since WPATH commends age 15 (and above) as appropriate for "chest masculinization" treatment, age 16 for breast augmentation and facial surgeries (e.g., rhi-noplasty, tracheal shave, and genioplasty), age 17 for hysterectomy, vaginoplasty, metoidioplasty (or bottom surgery for female-to-male patients), and orchidectomy (the removal of testicles), and 18—the end of status as a minor—for phalloplasty or the construction of a penis in female-to-male transgender patients.<sup>82</sup>

92. Hence, plaintiffs' witness Turban is no longer able to claim, as he did in the *New York Times* in 2020, that "[u]nder current medical guidelines, genital surgeries for transgender patients are never offered before adulthood." It may have been rhetorically useful, but the claim wasn't even true when he wrote it. A 2017 interview-based study of 20 surgeons revealed that vaginoplasties are being performed on minors by surgeons in the United States.<sup>83</sup> While such may have contravened WPATH's previous standards of care, it is no longer true of their forth-coming standards.

93. Full gender-affirming surgery in minors, however, now constitutes irreversible surgical sterilization, as even the most ambitious of affirmative clinicians admit.<sup>84</sup>

<sup>&</sup>lt;sup>82</sup> World Professional Association for Transgender Health. (2021).

<sup>&</sup>lt;sup>83</sup> Milrod, C., & Karasic, D. H. (2017). Age is just a number: WPATH-affiliated surgeons' experiences and attitudes toward vaginoplasty in transgender females under 18 years of age in the United States. *The journal of sexual medicine*, *14*(4), 624-634.

<sup>&</sup>lt;sup>84</sup> Olson-Kennedy, J. (2015). *The future of trans care in the new millennium*. Gender Infinity Annual Conference. https://youtu.be/pO8v--tztSg. What is critical here about the pairing of puberty blockers then cross-sex hormones is that if patients commence puberty blockers early enough, they will not go through puberty (of their natal sex); hence, their gametes do not have enough time to mature (for the purpose of being subsequently harvested for possible future artificial reproduction). See Hudson, J., Nahata, L., Dietz, E., & Quinn, G. P. (2018). Fertility counseling for transgender AYAs. *Clinical practice in pediatric psychology*, *6*(1), 84-92. doi: 10.1037/cpp0000180

94. Dr. Turban claimed in his previous supplemental declaration, "Although gender affirming hormones can cause some irreversible changes, such as body fat redistribution and vocal changes, these effects are primarily cosmetic."<sup>85</sup> Vocal changes may not be considered "cosmetic" by many, and fat redistribution is hardly a more significant irreversible change than infertility. For Dr. Turban, infertility seems largely irrelevant. He misrepresents a 2019 study, claiming that "fertility was similar between transgender men who had been on testosterone treatment and cisgender women."<sup>86</sup> In reality, the study is about comparing the pregnancy success rate of assisted reproductive technology—an expensive, demanding process with modest success rates—between self-identified transgender males (natal females) and a parallel group of women.<sup>87</sup> Given that over 98 percent of live births in the United States do not employ assisted reproductive technology<sup>88</sup> and involve no "fertility preservation" of the sort that WPATH recommends to counseled patients, the reference to "similar" fertility is at best misleading.

95. In the short span of a decade, psychiatrists, psychologists, pediatricians, and their patients have been pressed both to think about and to treat child and adolescent dysphoria in one "correct" manner—via the aggressively affirmative approach. Even some early advocates for the Dutch protocol are now concerned about the on-demand, skip-the-counseling version that is

<sup>&</sup>lt;sup>85</sup> Turban, J. L., & Keuroghlian, A. S. (2018). Dynamic gender presentations: Understanding transition and "de-transition" among transgender youth. *Journal of the American academy of child & adolescent psychiatry*, *57*(7), 451– 453. https://doi.org/10.1016/j.jaac.2018.03.016. The quote is from page 453.

<sup>&</sup>lt;sup>86</sup> Turban, J. L. (2021), p. 12.

<sup>&</sup>lt;sup>87</sup> Leung, A., Sakkas, D., Pang, S., Thornton, K. & Resetkova, N. (2019). Assisted reproductive technology outcomes in female-to-male transgender patients compared with cisgender patients: a new frontier in reproductive medicine. *Fertility and sterility 112*(5), 858-865. The quote is from page 859.

<sup>&</sup>quot;To be included in this study, the patient had to identify as a transgender man and have completed an ovarian stimulation cycle for oocyte cryopreservation, embryo cryopreservation, or intended uterine transfer. Most couples who desired to conceive did so through reciprocal IVF, whereby the transgender patient provided the oocytes and their cisgender partner carried the pregnancy. The few transgender men who opted to carry the pregnancy themselves underwent several failed intrauterine insemination cycles before proceeding to IVF."

<sup>&</sup>lt;sup>88</sup> Centers for Disease Control and Prevention. (2018). ART success rates. https://www.cdc.gov/art/artdata/in-dex.html

emerging.<sup>89</sup> Psychotherapy has now become more difficult to come by, even disparaged as "conversion" therapies, as discussed below.<sup>90</sup>

# C. The Entrepreneurial Explosion of Gender Clinics

96. When this contrived consensus meets a free-market health care delivery system, it is no surprise that the result is an explosion in gender clinics. Less than 15 years ago, the United States featured a solitary pediatric gender clinic (Boston Children's Hospital's Gender Management Service, founded in 2007). But today there are over 300 clinics that provide some form of "gender affirmative" care to minors, ranging from full-service operations (i.e., hormone and surgical services) to private practice doctors that will perform surgeries on minors.

97. Planned Parenthood clinics, as noted in the organization's recent annual report, are "the second largest provider of hormone therapy to those who identify as transgender/have gender dysphoria."<sup>91</sup> Planned Parenthood's director of health media was recently reported as confirming that the organization offers hormone therapy to transgender patients in 16 states. Mara Keisling, executive director of the National Center for Transgender Equality, remarked about Planned Parenthood that "It's possible they're the largest provider of trans health in the country."<sup>92</sup> Formally, the organization purports to serve only those 18 and older; informally, some facilities report serving 16- and 17-year-olds with "parental consent."<sup>93</sup>

<sup>90</sup> For example, see Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA psychiatry*, 77(1), 68–76. doi:10.1001/jamapsychiatry.2019.2285.
<sup>91</sup> Planned Parenthood Federation of America. (2021). 2019-2020 annual report, p. 11.

<sup>&</sup>lt;sup>89</sup> Edwards-Leeper, L., & Anderson, E. (2021).

https://www.plannedparenthood.org/uploads/filer\_public/67/30/67305ea1-8da2-4cee-9191-19228c1d6f70/210219-annual-report-2019-2020-web-final.pdf

<sup>&</sup>lt;sup>92</sup> Allen, S. (2017, January 10). The attack on Planned Parenthood hurts transgender people, too. *Daily beast*. https://www.thedailybeast.com/the-attack-on-planned-parenthood-hurts-transgender-people-too

 $<sup>^{93}\</sup> https://www.plannedparenthood.org/planned-parenthood-massachusetts/campaigns/gender-affirming-hormone-therapy$ 

98. Planned Parenthood operates its gender services on an "informed consent" basis, with no need for a diagnosis or mental health exam.<sup>94</sup> In other words, access to treatment is offered if the patients indicate they understand and accept the possible side effects. "I had no gatekeeping at all," one patient reported. "I had a prescription in my hand the same day I went in." The "affirmative" approach hence leads in short order to patient-driven, on-demand services.<sup>95</sup> More natal females than males seek out Planned Parenthood's gender services, which serve as a more stable source of income than abortions. One anonymous employee described them as "cash cows…kept on the hook for the foreseeable future."<sup>96</sup>

99. It is clear that clinics make their own decisions about treatment, and are proving even more aggressive than professional organizations' own recommendations. For example, New York's Mount Sinai Center for Transgender Medicine and Surgery (CTMS) operates with a "patient-centered model," and reported that 45 percent of 139 patients seeking vaginoplasty were deemed ready for surgery, well above the 15 percent who met WPATH's criteria for surgery eligibility.<sup>97</sup> If patients seeking surgical treatments are apt to see their odds of getting it tripled, it is only reasonable to believe that providers with fewer restrictions will thrive.

100. In a mid-2020 contribution to the *Journal of Medical Ethics*, an Australian attorney and six co-authors make the ethical case for supporting the practice of "ongoing puberty suppression," that is, to "permanently prevent the development of secondary sex characteristics, as a

<sup>&</sup>lt;sup>94</sup> Urquhart, E. (2016, January 29). Planned Parenthood is helping transgender patients access hormone therapy. *Slate*. https://slate.com/human-interest/2016/01/how-planned-parenthood-helps-transgender-patients-get-hormone-therapy.html <sup>95</sup> Allen (2017).

 <sup>&</sup>lt;sup>96</sup> Shrier, A. (2021, February 8). Inside Planned Parenthood's gender factory: An ex-reproductive health assistant speaks out. Substack: Abigail Shrier, https://abigailshrier.substack.com/p/inside-planned-parenthoods-gender
 <sup>97</sup> Lichtenstein, M., Stein, L., Connolly, E., Goldstein, Z. G., Martinson, T., Tiersten, L., Shin, S. J., Pang, J. H., & Safer, J. D. (2020). The Mount Sinai patient-centered preoperative criteria meant to optimize outcomes are less of a barrier to care than WPATH SOC 7 criteria before transgender-specific surgery. *Transgender Health*, *5*(3), 166-172.

way of affirming (one's) gender identity."<sup>98</sup> There is reason to question the clinical stability of an approach that is so rapidly giving young people suffering from significant psychiatric distress the agency to accept experimental medical interventions with irreversible effects, especially in an ideologically-charged atmosphere where medical professionals hold out the treatments to be the child's only hope of leading a peaceful, happy life.

101. Reports like these highlight how—in a few short years—advocates have injected American sexual politics into the medical evaluation and treatment of gender dysphoria. In a study to be published in the *Archives of Sexual Behavior*, a co-author and I observed in a survey of over 5,000 adults that the central framework through which Americans (as well as supplier organizations like Planned Parenthood) perceive the treatment of adolescent transgender patients is that of bodily autonomy and choice. That is, American adults' attitudes about abortion are the strongest predictor of what they think about "affirmative" treatment for minors, even after controlling for religion, political affiliation, voting behavior, and a variety of other factors.<sup>99</sup> This makes sense. And we are hardly the first to note it. Years ago journalists observed that the same principles at work in understanding abortion attitudes—about access to and control over one's body—are applied to decision-making about transgender treatments, even invasive ones. By extension, then, it is unsurprising to see how the authority over treatment decisions, including among minors, appear to have shifted from physician to patient.<sup>100</sup>

<sup>&</sup>lt;sup>98</sup> Notini, L., Earp, B. D., Gillam, L., McDougall, R. J., Savulescu, J., Telfer, M., & Pang, K. C. (2020). Forever young? The ethics of ongoing puberty suppression for non-binary adults. *Journal of medical ethics*, 46(11), 743-752. https://jme.bmj.com/content/46/11/743.abstract

<sup>&</sup>lt;sup>99</sup> Regnerus, M. & Vermurlen, B. (Final acceptance October 2021, forthcoming). Approval of hormonal and/or surgical interventions for adolescents experiencing gender dysphoria. *Archives of sexual behavior*.

<sup>&</sup>lt;sup>100</sup> Urquhart, E. (2016, March 11). Gatekeepers vs. informed consent: Who decides when a trans person can medically transition? *Slate*. https://slate.com/human-interest/2016/03/transgender-patients-and-informed-consent-whodecides-when-transition-treatment-is-appropriate.html

# D. Pressure-based Suppression of Open Debate

102. Physicians and researchers have been sanctioned for questioning "affirmative" gender treatment. Some have resigned, some have been demoted, and others fired. (Many have endured social media barrages.) A few examples may prove illuminating. Allan Josephson, chief of the University of Louisville's Division of Child and Adolescent Psychiatry and Psychology for nearly 15 years, was demoted after public remarks he offered criticized aspects of affirmative treatment, saying the "notion that gender identity should trump chromosomes, hormones, internal reproductive organs, external genitalia, and secondary sex characteristics when classifying individuals is counter to medical science."<sup>101</sup>

103. The *Archives of Sexual Behavior*'s editor Kenneth Zucker likewise endured professional and personal scrutiny for his work on the transgender experience. Zucker was head of a Toronto addiction and mental health clinic's "Gender Identity Service" until he was fired in 2015 after an external review by two adolescent psychiatrists found his method insufficiently "affirmative" for transgender-identifying youth. His crime? Too much caution, patience in treatment, and displaying concern for parents and family dynamics. (Zucker won a legal settlement and an apology,<sup>102</sup> and he remains the editor-in-chief of *Archives*, the top sexology journal in the field.) Intimidation of this nature discourages wider interest in this field, narrowing the pool of researchers to those who don't rock the boat or question the purported consensus. This is not how a healthy field of science works.

<sup>&</sup>lt;sup>101</sup> Watkins, M. (2019, March 29). Professor sues U of L, claims he was demoted over comments seen as anti-LGBTQ. *Courier journal*. https://www.courier-journal.com/story/news/2019/03/29/anti-lgbt-comments-university-of-louisville-professor-sues-over-demotion/3300002002/

<sup>&</sup>lt;sup>102</sup> Rizza, A. (2018, October 7). CAMH to pay more than half a million settlement to head of gender identity clinic after releasing fallacious report. *National post*. https://nationalpost.com/news/camh-reaches-settlement-with-former-head-of-gender-identity-clinic

104. Angela Sämfjord, a child and adolescent psychiatrist at Sahlgrenska University Hospital in Gothenburg, Sweden, launched the Lundstrom Gender Clinic in 2016. Two years later, she resigned because of her own fears about the lack of evidence for hormonal and surgical treatments. Her decision-making process reveals what others have also noted: "There's a lot of tension between some approaches of gender clinics and the trans community. Patients found it hard to accept that they needed to undergo a full mental health assessment before being referred for medical treatment. Parents would say that nobody ever discussed that other issues…might be implicated in the child's dysphoria."<sup>103</sup> Her patients displayed "many psychiatric symptoms," she notes. Gender dysphoria was just "one part of a complex problem." "Concentrating only on the gender dysphoria meant we might miss other things," she held. "When I realized the complexity [of these cases]…and that health care professionals are still expected to okay gender-affirming treatment despite the lack of evidence that we currently have, it preyed on my conscience." Sämfjord's story contributed to Sweden's recent decision to curb hormonal treatments for adolescents.

105. The controversy over a CBS *60 Minutes* segment about detransitioners, which aired on May 23, 2021, provides another sobering illustration of the ideological capture of much of this field of treatment. The popular news program sensed it would be illuminating to have a public discussion about patients who have undergone a gender transition but who wish to detransition back to their natal sex. Yet not only did activists seek to alter the *60 Minutes* episode (or prevent it from airing altogether), clinicians did too, including Dr. Johanna Olson-Kennedy, one of the more well-known researchers in the field, who posted on social media that "so many of us

<sup>&</sup>lt;sup>103</sup> McCall, B. & Nainggolan, L. (2021, April 23). Transition therapy for transgender teens drives divide. *WebMD*. https://www.webmd.com/children/news/20210427/transition-therapy-for-transgender-teens-drives-divide

worked hard to dissuade them from doing this segment." Lesley Stahl, the segment's correspondent and lead interviewer, reported that she could not remember another story "where comments and criticisms began surfacing from advocates before the piece aired."<sup>104</sup> Other major media outlets are feeling comparable pressure to vet transgender news stories prior to release.<sup>105</sup>

106. The *60 Minutes* controversy also sheds light on the new fissure between "conventional" affirmative care and the even more aggressive form of patient-driven care that "affirms without question," a position staked out Olson-Kennedy, who perceives little advantage to conducting pre-treatment mental health evaluations, and is known to offer cross-sex hormones to patients as young as 12 years old—a position that puts her at odds even with WPATH's aggressive new Standards of Care.<sup>106</sup> The only thing "settled" about transgender medical science is the advocates' use of that term. In truth, it is perpetually unsettled, and is now shifting toward putting the patient in the driver's seat of their own treatment decisions.

107. A pair of "affirming" clinical psychologists who work with gender dysphoric adolescents, called the *60 Minutes* backlash "unconscionable" and "harmful to detransitioned young people" who are being "made to feel as if their lived experiences are not valid." Moreover, they recognize that silencing detransitioners "will undoubtedly raise questions regarding the objectivity of our field..."<sup>107</sup> Indeed, as explained below, it has.

<sup>&</sup>lt;sup>104</sup> Zubrow, K. (2021, May 23). Inside the 60 Minutes report on transgender healthcare issues. *CBS News*. https://www.cbsnews.com/news/60-minutes-transgender-health-care-issues-2021-05-23/

<sup>&</sup>lt;sup>105</sup> Manning, S. (2021, June 26). BBC Pride activists demand right to vet transgender news stories on Radio 4's Today programme after host Justin Webb clashed with Pink News CEO over Stonewall's stance on single-sex spaces. *Daily Mail*. https://www.dailymail.co.uk/news/article-9728735/BBC-Pride-activists-demand-right-vet-transgendernews-stories-Radio-4s-Today-programme.html

<sup>&</sup>lt;sup>106</sup> Singal, J. (2018, July/August.) When children say they're trans. *The Atlantic Monthly*. https://www.theatlan-tic.com/magazine/archive/2018/07/when-a-child-says-shes-trans/561749/

<sup>&</sup>lt;sup>107</sup> Edwards-Leeper & Anderson (2021), paragraph 6.

108. The evidence demonstrates that desistance rates—that is, the share of adolescents who cease identifying as transgender and accept their natal sex—may have been around 90 percent for patients treated with a "watchful waiting" approach.<sup>108</sup> In a review of childhood gender dysphoria, prior studies demonstrated desistence rates ranging from 61% to 98%.<sup>109</sup> This method, however, is now contested in the United States, Canada, Australia, and the UK, and for dysphoric adolescents put on the "gender affirmation" schedule, the reverse has become true. Rather than pressing a pause button for time to think, 98 percent of the adolescents put on puberty blockers at the UK's Tavistock clinic proceeded to cross-sex hormones,<sup>110</sup> thereby triggering irreversible effects.<sup>111</sup> In other words, the "watchful waiting" method consistently predicted desistance because it recognizes the transience of cross-gender identification in minors. But taking an aggressively "affirmative" approach almost guarantees transition.

109. Transgender activists and their allies in the professions have sought to minimize the experiences of people who regret their transition and silence the voices of those who have detransitioned because of the challenges these present to the transgender identity narrative. Serious studies into this increasing phenomenon have been successfully squelched due to pressure from activists,<sup>112</sup> but the fact is that transition regret is real.<sup>113</sup> Recently, a wave of rapid adolescent

<sup>&</sup>lt;sup>108</sup> Singh, Bradley, and Zucker (2021) recently released a longitudinal study where the desistance rate was 88%. See: Singh, D., Bradley, S. J., & Zucker, K. J. (2021). A follow-up study of boys with gender identity disorder. *Frontiers in psychiatry*, *12*, 1-18. https://doi.org/10.3389/fpsyt.2021.632784

<sup>&</sup>lt;sup>109</sup> Ristori, J., Steensma, T. D. (2016). Gender dysphoria in childhood, *International review of psychiatry*, 28(1), 13-20.

<sup>&</sup>lt;sup>110</sup> Carmichael et al. (2021)

<sup>&</sup>lt;sup>111</sup> de Vries, A. L., Steensma, T. D., Doreleijers, T. A., & Cohen-Kettenis, P. T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *The journal of sexual medicine*, 8(8), 2276-2283. https://doi.org/10.1111/j.1743-6109.2010.01943.x

<sup>&</sup>lt;sup>112</sup> Hardy, R. (2017, October 13). How a psychotherapist who has backed transgender rights for years was plunged into a Kafkaesque nightmare after asking if young people changing sex might later regret it. *Daily mail*. https://www.dai-lymail.co.uk/news/article-4979498/James-Caspian-attacked-transgender-children-comments.html

<sup>&</sup>lt;sup>113</sup> Djordjevic, M. L., Bizic, M. R., Duisin, D., Bouman, M. B., & Buncamper, M. (2016). Reversal surgery in regretful male-to-female transsexuals after sex reassignment surgery. *The journal of sexual medicine*, *13*(6), 1000-

transitions numbering in the tens of thousands has been accompanied by a surge of young people who have come to see that their transition was not the answer to their problems after all. There are now so many detransitioners that suppression of their stories is becoming impossible. One recent study surveyed 237 detransitioners, both male and female, and noted that over half of the respondents had three mental health co-morbidities, a trait that once nixed their eligibility for aggressive treatments.<sup>114</sup> The majority of the sample, a full 70 percent, said a reason for detransitioning was due to realizing their "gender dysphoria was related to other issues."

110. Additionally, 62 percent marked health concerns as a reason for detransitioning, 50 percent said they did not find transition beneficial for their dysphoria, and 45 percent found other ways of dealing with their dysphoria. None of these reasons comport with the trans-affirmative narrative claiming that detransition is primarily due to social pressure or discrimination.<sup>115</sup> "Lack of support from social surroundings (13%), financial concerns (12%) and discrimination (10%)" were the least compelling reasons for detransitioning.<sup>116</sup>

111. Dr. Turban's recent study of USTS survey data (gathered from an online, opt-in convenience sample) reported far higher levels of "external" rather than "internal" reasons for detransitioning—meaning that motivation for detransitioning was thought to come from the respondent's social environment rather than from internal motivation. This conclusion, however, is a direct result of how the survey question was posed to respondents. External reasons for detransitioning dominated the answer options, including seven "pressure" answers (e.g., pressure

<sup>1007.</sup> https://doi.org/10.1016/j.jsxm.2016.02.173; Entwistle, K. (2021). Debate: Reality check–Detransitioner's testimonies require us to rethink gender dysphoria. *Child and adolescent mental health*, 26(1), 15-16. doi/epdf/10.1111/camh.12380

<sup>&</sup>lt;sup>114</sup> Vandenbussche, E. (2021). Detransition-related needs and support: A cross-sectional online survey. *Journal of homosexuality*, 1-19. https://doi.org/10.1080/00918369.2021.1919479

<sup>&</sup>lt;sup>115</sup> Turban, J. L., Loo, S. S., Almazan, A. N., & Keuroghlian, A. S. (2021). Factors leading to "detransition" among transgender and gender diverse people in the United States: A mixed-methods analysis. *LGBT health*, *8*(4), 273-280. https://doi.org/10.1089/lgbt.2020.0437

<sup>&</sup>lt;sup>116</sup> Vandenbussche (2021), p. 5.

from a parent, pressure from a spouse or partner, pressure from an employer, etc.). Only two vaguely-worded internal answer options were offered: "I realized that gender transition was not for me" and "It was just too hard for me." (Write-in options were nevertheless allowed, but predictably revealed the lowest response frequency.)

112. In a 2021 study published in the *Archives of Sexual Behavior*, public health scientist Lisa Littman surveyed a convenience sample of 100 detransitioners in order to better understand this population.<sup>117</sup> Her survey of detransitioners offered a far wider array of possible reasons for doing so than the USTS did, and revealed what the USTS could not, by design—namely that internal reasons were far more apt to be selected than external ones. Sixty percent of them became "more comfortable identifying as their natal sex," nearly half indicated concerns with "potential medical complications from transitioning," and 38% had come to view their dysphoria as "caused by something specific, such as trauma, abuse, or a mental health condition," each of which are—if the traditional pathway to treatment were followed—supposed to be probed prior to hormonal or medical treatments.<sup>118</sup>

113. In the USTS, and hence in Turban's published study of detransitioning, no answer options were offered that would recognize that dysphoria and initial transitioning might have involved "difficulty accepting themselves as homosexual," traumas (including but not limited to sexual trauma), mental health conditions, and peer effects. Littman's survey did not include the first of these—but nevertheless revealed its importance: "Despite the absence of any questions about this topic in the survey, nearly a quarter (23.0%) of the participants expressed the internal-

<sup>&</sup>lt;sup>117</sup> Littman L. (2021). Individuals treated for gender dysphoria with medical and/or surgical transition who subsequently detransitioned: A survey of 100 detransitioners. *Archives of sexual behavior*, *50*(8), 3353–3369. https://doi.org/10.1007/s10508-021-02163-w

<sup>&</sup>lt;sup>118</sup> Ibid., p. 3353.

ized homophobia and difficulty accepting oneself as lesbian, gay, or bisexual narrative by spontaneously describing that these experiences were instrumental to their gender dysphoria, their desire to transition, and their detransition."<sup>119</sup>

114. Additionally, 37% of detransitioners reported feeling pressure—mostly external to have transitioned in the first place. It seldom came from family, however. Open-response answers included: "My gender therapist acted like it [transition] was a panacea for everything;" "[My] [d]octor pushed drugs and surgery at every visit;" "I was dating a trans woman and she framed our relationship in a way that was contingent on my being trans;" "A couple of later trans friends kept insisting that I needed to stop delaying things;" "[My] best friend told me repeatedly that it [transition] was best for me;" "The forums and communities and internet friends."<sup>120</sup>

115. By contrast, only seven percent (collectively) reported in Littman's study that a parent, spouse, or a family member had pressured them to detransition, far below the USTS's report of 36%, 18%, and 26%, respectively.

116. Notably, only 24% of those surveyed by Littman had informed the doctor or gender clinic of their detransition, which means that any "official" numbers on detransitioners are apt to be a significant undercount.

117. Further, not even all who experience regret or difficulties attributable to their transition will actually seek to physically detransition. There are many reports of individuals having regret but seeking to make the best of the irreversible changes and situation they find themselves in.<sup>121</sup> Consider the pioneer patient of the experimental Dutch protocol, "B," who was followed

<sup>&</sup>lt;sup>119</sup> Ibid., p. 3362.

<sup>&</sup>lt;sup>120</sup> Ibid., p. 3360.

<sup>&</sup>lt;sup>121</sup> E.g.: Jax, R. (2017). *Don't get on the plane: Why a sex change will ruin your life*. CreateSpace Independent Publishing Platform.; Heyer, W. (2018). *Trans life survivors*. Bowker Identifier Services.; Teller Report. (2020, May 12). Aleksa Lundberg: "I am a gay feminine man with a female body." https://www.tellerreport.com/news/2020-05-12-aleksa-lundberg--%22i-am-a-gay-feminine-man-with-a-female-body%22.SyWGzCjDcU.html

for 22 years until the age of 35. It was reported that "he indicated no regrets about his treatment."<sup>122</sup> However, B "scored high on the measure for depression. Owing to 'shame about his genital appearance and his feelings of inadequacy in sexual matters,' he could not sustain a romantic relationship."<sup>123</sup> One cannot help but wonder whether B could have enjoyed greater lifetime wellbeing if he had not been placed on the medicalized transgender trajectory at the tender age of 13.

118. The scholar/activist authors of a 2020 *JAMA Psychiatry* study, led by plaintiffs' witness Dr. Turban, paint an entire class of cautious therapeutic approaches as intrinsically harmful—conversion attempts—using survey language stated as follows: "Did any professional (such as a psychologist, counselor, or religious advisor) try to make you identify only with your sex assigned at birth (in other words, try to stop you being trans)?" Given the hundreds of questions and items the USTS posed to its respondents six years ago, the fact that it lumps any scenario that does not involve unqualified affirmation (including "watchful waiting") into one imprecise, binary measure is psychometrically irresponsible.<sup>124</sup> In other words, it is foisting on people a one-size-fits-all definition. What one can learn from a poor-quality question posed to an opt-in

<sup>&</sup>lt;sup>122</sup> Cohen-Kettenis, P. T., Schagen, S. E. E., Steensma, T. D., de Vries, A. L.C., & Delemarre-van de Waal, H. A. (2011) Puberty suppression in a gender-dysphoric adolescent: A 22-year follow-up. *Archives of sexual behavior*, 40(4), 843–847, p. 843.

<sup>&</sup>lt;sup>123</sup> Biggs (2019) p. 49; Cohen-Kettenis et al. (2011), p. 845.

<sup>&</sup>lt;sup>124</sup> Turban et al. (2020). This study was thoroughly critiqued in: 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*(1), 7-16. The authors concluded: "Turban et al.'s (2020) singular endorsement of "affirmative" therapies, which their data failed to substantiate, contributes to the alarming trend to frame any non-"affirming" approaches as harmful. We are deeply concerned that this false dichotomy, reinforced by Turban et al.'s unproven claims of the harms of GICE, will have a chilling effect on the ethical psychotherapists' willingness to take on complex GD patients, which will make it much harder for GD individuals to access quality mental health care. We maintain that availability of a broad range of non-coercive, ethical psychotherapies for individuals with GD is essential to meaningful informed consent, which requires consideration of the full range of treatment options, from highly invasive to non-invasive. Further, given the potential of agenda-free psychotherapy to ameliorate GD non-invasively among young people with GD, withholding this type of intervention, while promoting "affirmation" approaches that pave the way to medical transition, is ethically questionable. We believe that exploratory psychotherapy that is neither "affirmation" nor "conversion" should be the first-line treatment for all young people with GD, potentially reducing the need for invasive and irreversible medical procedures." p. 13

sample of respondents motivated—even recruited—to participate is limited by definition. That such studies seem easily publishable today highlights the extent to which certain medical journals—officially sponsored by the same associations that have claimed a stake in the outcome here—have been "ideologically captured." They seem uninterested in holding transgender research to standards comparable to other divisions of medicine.

119. As an aside, one notable development is the explosion in the number of academic journals focused on topics of sexuality and gender identity. There has been, on average, at least one new peer-reviewed journal in the domain of sexuality and gender launched every year for the past 30 years. The supply of journals is certainly in part a function of demand. But it is also invariably the case that where the competition for publication in peer-reviewed journals is tight (and therefore, there is a scarcity of supply), the pathway to publication is more challenging. Hence, the quality of what is published tends to be higher. The opposite happens when there is a large supply of journals: the barrier to publication is lower, and so typically is the quality. This is a problem that pervades the field.

120. If counseling can be construed as conversion attempts, this sends a clear message to psychiatrists and psychotherapists alike about their role in the doctor-patient relationship here—as a supplier of whatever the patient wishes to do. In a marketplace where professionals, just like any business, are subject to public reviews of their work, the label of "transphobic" is unwelcome and may have serious adverse professional consequences.

121. I concur with Dr. Stephen Levine, who has highlighted the quandary facing professionals attempting to provide "informed" counsel to patients about the biological, social, and

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psychological risks posed by any treatment approach.<sup>125</sup> Such risks are real and ought to be discussed—this is what ethical informed consent does. But a serious, ranging conversation—the "informed" part of obtaining informed consent—could be perceived as an attempt to "convert" the person from pursuing gender affirmation treatments (e.g., hormones, surgery).

122. The idea that it is a "conversion" to become convinced that perhaps you may be able to live with the body you have strains simple logic as well as the advice of pioneering clinicians that less invasive outcomes were preferable to more aggressive ones.<sup>126</sup> In any case, there is no defined psychotherapeutic method for treating gender dysphoria that can be widely characterized and consistently identified as "conversion therapy" in order to be banned. Nor has there been a clinical trial evaluating specific psychotherapeutic methods of counseling gender dysphoria that could potentially demonstrate whether one or more such methods are indeed helpful or harmful.

123. On page 36 of his previous supplemental declaration, Dr. Turban contests—by misrepresenting—this claim. I did not state that there are no definitions. Rather, I assert that there is no wide and consistent agreement about what exactly constitutes "conversion therapy." Only his reference to American Academy of Child and Adolescent Psychiatry (AACAP) offers a definition for conversion therapy. The subsequent citations each refer to conversion therapy but do not define it.

124. Following the AACAP's policy on conversion therapy, Dr. Turban employs a "frame alignment"<sup>127</sup> move to suggest efforts at conversion therapy for same-sex attraction and

<sup>&</sup>lt;sup>125</sup> Levine (2019).

<sup>&</sup>lt;sup>126</sup> Smith, Y. L., van Goozen, S. H., & Cohen-Kettenis, P. T. (2001). Adolescents with gender identity disorder who were accepted or rejected for sex reassignment surgery: a prospective follow-up study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(4), 472-481.

<sup>&</sup>lt;sup>127</sup> Snow, D. A., Rochford Jr., E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American sociological review*, 464-481.

gender expression are equivalent, since both—he claims—specifically "aim to promote heterosexuality" (page 36). That is, he links two different movements—the one to suppress gay conversion therapy and the one, noted above, on gender identity "conversion" efforts—in the hopes that overlapping interests, values, beliefs, and goals are complementary. But I am not talking about heterosexuality. I concur with another critic who has observed, "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."<sup>128</sup> One British psychotherapist observes this challenge, noting that "[s]ome therapists, trans people, and their allies seem to regard any psychological description of GD as inherently pathologizing and equate it with gay conversion therapy."<sup>129</sup>

125. Here again is evidence that a central framework for understanding the treatment of adolescent transgender patients is not that of mental and physical flourishing, but rather has become that of securing bodily autonomy and patient choice. The ideological capture of much of this field of treatment makes for a very difficult environment for psychological treatment of gender dysphoria in minors.

126. Many other examples of undue pressure could be given, both within and outside the professions. Amazon's decision to withdraw from selling books that so much as suggest the idea that gender dysphoria is (or had been associated with) a mental disorder is one. Public fora for legitimate debate are actively being curbed.<sup>130</sup> Even *reviews* of books are being retracted and

<sup>&</sup>lt;sup>128</sup> Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of sex & marital therapy 46*(4): 307-313. The quote is from page 308.

<sup>&</sup>lt;sup>129</sup> Withers (2020), p. 865.

<sup>&</sup>lt;sup>130</sup> Trachtenberg, J. A. (2018, March 11). Amazon won't sell books framing LGBTQ+ identities as mental illnesses. *Wall street journal*. https://www.wsj.com/articles/amazon-wont-sell-books-framing-lgbtq-identities-as-mental-illnesses-11615511380

withdrawn.<sup>131</sup> Certain conclusions are now penalized both professionally and in the wider social and economic marketplace. To suppose that such external social and political pressures do not affect basic social or medical research on transgender-related matters would be naïve.

#### E. Inconsistent Claims about Adolescents' Ability to Consent

127. A central and persistent concern about hormonal (and subsequent surgical) courses of treatment for gender dysphoria in adolescents is their ability to genuinely consent to treatments that will almost invariably lead to de facto sterilization. Parental consent to sterilization used to be unlawful in many locales, creating ethical dilemmas that commonly required judicial review.<sup>132</sup>

128. These are complicated matters, no doubt. Bernadette Wren, who was a senior clinician at the Tavistock until her retirement in 2020, admits in her diary of reflections to doubts about her field at the UK's gender clinic: "Can children and adolescents realistically consent to these treatments? If yes, how is their competence ensured? If no, is this decision within the scope of parental discretion? And if young people, with or without their parents, are deemed competent, where does the responsibility lie if there are subsequent feelings of regret?" If senior clinicians who have worked in this domain for decades have such fundamental questions, they are certainly worth considering.

129. The stakes are high. The bar to informed consent for experimental medical treatments (of any sort) has long been elevated for minors. It is decreasingly so in gender medicine. As gender therapist Diane Ehrensaft observes, "continuity of care in gender affirmation" from

<sup>&</sup>lt;sup>131</sup> Novella, S. & Gorski, D. (2021, June). Retraction notice for Hall, H. (2021, June 15.) Book review: *Irreversible damage: The transgender craze seducing our daughters*, by Abigail Shrier. *Science-based medicine*. https://science-basedmedicine.org/irreversible-damage-the-transgender-craze-seducing-our-daughters/

<sup>&</sup>lt;sup>132</sup> For example, it remains illegal in Oregon to sterilize a person under age 15, regardless of parental permission. See also Boynton, M. (1994). Sterilization of minors. *Minn med.* 77(1):23-4. https://pubmed.ncbi.nlm.nih.gov/8127303/

puberty blockers to cross-sex hormones results in "discontinuity in potential capacity to ever create progeny with their own genetic material."<sup>133</sup> In other words, affirmative care eventually means sterilization *as a minor*, under WPATH's proposed new guidance.

130. Even researchers and clinicians trained on the experimental Dutch protocol are signaling new allegiances to the "affirm without question" paradigm, after claiming that the recent surge in cases merely reflects hidden demand previously unsurfaced.<sup>134</sup> As an example of this, Dutch child and adolescent psychiatrist Annelou de Vries and six co-authors registered their disappointment with the (original) *Bell v Tavistock* decision, asserting that "minors as young as 12 years of age frequently possess this ability"—that is, the competency to understand the consequences of a decision to begin puberty blockers.<sup>135</sup>

131. In asserting this, de Vries and her colleagues claim to concur with "all the major medical associations." But even some medical associations offer reasons to doubt that adolescents are competent to consent. The APA recognizes that "adolescents can become intensely focused on their immediate desires, resulting in outward displays of frustration and resentment when faced with any delay in receiving the medical treatment from which they feel they would benefit and to which they feel entitled. This intense focus on immediate needs may create challenges in assuring that adolescents are cognitively and emotionally able to make life-altering de-

<sup>&</sup>lt;sup>133</sup> Ehrensaft, D. (2021, April 7). Fertility issues for transgender and nonbinary youth. Training presentation sponsored by the UC San Francisco Child and Adolescent Gender Center. Discussion and video links available at: https://4thwavenow.com/2021/04/13/tmi-genderqueer-11-year-olds-cant-handle-too-much-info-about-sterilizing-treatments-but-do-get-on-with-those-treatments/

<sup>&</sup>lt;sup>134</sup> Arnoldussen, M., Steensma, T.D., Popma, A. *et al.* (2020). Re-evaluation of the Dutch approach: are recently referred transgender youth different compared to earlier referrals?. *European child & adolescent psychiatry*, *29*, 803–811. https://doi.org/10.1007/s00787-019-01394-6.

<sup>&</sup>lt;sup>135</sup> de Vries, A. L., Richards, C., Tishelman, A. C., Motmans, J., Hannema, S. E., Green, J., & Rosenthal, S. M. (2021). Bell v Tavistock and Portman NHS Foundation Trust [2020] EWHC 3274: Weighing current knowledge and uncertainties in decisions about gender-related treatment for transgender adolescents, *International journal of transgender health*, p. 5. doi: 10.1080/26895269.2021.1904330

cisions to change their name or gender marker, begin hormone therapy (which may affect fertility), or pursue surgery."<sup>136</sup> For its part, the Endocrine Society guidelines recognize that "no objective tools to make such an assessment [i.e., of an adolescent's competence in decision making] are currently available" and notes that some "believe that . . . abilities (such as good risk assessment) do not develop until well after 18 years."<sup>137</sup>

132. The American Medical Association (AMA) presents a curious case about consent. In an April 26, 2021 letter to the National Governors Association (NGA), the AMA wrote to urge the NGA to "oppose state legislation that would prohibit the provision of medically necessary gender transition-related care to minor patients."<sup>138</sup> But this statement is flatly inconsistent with the position the AMA has taken concerning adolescents' abilities in other contexts. In its 2005 amicus brief to the U.S. Supreme Court in *Roper v. Simmons*, a case that concerned capital punishment for crimes committed by minors, the AMA asserted that "[a]dolescents' behavioral immaturity mirrors the anatomical immaturity of their brains. To a degree never before understood, scientists can now demonstrate that adolescents are immature not only to the observer's naked eye, but in the very fibers of their brains."<sup>139</sup>

133. The AMA brief makes an additional pair of comparative claims about the adolescent brain: "First, adolescents rely for certain tasks, more than adults, on the amygdala, the area of the brain associated with primitive impulses of aggression, anger, and fear. Adults, on the

<sup>&</sup>lt;sup>136</sup> American Psychological Association (2015), p. 842.

<sup>&</sup>lt;sup>137</sup> Hembree et al. (2017), p. 3884.

<sup>&</sup>lt;sup>138</sup> Madara, J. L. (2021, April 26). Official AMA letter to legislators. https://www.ama-assn.org/press-center/press-re-leases/ama-states-stop-interfering-health-care-transgender-children

<sup>&</sup>lt;sup>139</sup> American Medical Association et al. (2005). Brief of Amici Curiae in *Roper v. Simmons*, (U.S. Sup. Ct.), 543 U.S. 551 (No. 03-633), 2004 WL 1633549, p. 10. The AMA was joined in their claims by the American Psychiatric Association, American Society for Adolescent Psychiatry, American Academy of Child & Adolescent Psychiatry, American Academy of Psychiatry and the Law, National Association of Social Workers, Missouri chapter of the National Association of Social Workers, and the National Mental Health Association.

other hand, tend to process similar information through the frontal cortex, a cerebral area associated with impulse control and good judgment. Second, the regions of the brain associated with impulse control, risk assessment, and moral reasoning develop last, after late adolescence."<sup>140</sup> This is widely recognized today in the conventional wisdom that (prefrontal) brain development does not stabilize in human beings until around age 25.

134. One of the attorneys who penned the brief in *Roper* on behalf of the AMA and other organizations later reinforced—by referring to the brief itself—that the "ability of adolescents to make cost-benefit calculations, as compared to adults, is deficient. Additionally, their susceptibility to peer pressure is greater because of this impaired judgment. Moreover, adolescents are more volatile than adults, experiencing more extreme emotions that are not as regulated as they are in adults."<sup>141</sup>

135. When it comes to criminal activity, the AMA asserts that minors cannot be trusted to navigate peer pressure, weigh costs and benefits, make clear-minded judgments, and move ahead with life-altering decisions. But when it comes to transgender medicine and its life-alter-ing consequences, the AMA asserts that minors are competent to make such decisions.

136. Is a child at the cusp of puberty competent to weigh the risks and consequences that transgender medicine entails? That was the question at stake in *Bell v Tavistock*. In 2020, Keira Bell petitioned the court to review the treatment given to minors and young people, saying she had been rushed to transition, was not given other therapeutic options, and lacked the capacity to understand the long-term implications of her decisions at the time. "I was an unhappy girl who needed help," Bell stated. "Instead, I was treated like an experiment."<sup>142</sup> In its December

<sup>&</sup>lt;sup>140</sup> American Medical Association et al., p. 11.

<sup>&</sup>lt;sup>141</sup> Haider, A. (2006) *Roper v. Simmons*: The role of the science brief. *Ohio state journal of criminal law 3*: 369-377, p. 372.

<sup>&</sup>lt;sup>142</sup> Bell, K. (2021, April 7). Keira Bell: My story. *Persuasion*. https://www.persuasion.community/p/keira-bell-my-story

2020 decision, the UK's highest court ruled that children could not give genuine consent to hormonal treatments offered at the National Health Service's gender clinic.

137. In its original verdict, the UK High Court also highlighted a "lack of clarity over the purpose of the treatment: in particular, whether it provides a "pause to think" in a "hormone neutral" state or is a treatment to limit the effects of puberty, and thus the need for greater surgical and chemical intervention later."<sup>143</sup>

138. When the initial judgment in *Bell v Tavistock* was announced, plaintiff Keira Bell responded, "I am delighted at the judgment of the court today. It was a judgment that will protect vulnerable young people. I wish that it had been made for me before I embarked on the devastating experiment of puberty blockers. My life would be very different today. This time last year I joined this case with no hesitation, knowing what I knew about what had and has been going on at the gender identity clinic. My hope was that outside of the noise of the culture wars the court would shine a light on this harmful experiment on vulnerable children and young people. These drugs seriously harmed me in more ways than one and they have harmed many more particularly young girls and women."<sup>144</sup>

139. What is certainly clear is that the use of puberty blockers in the present is linked to the potential outcomes of future drugs and surgeries, thus revealing a presumption of medical "path dependence" in these treatment protocols. That is why the court determined that puberty blockers and cross-sex hormones are essentially two parts of "one clinical pathway."<sup>145</sup> Consequently, for minors to be competent to consent to blockers, they would have to adequately understand and consent to the effects of future cross-sex hormones as well.

<sup>&</sup>lt;sup>143</sup> Bell & A v. Tavistock & Portman NHS Foundation Trust. (2020), para. 134.

<sup>&</sup>lt;sup>144</sup> Bell, K. (2020) Keira Bell case: Statements from BBC interview. Transcript available here: https://ourduty.group/2020/12/02/keira-bell-case-statements/

<sup>&</sup>lt;sup>145</sup> Bell & A v. Tavistock & Portman NHS Foundation Trust. (2020), para. 136.

140. In the most recent ruling on the Tavistock's subsequent appeal, the Court of Appeals' opinion did not reflect any change in the evidentiary bases, nor did it draw any conclusions about harm or risk of harm to minors, but instead upheld a legal precedent favoring physicians' discernment of adolescent competence to consent, on a case-by-case basis.<sup>146</sup> (The case is currently proceeding to the UK Supreme Court.)

141. The legal precedent, established in *Gillick v West Norfolk and Wisbech Area Health Authority*, presupposes that all clinicians are subject to professional regulation, with established review mechanisms. However, there is growing concern from within the transgender medical community that such established review mechanisms are increasingly disregarded. Wren recently reflected that the landscape for treating gender dysphoria in the UK had shifted. There is now "growing resistance from families toward…[a] slow-paced model of care. Young people and their parents, arriving at [Tavistock's GIDS clinic] many months after referral, were becoming more assertive in their demands for validation of their new gender identity and for faster, earlier and simpler access to puberty suspension and cross-sex hormones."<sup>147</sup> Social media sources add motivation, while external providers add competition. Caution and reflection, Wren observed, "were now pitted against online sources of anecdote, emotion and personal history. Private providers waited in the wings, willing to meet these requests with a minimal protocol."<sup>148</sup>

 $<sup>\</sup>label{eq:linear} {}^{146} \ http://www.bailii.org/uk/cases/UKHL/1985/7.html \ or \ https://www.judiciary.uk/judgments/bell-and-another-v-the-tavistock-and-portman-nhs-foundation-trust-and-others/$ 

 <sup>&</sup>lt;sup>147</sup> Wren, B. (2021, Dec. 2). Epistemic injustice. *London review of books*, 43 (23), https://www.lrb.co.uk/the-pa-per/v43/n23/bernadette-wren/diary, paragraph 12.
 <sup>148</sup> Ibid.

142. Hence, the September 2021 Court of Appeals deference to "Gillick competence," the precedent established in the 1985 case by that name, formally affirms an approach that is increasingly informally ignored—including at the Tavistock clinic, according to Wren.

143. The same observations are being made in the United States. A pair of clinical psychologists—one of whom identifies as transgender—who work with gender dysphoric adolescents, recently asserted that "we find evidence every single day, from our peers across the country and concerned parents who reach out, that the field has moved from a more nuanced, individualized and developmentally appropriate assessment process to one where every problem looks like a medical one that can be solved quickly with medication or, ultimately, surgery."<sup>149</sup> Formal standards, they claim, are being openly ignored in favor of believing the patient, no matter how young. This, the pair observes, is what gender-affirming medicine has become—skipping the psychological assessment and believing the patient is capable of making all decisions about their own body. They make reference to a popular physician and gender clinic director's claim that gender-affirming medicine means that "you are best equipped to make decisions about your own body," full stop."<sup>150</sup>

144. Sweden and Finland have, on the other hand, scaled back their protocols concerning adolescent transgender treatments after witnessing surging cases and the sex-ratio inversion—far more natal girls than boys seeking medical treatment for gender dysphoria. Finnish guidelines now hold that that identity exploration is a natural phase of adolescence and therefore medical interventions ought to be restricted until their "identity and personality development appear to be stable." Brain development, they observe, continues until early adulthood—about age

<sup>&</sup>lt;sup>149</sup> Edwards-Leeper & Anderson (2021), paragraph 6.

<sup>&</sup>lt;sup>150</sup> Ibid., paragraph 13.

25—which affects young people's ability to assess the consequences of their decisions on their own future selves for rest of their lives.<sup>151</sup>

145. "Cross-sex identification in childhood, even in extreme cases, generally disappears during puberty," the Finnish document maintains. Moreover, the new guidelines prioritize non-invasive psychotherapeutic interventions as the first course of action, due to "variations in gender identity in minors."<sup>152</sup> Finally, Finnish guidelines similarly recommend further study, citing "a need for more information on the disadvantages of procedures and on people who regret them."<sup>153</sup>

146. Sweden's rollback—in the wake of a 1,500 percent increase in youth gender clinic referrals over a ten-year period—is even more pronounced. Hormonal treatments will no longer be offered to persons under age 18, although clinical trials research on 16-18-year-olds will be allowed. This followed a late 2019 Swedish health system publication and a similar evidence review published in October 2020 that revealed little evidence to suggest that puberty-blocking and hormonal treatments improve the mental health and psychosocial functioning of minors. The literature provides very little knowledge about their safety in the long term.<sup>154</sup>

## F. The Department of Justice's Dramatic Flip-Flop on *Bostock*

147. Not to be overlooked in a discussion of matters bearing on the politically-charged nature of issues affecting persons who identify as transgender is the Department of Justice (DOJ) Civil Rights Division's dramatic flip-flop on implementing the U.S. Supreme Court's decision in

<sup>&</sup>lt;sup>151</sup> Council for Choices in Healthcare (COHERE). (2020). Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendation-summary. Healthcare Services Selection Council (Palko). Government, Finland. https://palveluvalikoima.fi/documents/1237350/22895008/Summary\_minors\_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary\_minors\_en.pdf

<sup>&</sup>lt;sup>152</sup> Council for Choices in Healthcare (COHERE) (2020).

<sup>153</sup> Ibid.

<sup>&</sup>lt;sup>154</sup> Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) (2019).

*Bostock v. Clayton County, Georgia.* That decision held that firing an individual because they are transgender violates Title VII of the Civil Rights Act.

148. On January 17, 2021, the DOJ's Civil Rights Division issued a memorandum addressing *Bostock*'s implications for various provisions of law, for religious liberty, and for the DOJ's own employment practices.<sup>155</sup> But a mere five days later—after the inauguration of a new presidential administration—the Civil Rights Division withdrew the memorandum.<sup>156</sup> The whiplash-inducing speed with which the Civil Rights Division reversed itself after the new administration took over simply highlights the politically-charged nature of the matter.

149. I have reviewed the Civil Rights Division's statement of interest filed in this lawsuit, which accentuates the point to an even greater degree. The Civil Rights Division's January 17, 2021 memorandum articulated several reasons why the *Bostock* decision did not bear on the Equal Protection Clause. But on June 17, 2021, the Civil Rights Division filed a statement of interest in this lawsuit that repeatedly appeals to *Bostock* in support of the plaintiffs' Equal Protection claim in this lawsuit. The DOJ Civil Rights Division's direct contradiction of the precise legal position that it took only a few months prior renders undeniable the politically-charged nature of matters bearing on individuals who identify as transgender.

# VI. ASSESSING THE RISK OF SUICIDE AS MOTIVATION FOR "AFFIRMATIVE" TREATMENT

150. Parents' fears about children's suicide are understandable and ought never to be dismissed. However, such fears should not override scholarly evaluations of suicidality—which

<sup>&</sup>lt;sup>155</sup> Daukas, J. B. (2021, January 17). Department of Justice memorandum to the Civil Rights Division on the application of *Bostock v. Clayton County*. Although the DOJ removed the January 17 memorandum from the Internet, it is archived online here: https://web.archive.org/web/20210120125231/https://www.justice.gov/crt/page/file/1356531/download

<sup>&</sup>lt;sup>156</sup> Friel, G. B. (2021, January 22). Department of Justice memorandum to the Civil Rights Division withdrawing the memorandum on the application of *Bostock v. Clayton* County. https://www.justice.gov/crt/page/file/1373621/download

the APA defines as risk of suicide indicated by ideation and intent—with suicide itself.<sup>157</sup> The association of the two (suicide and suicidality) varies notably in subpopulations.<sup>158</sup> Too often, however, suicidal "ideation" is equated with "attempted" suicide, and even seems to be treated as a proxy for suicide.

151. For example, Dr. Turban proposes suicidality as an important motivation for endorsing the "affirmative" approach to treating dysphoric adolescents.<sup>159</sup> But suicidal ideation and suicidal behavior are not as tightly associated as some surmise. For example, young adults are at least three times as likely to report past-year thoughts of suicide than are adults age 50 and older.<sup>160</sup> But the actual suicide rate among older Americans remains well above that among young adults, and far above children below age 15.<sup>161</sup> New data, collected during the COVID-19 era, complicates matters further, given that young adults ages 18-24 reported suicidal thoughts in the past month at rates 12 times higher than that of respondents age 65 and over, and six times that reported by those between 45 and 64 years old (25.5, 3.8, and 2.0 percent, respectively).<sup>162</sup>

<sup>&</sup>lt;sup>157</sup> https://dictionary.apa.org/suicidality

<sup>&</sup>lt;sup>158</sup> Han, B., Compton, W. M., Gfroerer, J., & McKeon, R. (2015). Prevalence and correlates of past 12-month suicide attempt among adults with past-year suicidal ideation in the United States. *The journal of clinical psychiatry*, *76*(3), 295–302. https://doi.org/10.4088/JCP.14m09287

<sup>&</sup>lt;sup>159</sup> Turban, J. L., King, D., Carswell, J. M., & Keuroghlian, A. S. (2020). Pubertal suppression for transgender youth and risk of suicidal ideation. *Pediatrics, 145,* e20191725. https://doi.org/10.1542/ peds.2019-1725. This touted study, however, proves insufficient for the claims it makes. Oxford University sociologist Michael Biggs argues that the study leans on "a low-quality survey which is known to have elicited unreliable answers on puberty blockers." Biggs concludes that Turban's study "provided no evidence to support the recommendation 'for this treatment to be made available for transgender adolescents who want it." See Biggs, M. (2020). Puberty blockers and suicidality in adolescents suffering from gender dysphoria. *Archives of Sexual Behavior, 49,* 2227-2229.

https://link.springer.com/content/pdf/10.1007/s10508-020-01743-6.pdf

<sup>&</sup>lt;sup>160</sup> Lipari, R. N., Hughes, A., & Williams, M. (2016, June 16). State estimates of past year serious thoughts of suicide among young adults: 2013 and 2014. *The CBHSQ report*, 1-7. Substance Abuse and Mental Health Services Administration (US). PMID: 27854411.

 <sup>&</sup>lt;sup>161</sup> Hedegaard, H., Curtin, S. C., Warner, M. (2021). Suicide mortality in the United States, 1999–2019. *NCHS data brief, no. 398*. Hyattsville, MD: National Center for Health Statistics. doi: https://dx.doi.org/10.15620/cdc:101761.
 <sup>162</sup> Czeisler, M. É., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Weaver, M. D., Robbins, R., Facer-Childs, E. R., Barger, L. K., Czeisler, C. A., Howard, M. E. & Rajaratnam, S. M. W. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic — United States, June 24–30. *MMWR Morbidity & mortality weekly report, 69*(32), 1049–1057. doi: http://dx.doi.org/10.15585/mmwr.mm6932a1

Based on thoughts of suicide, then, it could be said that there is a crisis of suicidality among the young. But the crisis of actual suicide affects older Americans to a more significant degree.

152. One of the most recent evaluations of suicidal ideation using the CDC's 2019 Youth Risk Behavior Survey noted that 19 percent of Americans ages 14-18 report having seriously thought about suicide (i.e., had suicidal ideation) in 2019.<sup>163</sup> Nine percent reportedly attempted suicide. The CDC did not track such rates among youth identifying as transgender, but did note elevated rates among individuals identifying as lesbian, gay, or bisexual. Previous research has noted that between 25 to 30 percent of adolescents identifying as transgender report having attempted suicide during their lifetimes.<sup>164</sup>

153. Suicides and attempted suicides among the self-identified transgender population are indeed higher than those in the population at large. It is, however, difficult to determine this subpopulation's scope of suicide risk with accuracy. Moreover, suicide rates have increased strikingly in the general population over the past decade.<sup>165</sup>

154. Nevertheless, localized estimates of suicidal ideation and attempts among transgender-identifying adolescents vary notably. A 2017 chart review from a Cincinnati gender

 <sup>&</sup>lt;sup>163</sup> Ivey-Stephenson, A. Z., Demissie, Z., Crosby, A. E, Stone, D. M., Gaylor, E., Wilkins, N., Lowry, R., & Brown, M. (2020). Suicidal ideation and behaviors among high school students - Youth Risk Behavior Survey, United States, 2019. *MMWR Suppl., 69*(Suppl. 1), 47-55. doi: 10.15585/mmwr.su6901a6. See also: Gender Identity Development Service. (2021). Evidence base: Psychosocial difficulties. https://gids.nhs.uk/evidence-base
 <sup>164</sup> Olson, J., Schrager, S. M., Belzer, M., Simons, L. K., & Clark, L. F. (2015). Baseline physiologic and psychosocial characteristics of transgender youth seeking care for gender dysphoria. *Journal of adolescent health, 57*(4), 374–380; Grossman, A.H., Park, J.Y., & Russell, S.T. (2016). Transgender youth and suicidal behaviors: Applying the interpersonal psychological theory of suicide. *Journal of gay & lesbian mental health, 20*(4), 329–349.
 <sup>165</sup> Whalen, J. (2018, May 15). Youth suicidal behavior is on the rise, especially among girls. *Wall street journal.* https://www.wsj.com/articles/youth-suicidal-behavior-is-on-the-rise-especially-among-girls-1526443782

clinic noted that among patients (ages 12-22) diagnosed with gender dysphoria, 30 percent reported at least one suicide attempt.<sup>166</sup> (Overall, 58 percent of the Cincinnati clinic patients exhibited at least one additional psychiatric diagnosis.) Two similar studies support these findings, with attempted suicide rates among transgender or dysphoric adolescents of between 26 and 31 percent.<sup>167</sup> Others note lower rates, including 14 percent in a Toronto clinic and 10 percent in an Australian clinic.<sup>168</sup>

155. The UK's Gender Identity Development Service (GIDS) observes that suicide remains "extremely rare" among dysphoric youth, even while noting their rates of self-harm are consonant with those among adolescents in the general population. An extensive, longitudinal "chart study" of all 8,263 adult, adolescent, and child referrals to an Amsterdam gender clinic between 1972 and 2017 documented that 41 natal men (0.8 percent) and 8 natal women (0.3 percent) died by suicide.<sup>169</sup> Among the former, suicide deaths had decreased over time, while it did not change in natal women. Only four suicide deaths were observed among patients referred to the clinic before the age of 18 (0.2 percent), which was a lower risk than among adult patients (0.7 percent).

<sup>&</sup>lt;sup>166</sup> Peterson, C. M., Matthews, A., Copps-Smith, E. and Conard, L. A. (2017). Suicidality, self-harm, and body dissatisfaction in transgender adolescents and emerging adults with gender dysphoria. *Suicide and life-threatening behavior*, 47, 475-482. https://doi.org/10.1111/sltb.12289

<sup>&</sup>lt;sup>167</sup> Eisenberg, M. E., Gower, A. L., McMorris, B. J., Rider, G. N., Shea, G., & Coleman, E. (2017). Risk and protective factors in the lives of transgender/gender nonconforming adolescents. *Journal of adolescent health*, *61*(4), 521-526. https://doi.org/10.1016/j.jadohealth.2017.04.014; Grossman, A. H. & D'Augelli, A. R. (2007). Transgender youth and life-threatening behaviors. *Suicide and life-threatening behavior*, *37*(5), 527-537. https://guilfordjournals.com/doi/abs/10.1521/suli.2007.37.5.527

<sup>&</sup>lt;sup>168</sup> Sorbara, J. C., Chiniara, L. N., Thompson, S., & Palmert, M. R. (2020). Mental health and timing of gender-affirming care. *Pediatrics*, *146*(4). https://doi.org/10.1542/peds.2019-3600; Kozlowska et al. (2021).

<sup>&</sup>lt;sup>169</sup> The median age at first visit, however, was 25. See Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M, de Blok, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). Trends in suicide death risk in transgender people: Results from the Amsterdam cohort of Gender Dysphoria study (1972–2017). *Acta psychiatrica Scandinavica*, *141*(6), 486-491. https://doi.org/10.1111/acps.13164

156. The Tavistock report also revealed that after a year on puberty blockers, a significant increase was noted in responses to the statement "I deliberately try to hurt or kill myself." This finding, however, was not replicated across the duration of the study.<sup>170</sup>

157. In 2020, the Swedish National Board of Health and Welfare reported that minors with gender dysphoria have a high incidence of "co-occurring psychiatric diagnoses, self-harm behaviors, and suicide attempts compared to the general population" and that suicide mortality rates are higher among people with gender dysphoria than in the general population. They also observe, however, complications in figuring out what is to blame: "At the same time, people with gender dysphoria who commit suicide have a very high rate of co-occurring serious psychiatric diagnoses, which in themselves sharply increase risks of suicide. Therefore, it is not possible to ascertain to what extent gender dysphoria alone contributes to suicide, since these psychiatric diagnoses often precede suicide."<sup>171</sup>

158. Hence, the evidence for actual suicide risk among gender dysphoric minors is simply unclear, and not just because completed suicides are far more apt to be documented in terms of demographic characteristics rather than sexual and gender-related ones. Rather, as one psychiatrist aptly notes, "Suicide is rare and noisy," that is, understanding particular causes is challenging. The white male suicide rate, for example, is the highest in the United States by a significant margin. But to suggest that race or sex plays a compelling motivation in suicidal decision-making does not make sense. Complicating matters here is the known, elevated frequency

<sup>&</sup>lt;sup>170</sup> Biggs (2019).

<sup>&</sup>lt;sup>171</sup> Swedish National Board of Health and Welfare. (2020). The evolution of the diagnosis of gender dysphoria: Prevalence, co-occurring psychiatric diagnoses and mortality from suicide. *Socialstryrelsen*, p. 11.

of "significant psychopathology" among dysphoric adolescents.<sup>172</sup> This makes direct, unmediated claims about the causes of suicidal ideation very difficult.

159. An earlier study of 55 transgender youth reported that "nearly half of the sample reported having seriously thought about taking their lives and one quarter reported suicide attempts."<sup>173</sup> Among them, however, "a significantly greater proportion of those who had attempted suicide expressed weight-related body dissatisfaction than those who had not," a finding observed in other studies as well.<sup>174</sup> They also tended to ruminate about how others evaluated their bodies.

160. Simply documenting elevated "suicidality" among self-identified transgender youth does not recommend a particular treatment approach.<sup>175</sup> As one psychoanalyst put it, "We treat suicide first of all by keeping people safe, and by helping them become more resilient."<sup>176</sup> Understanding the relationship between gender dysphoria and suicidality is complex; that is, there is an association, but the dysphoria may or may not be a central cause. Research has noted recently that particular aspects of body dissatisfaction may constitute independent risk factors for suicidality among patients with gender dysphoria.<sup>177</sup> In other words, dissatisfaction with appearance—all the more in the age of Instagram and the selfie—may be a factor in the elevated risk of attempted suicide. In the absence of data analyses that can control for the effects of other confounding and contributing factors, it becomes very difficult to establish that gender dysphoria is

<sup>&</sup>lt;sup>172</sup> Kaltiala-Heino, R., Sumia, M., Työläjärvi, M., & Lindberg, N. (2015). Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. *Child and adolescent psychiatry and mental health*, *9*(1), 1-9. https://doi.org/10.1186/s13034-015-0042-y

<sup>&</sup>lt;sup>173</sup> Grossman & D'Augelli (2007), p. 527.

<sup>&</sup>lt;sup>174</sup> Day et al. (2019), p. 2; Grossman & D'Augelli (2007).

<sup>&</sup>lt;sup>175</sup> Day, D. S., Saunders, J. J., & Matorin, A. (2019). Gender dysphoria and suicidal ideation: Clinical observations from a psychiatric emergency service. *Cureus*, *11*(11), e6132. https://doi.org/10.7759/cureus.6132 <sup>176</sup> Shrier (2020), pp. 137-138.

<sup>&</sup>lt;sup>177</sup> Peterson et al. (2017).

a solitary or primary driver of suicidality, all the more since the majority of gender dysphoric minors never attempt suicide.

161. The specter of suicide has nevertheless become a central narrative among supporters of the affirmative treatment approach. Some advocates compare puberty suppression to cancer treatments, claiming that these interventions are as "life-saving" for gender-dysphoric youth as oncology treatments are for those afflicted with cancer.<sup>178</sup> However, the science behind claims that such treatments lead to sustained improvement in mental health—improvement that cannot possibly occur in its absence—is remarkably weak.

162. Affirmative clinicians Dr. Edwards-Leeper and her transgender co-author Dr. Erica Anderson have criticized advocates' weaponization of suicidality—a tool they believe to be wielded by the "affirm without question" wing of clinicians, whose argument can be summarized as follows: support the minor's self-diagnosis and put them on the pathway to transition, lest they take their own life. Edwards-Leeper and Anderson have heard enough; the "specter" of suicide "should not be used to push forward unrelated medical treatment without professional care or attention for each patient."<sup>179</sup>

<sup>&</sup>lt;sup>178</sup> In the Tavistock study, children were barred from beginning GnRha treatment if their baseline bone density was too low or agreed to stop treatment if it fell below a certain threshold. In the original Dutch protocol, several participants had to discontinue treatment due to medical complications from the hormone therapy. Did these children die from lack of medicine? Was the progression of their natural puberty and release of sex congruent hormones akin to the progression of metastatic cancer? Of course not. One hopes that these children were rightly encouraged in resilience, rather than surmise that they were doomed to commit suicide because they could not tolerate living in their body apart from transgender medical interventions.

<sup>&</sup>lt;sup>179</sup> Edwards-Leeper & Anderson, E. (2021), paragraph 15.

# VII. THE ROLE OF VALUES IN THE PRODUCTION OF SCIENCE

163. Many scientists have long asserted the reality and importance of the fact/value distinction. That is, there are facts—real things—and then there are values, our opinions or attitudes. The study of transgender medicine undermines any strong confidence in this distinction because what a person values shapes what they discern as facts.

164. Misunderstanding the place of values in science is not just an intellectual problem. It can have practical consequences, especially where science has implications for public health and policy. A trio of philosophers aptly note: "If values play a role in science, then the public and public officials cannot take scientific results as given and scientific authorities as beyond challenge. Responsible public policy will require responsible use of science; responsible use of science will require explicit critical awareness of its value assumptions."<sup>180</sup>

165. Although this report has focused on the scientific evidence, researcher behavior, and the culture of scientific organizations, it is nevertheless easy to observe how values saturate "affirmative" approaches to treating gender dysphoria. This is not a criticism per se. Values necessarily infuse the sciences, including the medical sciences as well. The Endocrine Society openly notes how particular values affect their counsel: "These recommendations place a high value on avoiding an unsatisfactory physical outcome when secondary sex characteristics have become manifest and irreversible, a higher value on psychological well-being, and a lower value on avoiding potential harm from early pubertal suppression."<sup>181</sup> In other words, the Endocrine Society is more concerned with helping young people achieve a certain subjective satisfaction

<sup>&</sup>lt;sup>180</sup> Kincaid, H., Dupré, J., & Wylie, A., (Eds.). (2007). *Value-free science? Ideals and illusions*. Oxford University Press, pp. 4-5.

<sup>&</sup>lt;sup>181</sup> Hembree et al. (2017), p. 3881.

with their physical appearance than it is avoiding possible harms of experimental medications, the threat of sterilization, or addressing the long-term health and well-being of its young patients.

166. The Endocrine Society is not alone here. Even Dr. de Vries and her colleagues, cited earlier as one-time representatives of the (less reckless but still experimental) Dutch protocol, make a play for the same privileging of physical appearance in their criticism of the UK court's *Tavistock* decision: "Our deep concern is that the High Court overlooked . . . the lifelong benefits of having a physical appearance which is congruent with one's gender identity (e.g., no or less breast development and less feminine body shape in an affirmed male and no low voice, Adam's apple, or masculine facial features in an affirmed female)."<sup>182</sup>

167. Indeed, value-laden questions may outnumber purely clinical ones in this domain. Is the physician's role one of granting the requests of patients in order to fulfill what the latter believe or want to be true, or is the physician's role to treat the gender dysphoria with as little longstanding harm to the wellbeing of the body and mind as possible? Are we to master our feelings and emotions or be subject to them?

168. The very experience of social, hormonal, and surgical "transition" is a value leap—the introduction of a new meaning of "life cycle." The "body and its meanings" are now considered "contingent."<sup>183</sup> The concept of "gender identity" requires body dissociation de facto, subjugating material reality to the subjective feelings of youth susceptible to suggestion.

169. Dr. Adkins comments on pre-pubertal social transitioning behaviors, including "allowing children to wear clothing, to cut or grow their hair, to use names and pronouns, and to access restrooms and other sex-separated facilities and activities in line with their gender identity

<sup>&</sup>lt;sup>182</sup> de Vries et al. (2021), p. 4.

<sup>&</sup>lt;sup>183</sup> Pyne, J. (2014). Gender independent kids: A paradigm shift in approaches to gender non-conforming children. *The Canadian journal of human sexuality*, 23(1), 1-8, p. 5. https://doi.org/10.3138/cjhs.23.1.CO1

instead of the sex assigned to them at birth."<sup>184</sup> But her description is wrong because these behaviors are not in line with some immutable thing called a "gender identity." Rather, they are in line with current, valued (and culture-specific) expressions of sex-typed behavior. If "gender identity," a concept not invented until mere decades ago, was associated with each of these practices, from where (and why) did such norms arise? Instead of questioning the exclusive validity of two-dimensional, historically contingent gender stereotypes (e.g., the cartoonishly "feminine" Barbie doll or an excessively "masculine" counterpart), many have instead capitulated to (social) media-intensified values about dress, attire, look, and practice. Rather than impugn one's own body, perhaps norms associated with this or that "gender identity" ought to be more flexible.

170. Bernadette Wren, the retired senior clinician from the Tavistock clinic, wrote in 2014 how trendy postmodern ideas about gender had impacted clinicians' work with children and adolescents, namely, by adopting the idea of "all gender as fictional and artificial." After discussing the possible conundrums that arise when directing minors toward irreversible physical changes in light of these conceptions, Wren concluded: "the meaning of trans is constantly shaped and re-shaped, [and] rests on no foundation of truth. The therapist is not burdened with needing to be right or certain, but to offer a reflexive and thoughtful space to help clients explore the architecture and borders of their gendered world view."<sup>185</sup>

171. Wren recognizes the value-laden nature of gender medicine for minors: "We are concerned about overstepping what the current evidence can tell us about the safety of our interventions. And we are fully alive to the complexities of informed consent, especially with respect to irreversible bodily change and fertility—and to the possibility of young people having later

<sup>&</sup>lt;sup>184</sup> Adkins (2021), p. 7.

<sup>&</sup>lt;sup>185</sup> Wren, B. (2014). Thinking postmodern and practising in the enlightenment: Managing uncertainty in the treatment of children and adolescents. *Feminism & Psychology*, 24(2), 271-291, p. 271 and p. 287, respectively.

misgivings around medical intervention. We see that these are not matters of narrow 'clinical' judgement, but relate to broader social acceptance of the challenges brought by new medical technologies, new ideologies of self-determination and new models of parental responsiveness and love."<sup>186</sup> Unquestionably, values saturate this domain.

#### VIII. CONCLUSION

172. The field of adolescent transgender medicine is saturated by conflict over competing values. High quality longitudinal research is rare. Randomized clinical trials research has not occurred. Bait-and-switch tactics are being employed—conclusions from studies based on patients without psychological comorbidities are being applied to patients displaying anxiety disorders, autism spectrum disorders, suicidality, and self-harming behaviors. Protocols are becoming more permissive (and aggressive in "affirmation"), motivated by a market-driven medical culture in which emphasis is placed on liking what one sees in a mirror, or, increasingly, how others respond to a selfie. Careful practitioners are put in a position to only guess at what may result based on research conducted under quite different conditions. To object, however, invites professional censure. Meanwhile, the basics of the explosion in gender dysphoria, especially among natal girls, remain understudied and undertheorized—perhaps now on purpose—even as minors' questionable ability to consent is validated because minors (and their parents) are demanding the experimental treatments. This is not how healthy medical research operates.

173. A premature—and still evolving—"consensus" has been contrived among some professional organizations in this field of medicine. Activists and other interested parties have played a significant role in shaping medical policy, and researchers have taken steps to suppress public discussion and debate and to push medical practice in directions that outpace and even

<sup>&</sup>lt;sup>186</sup> Wren, B. (2020). Debate: You can't take politics out of the debate on gender-diverse children. *Child and adolescent mental health*, 25(1), 40-42, p. 41. https://doi.org/10.1111/camh.12350

contradict the available evidence. As I have documented, such practices are often openly observable. The pace and extent of ideological capture is staggering.

174. Bernadette Wren, the retired Tavistock senior clinician quoted earlier, helps articulate the dilemma here. "For some advocates," a term that certainly includes the plaintiffs in this case, "[a] justice-based approach extends to the demand that all gender-diverse people, including the young, should have the unquestionable right to make fully autonomous treatment decisions – the full freedom, we might say, to make their own mistakes."<sup>187</sup>

175. Based on the current state of the science, giving minors the power to make "fully autonomous treatment decisions" and "make their own mistakes" here is to abdicate responsibility and to abandon them to the risks of irreversible and long-term consequences. Medical treatment protocols for youth gender dysphoria are becoming more aggressive, at earlier ages, even as interest in discerning the long-term presence and stability of the dysphoria before treatment is diminishing.

176. Given the state of disarray in the science, the activist capture of medical organizations, and the market motivations shaping medical decision-making in a surging domain, there are compelling reasons to protect young people by ensuring that they reach adulthood before submitting to experimental, life-altering gender transition treatments.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 10, 2021.

Mar Br

Dr. Mark Regnerus

<sup>&</sup>lt;sup>187</sup> Wren, B. (2021), paragraph 20.

# MARK REGNERUS

(December 2021)

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### **EDUCATION**

Ph.D., Sociology, University of North Carolina at Chapel Hill, 2000.

M.A., Sociology, University of North Carolina at Chapel Hill, 1997.

B.A., Sociology, with high honors, Trinity Christian College, 1993.

### **PROFESSIONAL APPOINTMENTS**

2018-Present: Professor, Department of Sociology, The University of Texas at Austin.

2007–2018: Associate Professor, Department of Sociology, The University of Texas at Austin.

2002–2014: Faculty Research Associate, Population Research Center, The University of Texas at Austin.

2002–2007: Assistant Professor, Department of Sociology, The University of Texas at Austin.

2001–2002: Assistant Professor of Sociology, Department of Sociology and Social Work, and Director, Center for Social Research, Calvin College.

2000–2001: Postdoctoral Research Associate, Carolina Population Center.

### PUBLICATIONS

#### **Books**

Regnerus, Mark. 2020. *The Future of Christian Marriage*. New York, NY: Oxford University Press. (268 pages)

Reviewed or discussed in Journal for the Scientific Study of Religion, Publishers Weekly, National Review, Choice, World, Public Discourse, and Christianity Today.

Regnerus, Mark. 2017. *Cheap Sex: The Transformation of Men, Marriage, and Monogamy*. New York, NY: Oxford University Press. (262 pages)

Reviewed in The Atlantic Monthly, Commentary, Washington Post, New York, Humanum, Men & Masculinities, Public Discourse, National Review, Claremont Review of Books, Nevada Appeal, Jet, Contemporary Sociology, and The Globe and Mail.

Regnerus, Mark and Jeremy Uecker. 2011. Premarital Sex in America: How Young Americans Meet, Mate, and Think about Marrying. New York, NY: Oxford University Press. (295 pages) Reviewed in American Journal of Sociology; BYU Studies Quarterly; Commentary; Contemporary Sociology; Culture, Health & Sexuality; First Things; Horizons; INTAMS Review; Journal of Family Theory & Review; Journal of Popular Romance Studies; Journal of Youth and Adolescence; Mercatornet; Public Discourse; Sex Roles; The New Republic; and The New York Times.

Regnerus, Mark D. 2007. *Forbidden Fruit: Sex and Religion in the Lives of American Teenagers*. New York: Oxford University Press. (304 pages)

Reviewed in American Journal of Sociology, Contemporary Sociology, Journal of Youth and Adolescence, Journal of Sex Research, and The New Yorker.

### Peer-Reviewed Journal Articles (including Accepted and In Press)

- Regnerus, Mark and Brad Vermurlen. 2021. "Attitudes toward Hormonal and/or Surgical Interventions for Adolescents Experiencing Gender Dysphoria." Forthcoming, *Archives of Sexual Behavior*.
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- McFarland, Michael J., Jeremy E. Uecker, and Mark D. Regnerus. 2010. "The Role of Religion in Shaping Sexual Frequency and Satisfaction: Evidence from Married and Unmarried Older Adults." *The Journal of Sex Research* 47: 1-12.
- Stokes, Charles E. and Mark D. Regnerus. 2009. "When Faith Divides Family: Religious Discord and Adolescent Reports of Parent-Child Relations." *Social Science Research* 38: 155-167.

- Hill, Terrence D., Amy M. Burdette, Mark Regnerus, and Ronald J. Angel. 2008. "Religious Involvement and Attitudes Toward Parenting Among Low-Income Urban Women." *Journal of Family Issues* 29(7): 882-900.
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- Regnerus, Mark D. and Jeremy E. Uecker. 2007. "Religious Influences on Sensitive Self-Reported Behaviors: The Product of Social Desirability, Deceit, or Embarrassment?" Sociology of Religion 68(2): 145-163.
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- Trinitapoli, Jenny and Mark D. Regnerus. 2006. "Religion and HIV Risk Behaviors among Married Men: Initial Results from a Study in Rural Sub-Saharan Africa" *Journal for the Scientific Study of Religion* 45: 505-528.
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- Regnerus, Mark D. and Amy Burdette. 2006. "Religious Change and Adolescent Family Dynamics." *The Sociological Quarterly* 47: 175-194.
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- Regnerus, Mark D. and Christian Smith. 2005. "Selection Effects in Studies of Religious Influence." *Review of Religious Research* 47: 23-50.
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- Regnerus, Mark D. 2003. "Religion and Positive Adolescent Outcomes: A Review of Research and Theory." *Review of Religious Research* 44: 394-413.

Regnerus, Mark D. and Glen H. Elder, Jr. 2003. "Religion and Vulnerability among Low-Risk

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- Smith, Christian, Robert Faris, Melinda Lundquist Denton, and Mark D. Regnerus. 2003. "Mapping American Adolescent Subjective Religiosity and Attitudes of Alienation Toward Religion: A Research Report." *Sociology of Religion* 64: 111-133.
- Regnerus, Mark D. 2002. "Friends' Influence on Adolescent Theft and Minor Delinquency: A Developmental Test of Peer-Reported Effects." *Social Science Research* 31: 681-705.
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- Regnerus, Mark. 2000. "Shaping Schooling Success: A Multi-level Study of Religious Socialization and Educational Outcomes in Urban Public Schools." *Journal for the Scientific Study of Religion* 39: 363-370.
- Steensland, Brian, Jerry Park, Mark Regnerus, Lynn Robinson, Bradford Wilcox, and Robert Woodberry. 2000. "The Measure of American Religion: Toward Improving the State of the Art." Social Forces 79: 291-318.
- Regnerus, Mark, David Sikkink, and Christian Smith. 1999. "Voting with the Christian Right: Contextual and Individual Patterns of Electoral Influence." *Social Forces* 77 (4): 1375-1401.
- Regnerus, Mark and Christian Smith. 1998. "Selective Deprivatization among American Religious Traditions: The Reversal of the Great Reversal." *Social Forces* 76: 1347-72.
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#### **Peer-Reviewed Book Chapters**

- Regnerus, Mark D. 2010. "Religion and Adolescent Sexual Behavior." In *Religion, Families, and Health: Population-Based Research in the United States* (Christopher G. Ellison and Robert A. Hummer, editors), pp 61-85. New Brunswick, NJ: Rutgers University Press.
- Regnerus, Mark D. 2005. "Adolescent Delinquency." Pp. 259-276 in Helen Rose Ebaugh (ed.), Handbook of Religion and Social Institutions. New York: Kluwer/Plenum.
- Sikkink, David and Mark Regnerus. 1996. "For God and the Fatherland: Protestant Symbolic Worlds and the Rise of German National Socialism." Pp. 133-147 in Christian Smith (ed.), *Disruptive Religion: The Force of Faith in Social Movement Activism.* New York: Routledge.

## Non-Peer-Reviewed Journal Articles and Book Chapters

- Regnerus, Mark D. 2020. "Measurement and Analytic Vulnerabilities in the Study of Structural Stigma." (Commentary). *Social Science & Medicine* 244: 112567.
- Regnerus, Mark D. 2019. "Sexual Media as Competition in the Heterosexual Relationship Market" (Commentary). *Archives of Sexual Behavior* 48: 2279-2281.
- Regnerus, Mark. 2019. "Comment on Barbara Risman's review of Cheap Sex: The Transformation of Men, Marriage, and Monogamy." *Contemporary Sociology* 48: 130-131.
- Regnerus, Mark D. 2018. "Reproducing Homes: Intergenerational Transmission of Marriage and Relationship Legacy." In *The Home: Multidisciplinary Reflections* (Antonio Argandoña, editor). Cheltenham, UK: Edward Elgar. 24 pp.
- Regnerus, Mark D. 2015. "The Family as First Building Block." In *The Thriving Society: On the Social Conditions of Human Flourishing* (James R. Stoner, Jr. and Harold James, editors), pp 49-66. Princeton, NJ: The Witherspoon Institute.
- Regnerus, Mark. 2012. "Contemporary Mating Market Dynamics, Sex-Ratio Imbalances, and Their Consequences." *Society* 49: 500-505.
- Regnerus, Mark. 2012. "Parental Same-Sex Relationships, Family Instability, and Subsequent Life Outcomes for Adult Children: Answering Critics of the New Family Structures Study with Additional Analyses." *Social Science Research* 41: 1367-1377.
- Regnerus, Mark D. 2010. "Sexual Behavior in Young Adulthood." The Changing Spirituality of Emerging Adults Project. 16 pp.
- Regnerus, Mark D. 2009. "Imitation Sex and the New Middle Class Morality" (chapter 6 of *Forbidden Fruit*), reprinted in *Speaking of Sexuality: Interdisciplinary Readings, 3<sup>rd</sup> Edition* (Nelwyn B. Moore, J. Kenneth Davidson, and Terri D. Fisher, editors). New York, NY: Oxford University Press.
- Regnerus, Mark D. and Jeremy E. Uecker. 2007. "How Corrosive Is College to Religious Faith and Practice?" Social Science Research Council. 6 pp.
  - Reprinted as Regnerus, Mark D., and Jeremy E. Uecker. 2008. "College Students Value Religion." *Opposing Viewpoints in Context: America's Youth*. Jamuna Carroll, editor. Farmington Hills, MI: Greenhaven Press. <u>link.galegroup.com/apps/doc/EJ3010300238/OVIC?u=txshracd2598&xid=ea8e31f3</u>. 7 pp.
- Regnerus, Mark D., Christian Smith, and Melissa Fritsch. "Religion in the Lives of American Adolescents: A Review of the Literature." A Research Report of the National Study of Youth and Religion, No. 3. Chapel Hill, NC: University of North Carolina, 2003.

Regnerus, Mark D. "Living up to Expectations." Report, Center for Research on Religion and Urban Civil

Society, University of Pennsylvania, 2003.

- Regnerus, Mark D. "Making the Grade: The Influence of Religion upon the Academic Performance of Youth in Disadvantaged Communities." Report, Center for Research on Religion and Urban Civil Society, University of Pennsylvania, 2001.
- Regnerus, Mark. "Challenges to Liberal Protestant Identity and Diversity Work: a Qualitative Study." Sociological Analysis 1998, 1: 139-149.

#### **Book Reviews**

- Review of: *Nationalizing Sex: Fertility, Fear, and Power*, Richard Togman (New York: Oxford University Press, 2019). In *Review of Politics* 82: 500-502 (2020).
- Review of: *Charitable Choices: Religion, Race, and Poverty in the Post-Welfare Era*, John P. Bartkowski and Helen A. Regis (New York: NYU Press). In *Social Forces* 82: 861-863 (2003).
- Review of: *They Still Pick Me Up when I Fall: The Role of Youth Development and Community Life*, Diana Mendley Rauner (New York: Columbia University Press). In *Social Forces* 79: 1545-1547 (2001).

#### Select Essays and Op-Eds (all sole-authored)

- "Weak Data, Small Samples, and Politicized Conclusions on LGBT Discrimination." *Public Discourse*, January 12, 2020.
- "New Data Show 'Gender-Affirming' Surgery Doesn't Really Improve Mental Health. So Why are the Study's Authors Saying It Does?" *Public Discourse*, November 13, 2019.
- "Does 'Conversion Therapy' Hurt People who Identify as Transgender? The New JAMA Psychiatry Study Cannot Tell Us." *Public Discourse*, September 18, 2019.
- "Queering Science." First Things, December 2018.
- "The Death of Eros." First Things, October 2017.
- "Can Same-Sex Marriage Really Reduce Teen Suicide?" Public Discourse, February 24, 2017. 4 pp.
- "Hijacking Science: How the 'No Differences' Consensus about Same-Sex Households and Children Works." *Public Discourse*, October 14, 2016. 5 pp.
- "Making Differences Disappear: The Evolution of Science on Same-Sex Households." *Public Discourse*, May 12, 2015. 4 pp.
- "Minecraft over Marriage." First Things, March 31, 2015. 5 pp.
- "The Good-Enough Marriage." First Things, December 4, 2014. 4 pp.
- "The Pornographic Double-Bind." First Things, November 11, 2014. 3 pp.
- "Diversity as Slogan and Reality." First Things, October 9, 2014. 3 pp.
- "Resurrecting the Dead in America." First Things, September 11, 2014. 4 pp.

"The Government's in Your Bedroom, but This Time It's Okay." National Review, July 16, 2014. 3 pp.

"Right Side of History,' or Primed to Say Yes?" National Review, August 20, 2013. 5 pp.

"Assessing the Australian Study." National Review, June 6, 2013. 3 pp.

"Sex is Cheap: Why Young Men Have the Upper Hand in Bed, Even When They're Failing in Life." *Slate*, February 25, 2011. (9<sup>th</sup>-most read *Slate* article of 2011.) 4 pp.

"Freedom to Marry Young." Washington Post, April 26, 2009. 2 pp.

# **RESEARCH GRANTS**

- Principal Investigator, "The Relationships in America Survey Project." \$328,426 grant from the Austin Institute, January 2014-September 2014. (Approved, 100% under PI's supervision)
- Principal Investigator, "The New Family Structures Study." \$640,000 grant from the Witherspoon Institute, May 2011-August 2013. (Approved, 100% under PI's supervision)
- Principal Investigator, "The New Family Structures Study (supplementary assistance)." \$90,000 grant from the Bradley Foundation, Nov 2011-Nov 2012. (Approved, 100% under PI's supervision)
- Principal Investigator, "The New Family Structures Study." \$55,000 planning grant from the Witherspoon Institute, Oct 2010-June 2011. (Approved, 100% under PI's supervision)
- Principal Investigator, "The New Pentecostals and Political and Social Activism." \$9,565 grant from the National Science Foundation (Dissertation Improvement Grant, for Nicolette Manglos), 2010-2011. (Approved but returned)
- Co-Investigator, "Developing Health Behaviors in Middle Adolescence" (Lynn Rew, PI, The University of Texas at Austin School of Nursing). \$1,276,919 grant from the National Institute of Nursing Research, 2006-2011. (Approved, <5% under Regnerus' supervision). R01-NR009856.
- Principal Investigator, "Testing Differences: The Transfer and Transformation of HIV Testing from the West to Sub-Saharan Africa." \$7,500 grant from the National Science Foundation (Dissertation Improvement Grant, for Nicole Angotti), 2008-2009. (Approved)
- Co-Investigator, "Religious Organizations, Local Norms, and HIV in Africa" (Susan Watkins, PI, University of Pennsylvania). \$864,000 grant from the National Institute of Child Health and Human Development, June 2005-May 2008. (Regnerus is PI of \$279,000 sub-contract to The University of Texas at Austin). R01-HD050142-01.
- Seed grant for "Sex and Emotional Health in Emerging Adulthood." \$4,000 grant from the Population Research Center and \$2,000 grant from the College of Liberal Arts, The University of Texas at Austin, 2007.

# SELECT INVITED PRESENTATIONS

"The Future of Christian Marriage."

- University of Mary, Bismarck, ND, April 2021
- Faulkner University, Montgomery, AL, March 2021
- "The Transformation of Men, Marriage, and Monogamy." Universidad Francisco de Vitoria, Madrid, November 2018.
- Author meets critics panel on *Cheap Sex: The Transformation of Men, Marriage, and Monogamy*. Society for the Scientific Study of Religion, Las Vegas, NV, October 2018.
- "The Transformation of Men, Marriage, and Monogamy." Archdiocese of Denver, September 2018.
- Author meets critics panel on *Virgin Nation: Sexual Purity and American Adolescence* (by Sara Moslener, Oxford University Press, 2016). American Academy of Religion, San Antonio, TX, November 2016.
- "Intergenerational Transmission of Marriage and Relationship Legacy." Home Renaissance Foundation, London, United Kingdom, November 2015.
- "The Future of Marriage and Family in America." University of St. Thomas, Houston, TX, March 2015.
- "The New Family Structures Study and the Challenges of Social Science." Brigham Young University, Provo, UT, October 2014.
- "Sex in America: Sociological Trends in American Sexuality." Ethics and Religious Liberty Commission, Nashville, TN, April 2014.
- "Premarital Sex in America." Department of Sociology, University of North Carolina at Chapel Hill, Chapel Hill, NC, January 2012.
- Book discussion session on *Premarital Sex in America*. Society for the Study of Emerging Adulthood, Providence, RI, October 2011.
- "The Future of Sex and Marriage in American Evangelicalism." National Association of Evangelicals Advisory Board, Washington, D.C., October 2011.
- Heyer Lecture. Austin Presbyterian Theological Seminary, Austin, TX, September 2011.
- Thematic session on "The Cultural War and Red/Blue Divide: Re-examining the Debate Demographically and Behaviorally." American Sociological Association, Las Vegas, NV, August 2011.
- "Sexual Economics: The Forces Shaping How Young Americans Meet, Mate, and Marry." Heritage Foundation, Washington, D.C., May 2011.
- "Marital Realities, Current Mindsets, and Possible Futures." Institute of Marriage and Family Canada, Ottawa, Canada, May 2011.
- Panel on "Teen Pregnancy: What Is California Doing Right?" Zócalo Public Square, Los Angeles, CA, December 2010.
- "Marriage and Parenthood in the Imagination of Young Adults." Baby Makes Three: Social Scientific Research on Successfully Combining Marriage and Parenthood (seminar), Princeton, NJ, June 2010.

"Saving Marriage Before It Starts." Q Conference, Lyric Opera, Chicago, IL, April 2010.

- "The Price of Sex in Contemporary Heterosexual Relationships." TEDxUT, The University of Texas at Austin, Austin, TX, April 2010.
- "Love and Marriage in the Minds of Emerging Adults." Child Trends and Heritage Foundation, Washington, D.C., October 2009.
- "Forbidden Fruit? Sex and Religious Faith in the Lives of Young Americans." Baylor University, Waco, TX, September 2007.
- "Great Expectations: Culture, Emotion, and Disenchantment in the Sexual Worlds of Young Americans." Bay Area Colloquium on Population, Berkeley, CA, September 2007.

# **CONFERENCE PRESENTATIONS**

- "The Math Behind Declining Christian Marriage," Society for the Scientific Study of Religion, Las Vegas, NV, October 2018.
- "Consent and the Presumption of the Exchange Theory of Relationship Behavior." Paper presented at the annual meeting of the American Political Science Association, Boston, MA, September 2018.
- "Is There a Recession in Marriage among Western Christians?" Paper presented at the annual meeting of the Society for the Scientific Study of Religion, Atlanta, GA, October 2016.
- "Gender and Heterosexual Sex." Panel discussion at the annual meeting of the American Sociological Association, New York, NY, August 2013.
- "The New Family Structures Study: Introduction and Initial Results." Paper presented at the annual meeting of the Population Association of America, San Francisco, CA, May 2012.
- "Religious Distinctions in Nonmarital Romantic Relationship Formation" (with Ellyn Arevalo). Paper presented at the annual meeting of the Society for the Scientific Study of Religion, Milwaukee, WI, October 2011.
- "Premarital Sexual Initiation and Fertility among Pentecostal Adolescents in Brazil." Paper presented at the annual meeting of the Population Association of America, Washington, D.C., April 2011.
- "Red Sex, Blue Sex: Distinguishing Political Culture and Religious Culture in the Sexual Decisions of Young Americans." Paper presented at the annual meeting of the Society for the Scientific Study of Religion, Denver, CO, October 2009.
- "Bare Market: Campus Sex Ratios and Romantic Relationships" (with Jeremy Uecker). Paper presented at the annual meeting of the Population Association of America, Detroit, MI, May 2009.
- "Religion and Sexual Initiation in Brazil" (with Ana Paula Verona). Paper presented at the annual meeting of the Population Association of America, Detroit, MI, April 2009.

# ADVISING

Ph.D. Committees in the Department of Sociology (Year Degree Awarded, \* Co-Chair/Co-Supervisor, \*\* Chair/Supervisor)

- 2016 Jennifer McMorris
- 2015 Stanley Kasun
- 2015 Nina Palmo
- 2012 Nicolette Manglos \*\*
- 2012 Catherine McNamee
- 2011 Charles Stokes
- 2010 Nicole Angotti \*\*
- 2010 Georgina Martínez Canizales
- 2010 Viviana Salinas
- 2010 Jeremy Uecker \*\*
- 2010 Ana Paula Verona
- 2008 Margaret Vaaler
- 2008 Sara Yeatman
- 2007 Amy Burdette \*
- 2007 Bryan Shepherd
- 2007 Jenny Trinitapoli \*\*
- 2007 Elisa Zhai

M.A. Committees in the Department of Sociology (Year Degree Awarded, \* Co-Chair/Co-Supervisor, \*\* Chair/Supervisor)

- 2013 Ellyn Arevalo \*
- 2012 Kristen Redford \*\*
- 2011 David McClendon \*\*
- 2010 Aida Ramos Wada
- 2008 Nicolette Manglos \*\*
- 2007 Andrea Henderson
- 2006 Jeremy Uecker \*\*

Undergraduate Thesis Supervision for Honors, Plan II, BDP (Year Degree Awarded, \* Reader, \*\* Supervisor)

- 2019 Clarisa Trevino \*\*
- 2014 Tiffany Fong \*
- 2011 Mary Lingwall \*\*
- 2008 Hong Nguyen \*\*

Ph.D. Committees at other universities (Year Degree Awarded)

2018 Yana Mikhaylova, Higher School of Economics, Moscow

### DEPARTMENTAL AND UNIVERSITY SERVICE

Member, Executive Committee, Department of Sociology, 2012-2014

Member, Graduate Admissions Committee, Department of Sociology, 2012-2014

Member, Promotion and Tenure Committee, Department of Sociology, 2012-2014

Member, Undergraduate Research Award Selection Committee, College of Liberal Arts, 2010-2012 Guest presenter, Peer Educator Sexual Health courses, University Health Services, 2008-2012 Presenter, Orange Jackets' Week of Women, Tejas Club, Spring 2011 Moderator, Thesis Symposium, Plan II Honors Program, 2011 Member, Graduate Steering Committee, Department of Sociology, 2010-2011 Member, Promotion and Tenure Committee, Department of Sociology, 2010-2011 Member, Executive Committee, Department of Sociology, 2009-2011 Presenter, TEDxUT, The University of Texas at Austin, Spring 2010 Member, Governing Board, Population Research Center, 2009-2010 Member, Graduate Admissions Committee, Department of Sociology, 2009-2010 Presenter, Sexual Health Panel, Tejas Club, Fall 2009 Member, Graduate Steering Committee, Department of Sociology, 2007-2009 Participant and presenter, Faculty Fellows Program, The University of Texas at Austin, 2007-2009 Chair, Religion Faculty Search Committee, Department of Sociology, Fall 2008 Member, Population Junior Faculty Search Committee, Department of Sociology, Fall 2007 Member, Speaker Colloquium Committee, Department of Sociology, Fall 2007 PROFESSIONAL SERVICE AND ORGANIZATIONAL MEMBERSHIP Co-organizer and session chair, The Moynihan Report at 50: Reflections, Realities, and Prospects. Princeton University, Princeton, NJ, October 30-31, 2015

Distinguished Article Award Committee member, American Sociological Association (Religion Section), 2010-2011

• Committee chair, 2011

Editorial Board member, Interdisciplinary Journal of Research on Religion, 2005–2011

Editorial Board member, Journal for the Scientific Study of Religion, 2004–2011

Distinguished Article Award Committee member, Society for the Scientific Study of Religion, 2009-2010

• Committee chair, 2010

Nominating Committee member, Society for the Scientific Study of Religion, 2007-2009

Jack Shand Research Award Committee member, Society for the Scientific Study of Religion, 2005-2007

Council member, American Sociological Association (Religion Section), 2004-2007

Member of:

American Academy of Religion, 2017-2019 Population Association of America, 2004-2018 Society for the Scientific Study of Religion, 1996-present

### Ad-hoc reviewer for:

American Journal of Sociology, American Sociological Review, Archives of Sexual Behavior, Biodemography and Social Biology, Gender & Society, Interdisciplinary Journal of Research on Religion, International Journal of Environmental Research and Public Health, Journal for the Scientific Study of Religion, Journal of Adolescent Health, Journal of Behavioral Addictions, Journal of Family Issues, Journal of Health and Social Behavior, Journal of Homosexuality, Journal of Marriage and Family, Journal of Psychology and Christianity, Pediatrics, Perspectives on Psychological Science, Review of Religious Research, Social Forces, Social Problems, Social Psychology Quarterly, Social Science & Medicine, Social Science Quarterly, Social Science Research, Sociological Forum, Sociological Inquiry, The Sociological Quarterly, National Institutes of Health (2007), National Science Foundation (2010, one review), Templeton Foundation (2012, 2019)