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

DYLAN BRANDT, et al.,

PLAINTIFFS,

 \mathbf{v} .

No. 4:21-CV-00450-JM

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 2003.¹ The books, peer-reviewed journal articles, and essays I have written include material on sexual orientation and, more recently, the science of 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. I have extensive survey administration experience as well, having fielded three na-

¹ 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.

tionally-representative surveys since 2011, and consulted on survey construction for several others. 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.
- 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, and the role of values in inquiry. 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 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 uncharacteristically rapid for such a new scientific subfield. 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.
- The demographics of transgender-identifying adolescents is shifting in ways that are not yet understood.
- 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 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 judgments that result in a harmful, consumer-driven medical culture.
- 7. I have reviewed the declaration of Deanna Adkins, dated June 11, 2021 ("Adkins"). Dr. Adkins identifies affirmative care as treatment for gender dysphoria "aimed at eliminating the clinically significant distress a patient experiences by helping the patient live in alignment with their gender identity." 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.

² Adkins, D. (2021) Declaration, U.S. District Court, Eastern District of Arkansas, Case No.: 4:21CV450-JM, p. 4.

- 8. I make no claims here about the most prudent course of treatment for a particular patient. Instead, as a sociologist, my claims highlight the unscientific processes by which "gender affirming" treatment has come to appear not simply as the dominant approach but increasingly the only permitted approach. This has happened amid a surge in cases of gender dysphoria and transgender identity that emerged suddenly, was unanticipated, and remains demonstrably undertheorized.³ In other words, 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. Instead, many have pressed ahead without sufficient interest in understanding why the current realities have come to be.
- 9. 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, is affirmative care 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?
- 10. 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-

4

³ Bernadette Wren, who was until her retirement a senior clinician at the UK Tavistock gender clinic, 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. To-day, the sex ratio has reversed: for every one natal male seeking help, approximately three natal females do. Why? And why aren't researchers more interested in understanding this than they are in shuttling patients (regardless of their natal sex) toward "affirmative" care?

- 11. 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. There is now little professional space for clinicians and psychologists to endorse anything except the "affirmative" approach, which has rapidly colonized adolescent endocrinology in less than a decade.
- 12. 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, 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. 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 and where most of what has been written is less

than seven years old? Even some researchers acknowledge this: "...in actual practice, no consensus exists whether to use these early medical interventions."

II. UNDERSTANDING THE DEMOGRAPHICS OF TRANSGENDER-IDENTIFYING ADOLESCENTS

- 13. 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 state and nine urban school districts found that an average of 1.8 percent of high school students identify as transgender.⁵ A study in *Pediatrics*, leaning on a 2016 statewide survey in Minnesota, revealed a figure of 2.7 percent.⁶
- 14. 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).⁷ Five years later, those figures rose to 399 natal females and 250 natal males. At the

6

⁴ 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

⁵ 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

⁶ 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

⁷ 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/

most recent year of data reporting (2018-19), the numbers 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.⁸

- 15. A June 6, 2021 answer to a Freedom of Information Act request revealed that 8,741 patients are awaiting their first visit to the UK's Charing Cross Gender Identity Clinic, a sizable number for what once affected less than 1 in 10,000 children, according to DSM-5 prevalence rates.⁹
- 16. 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). But the pace of growth in adolescent transgender self-identifications eclipses the climb in rates of nonheterosexual orientations.
- 17. In 2020, a Pew research survey revealed that among Americans born between 1997 and 2002 (or Gen Z), 1.8 percent now identify as transgender, an estimate that is 50 percent

⁸ 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

⁹ 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/request_for_charing_cross_gic_wa?nocache=incoming-1805111#incoming-1805111

¹⁰ 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

higher than that of Millennials (1.2 percent), and nine times higher than found among Gen X respondents (0.2 percent).¹¹ Other surveys have found as high as 10 percent of high schoolers identifying as transgender or gender non-conforming.¹²

- 18. 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.¹³ 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.
- 19. In the "Factual Background" section of the Memorandum in Support of Plaintiffs' Motion, gender identity is described 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, 14 the report she has submitted in this case makes no use of the term (nor of "immutable"), instead describing a person's gender identity merely as "fixed." It is fair to say the terminology, together with the science of the origins and course of gender identity, remains in flux. Indeed, this fact is acknowledged. Guidelines published by the World Professional Association for

¹¹ 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

¹² Kidd, K. M., Sequeira, G. M., Douglas, C., Paglisotti, T., Inwards-Breland, D. J., Miller, E., & Coulter, R. W. (2021). Prevalence of gender-diverse youth in an urban school district. *Pediatrics*, *147*(6) e2020049823. https://doi.org/10.1542/peds.2020-049823

^{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
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.

Transgender Health (WPATH), for example, recognize that "this field of medicine [i.e., providing cross-sex hormones to people who identify as transgender] is evolving,"¹⁵ and 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."¹⁶ The Endocrine Society's guidelines likewise acknowledge that "[t]erminology and its use vary and continue to evolve."¹⁷

- 20. Categorical claims about the immutability of sexual orientation have recently fared well in legal decisions in the West. But to invoke that description in the absence of a genuine consensus on the etiology of gender dysphoria—especially amid the sudden surge in cases—suggests political calculation is at work.
- 21. 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. Early onset gender dysphoria, however, has been documented for years, primarily in natal boys.
- 22. The 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.

¹⁵ World Professional Association for Transgender Health. (2012). *Standards of care for the health of transsexual, transgender, and gender-conforming people* [7th version]. https://www.wpath.org/publications/soc

¹⁶ World Professional Association for Transgender Health. (2012), p. 95.

¹⁷ 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

¹⁸ Shrier, A. (2020). Irreversible damage: The transgender craze seducing our daughters. Regnery Publishing.

- 23. Second, the surge makes for a very sensitive research environment, all the more so given the rapid clinical shift in some contexts from a more "watchful waiting" approach to adolescent gender dysphoria to an "affirmative care" approach, wherein a much swifter move to puberty blockers and cross-sex hormones is suggested. This development appears to constitute much of the political struggle being witnessed over adolescent gender dysphoria, and it makes research efforts in this domain subject to far greater policing during the peer-review process as well as in post-publication media and activist scrutiny.
- 24. One recent study about the surge in adolescent demand for gender dysphoria treatment in the UK and four Nordic countries noted that "[t]he reasons for the increase are not known," but fingered four forces as playing a potential role: (1) the increased awareness of gender identity issues, (2) the supply of services for the same, (3) de-stigmatization, and (4) social and media influences.¹⁹
- 25. 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.²⁰ (Others identify this as "adolescent-onset" GD.²¹) The study, which inquired of parents of teens, noted that ROGD tended to occur within groups of friends: more than one-third

¹⁹ 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

²⁰ 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

²¹ 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

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."

- 26. 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." 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." ²³
- 27. 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 ROGD and certain social and psychiatric conditions.
- 28. 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-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 both for understanding and documenting what is going on.

²² Littman (2018), p. 3.

²³ Littman (2018), p. 36.

- 29. University of Utah psychology professor Lisa Diamond, upon noting the high levels of diverse gender self-identities in recent surveys, remarked last year, "Clearly, we need a more thorough understanding of youth who consider themselves gender fluid, genderqueer, or nonbinary, and of how they resemble and differ from transgender youth."²⁴
- 30. 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 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." 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." 26

²⁴ Diamond, L. M. (2020). Gender fluidity and nonbinary gender identities among children and adolescents. *Child development perspectives*, *14*(2), 110-115. https://doi.org/10.1111/cdep.12366

²⁵ 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.

²⁶ 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

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

- 31. 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.
- 32. 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.
- 33. 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.²⁷ 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.

²⁷ 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/

- 34. 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." 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." 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." 30
- 35. But what the research does not tell us is the isolated effect of puberty blockers (and similarly, that of subsequent cross-sex hormones), since dysphoria rarely manifests apart from other (possibly confounding) psychiatric conditions and the experience of traumas.³¹
- 36. 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.³² Only five percent of their sample was believed to exhibit "healthy" levels of functioning.
- 37. Despite this, many of the new clinic's patients and their families openly pressed the clinicians for "affirmative" treatment, believing that method was the only solution and "that their distress would be completely alleviated if they pursued the pathway of medical treatment." This frustrated the authors: "Lost were our efforts to highlight the many different pathways in

²⁸ Levine, S. (2020) Declaration, U.S. Circuit Court, Dane County, Wisconsin, Case No.: 20-CV- 454, p.41.

²⁹ Rafferty, J. & Committee on Psychosocial Aspects of Child and Family Health. (2018), p. 5.

³⁰ Hembree et al. (2017), p. 3885.

³¹ 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.

³² 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

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 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." "33"

- 38. 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, 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." Withers additionally notes that "[m]any 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." 35
- 39. 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.³⁶ Its

³³ Kozlowska et al. (2021). All quotes are from p. 15.

³⁴ 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

³⁵ Withers (2020), p. 869.

³⁶ 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

authors tracked dysphoric respondents over time and assessed their subsequent use 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."

40. 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." 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-

³⁷ 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.³⁸ Conducting surgery on 49 patients in order to secure one patient who modestly benefits in slightly less psychological services? It ought to give physicians pause, but in a demand-oriented industry, it does not.

- 41. 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." This example is indicative of a wider trend of "looking" for statistical significance, however weak, to support claims that are consonant with the political wishes of transgender medical practitioners.
- 42. 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

³⁸ 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 ³⁹ 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

Excellence (NICE) in Britain have all concluded that claims of benefit for medical gender interventions in children are based on "low quality evidence."⁴⁰

- 43. Sweden's review of the evidence base and ethics considerations found "knowledge gaps and uncertain knowledge" to be a "central theme." A summary of their review of the literature reported the following: "No studies explaining the increase of children and 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." 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.
- 44. 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." 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

⁴⁰ 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

⁴¹ 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

⁴² 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

⁴³ 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-policy/2019/RCGP-position-statement-providing-care-for-gender-transgender-patients-june-2019.ashx?la=en

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."

- 45. 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 confounding, bias, or chance." The studies "all lack appropriate controls." Moreover, the claims of "clinical effectiveness, safety, and cost-effectiveness" of such treatments clearly are not substantiated. 44
- 46. 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.
- 47. Data from the UK's Tavistock clinic study were requested by the High Court during the hearing for *Bell v. Tavistock*, a case involving plaintiff Keira Bell, a young British woman who took puberty blockers at age 16, proceeded to cross-sex hormones, and had "top surgery" at age 20—all of which she now regrets. The Tavistock Clinic, however, did not provide the data, which was published only the day after the High Court ruled against the clinic. 45 Repeatedly the court judgment stated it was "surprising" that the Tavistock had not kept better data

⁴⁴ 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

⁴⁵ Barnes, H. & Cohen, D. (2020, December 11). Tavistock puberty blocker study published after nine years. *BBC News*, https://www.bbc.com/news/uk-55282113

and could not produce it in a timely manner when asked: "...though this research study was commenced some 9 years ago, at the time of the hearing before us the results of this research had yet to be published."⁴⁶

- 48. The Tavistock study results found no demonstrable psychological benefit, nor was there any evidence of reduced body dissatisfaction for those receiving the blockers. (This varies from Dutch study findings reporting improvement in the same.⁴⁷) Thus, if the purpose of the treatment was to improve mental feelings of wellness or reduce negative body image, the clinic's own study shows that puberty blockers failed in this regard. Not only was there no benefit, thoughts of self-harm actually increased for some natal female participants after a year on the blockers.⁴⁸
- 49. 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 discern any obvious "consensus" or "standards" from existing research would make little scientific sense.

 ⁴⁶ Bell & A v. Tavistock and Portman NHS Foundation Trust. (2020). U.K. High Ct. 2020 EWHC3274 (Admin). CO/60/2020, para. 24. https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf
 ⁴⁷ de Vries, A. L., McGuire, J. K., Steensma, T. D., Wagenaar, E. C., Doreleijers, T. A., & Cohen-Kettenis, P. T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, *134*(4), 696-704. doi: https://doi.org/10.1542/peds.2013-2958

⁴⁸ Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., & Viner, R. M. (2021). Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *Plos one*, *16*(2), e0243894. https://doi.org/10.1371/journal.pone.0243894; Biggs, M. (2019). Britain's puberty blocking experiment. In: H. Brunskell-Evans & M. Moore, (Eds.), *Inventing transgender children and young people*, (pp. 40-55). Cambridge Scholars Publishing.

IV. THE ABSENCE OF RANDOMIZED CLINICAL TRIALS RESEARCH

- 50. I have reviewed the declaration of Armand H. Matheny Antommaria, dated June 11, 2021. Dr. Antommaria claims that in Arkansas, "adolescents with gender dysphoria are not being subject to…experimentation." 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.
- 51. 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. 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.
- 52. 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." 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.

⁴⁹ Antommaria, A. H. M. (2021). Declaration, U.S. District Court, Eastern District of Arkansas, Case No.: 4:21CV450-JM, p. 11.

⁵⁰ 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

⁵¹ Antommaria (2021), p. 7.

- 53. Dr. Antommaria maintains that to propose and carry out "randomized placebo-controlled 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 clear "better" intervention present.⁵² 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.
- 54. 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 often 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. It is a situation, however, that is 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.
- 55. 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." But no such trials have been conducted.

⁵² 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

⁵³Haupt, 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

V. THE IDEOLOGICAL CAPTURE OF GENDER DYSPHORIA

56. There is a great deal of evidence that 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 interests 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.⁵⁴ Ideological capture is inimical to the dissent and open debate that is critical to healthy medical and social science. 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 rapid formation of a putative consensus in American professional societies, by the entrepreneurial explosion of gender clinics across the nation, by pressure-based suppression of open debate, by inconsistent claims concerning adolescents' ability to give informed consent, and even by the Department of Justice's recent inconsistent actions.

A. Re-education in the Parlance of Gender Ideology

57. 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 "legitimate naming." In the domains of gender and sexuality—fraught as they are with great

⁵⁴ 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.

⁵⁵ Bourdieu, P. (1985). The social space and the genesis of groups. *Theory and society*, 14(6), 723-744.

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.

- 58. The complaint and reports submitted by the plaintiffs in this case reflect this ideological effort. For example, Adkins' claim that "[e]veryone has a gender identity" 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)." Dr. Anne Lawrence, who identifies as transgender, has also noted the parallels between gender dysphoria and body integrity identity disorder (BIID). 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." 59
- 59. 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

⁵⁶ Adkins (2021), p. 3.

⁵⁷ Hembree et al. (2017), p. 3878.

⁵⁸ Lawrence, A. A. (2006). Clinical and theoretical parallels between desire for limb amputation and gender identity disorder. *Archives of sexual behavior*, *35*, 263-78.

⁵⁹ Lawrence (2006), p. 263.

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.

- 60. 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.⁶⁰
- 61. 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 author(s) 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).

⁶⁰ 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.

62. 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 sexed body and gender identity."⁶¹ This new narrative is not grounded in evidence-based science but in political activism.

B. The Rapid Formation of a Putative Consensus

- 63. 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." But, despite the fact that American professional associations have endorsed the "affirmative" approach to treating dysphoric adolescents, there is no wide, international consensus about its superiority. That a consensus on hormonal and surgical interventions at earlier ages should have coalesced 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 curious and concerning. It suggests, rather, a concerted effort to suppress alternative treatment approaches in favor of a demand-driven endorsement of hormonal and surgical treatments.
- 64. Closely connected to the idea of ideological capture is that of a "Castro consensus," wherein a consensus "is viewed as a proxy for truth." 63 Certainly, "when a consensus is

⁶¹ Levine, S. B. (2019). Informed consent for transgendered patients. *Journal of sex & marital therapy*, 45(3), 218-229, p. 219.

⁶² Adkins, D. (2021), p. 6.

⁶³ 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

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." This is an accurate description of what has occurred in the domain of medicine concerned with the treatment of gender dysphoria.

- 65. 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." WPATH's treatment recommendations shape the recommendations of other professional organizations; the APA's guidelines, for example, complement WPATH's recommendations and label any approach other than "affirming" to gender dysphoric youth as unethical. 66
- 66. 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

⁶⁴ 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

⁶⁵ 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).

⁶⁶ American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American psychologist*, 70(9), 832-864.

"correct" manner—via the "affirmative" approach. In turn, psychotherapeutic alternatives are now more difficult to come by, even disparaged as "conversion" therapies, as discussed below.⁶⁷

C. The Entrepreneurial Explosion of Gender Clinics

- 67. 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.
- 68. 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." 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."

⁶⁷ 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.

⁶⁸ Planned Parenthood Federation of America. (2021). 2019-2020 annual report, p. 11. https://www.plannedparenthood.org/uploads/filer_public/67/30/67305ea1-8da2-4cee-9191-19228c1d6f70/210219-annual-report-2019-2020-web-final.pdf

⁶⁹ 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

- 69. Planned Parenthood operates its gender services on an "informed consent" basis, with no need for a diagnosis or mental health exam.⁷⁰ In other words, access to treatment is offered if the patients indicate they understand and accept the possible side effects. "I had no gate-keeping at all," one patient reported. "I had a prescription in my hand the same day I went in." The "affirmative" approach leads to patient-driven, on-demand services, with potentially disastrous consequences.⁷¹
- 70. It is clear that clinics make their own decisions about treatment, and will prove 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.⁷²
- 71. 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 way of affirming (one's) gender identity."⁷³ In other words, there should be no assumptions about what comes next in the affirmative treatment regime. There is reason to question the clinical stability of an approach that is so rapidly giving young people suffering significant psychiat-

⁷⁰ 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 ⁷¹ Allen (2017).

⁷² 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. ⁷³ 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

ric distress the agency to accept experimental medical interventions with irreversible effects, especially in an ideologically-charged atmosphere where medical professionals hold the treatments out to be the child's only hope of leading a peaceful, happy life.

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 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. 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. The study of the product of the product of the product of the study of the product of the

D. Pressure-based Suppression of Open Debate

73. Physicians and researchers have been sanctioned for questioning "affirmative" gender treatment. Some have resigned, some have been demoted, and others fired. A few examples may prove illuminating. Allan Josephson, chief of the University of Louisville's Division

⁷⁴ Regnerus, M. & Vermurlen, B. (Conditional accept, 2021). Approval of hormonal and/or surgical interventions for adolescents experiencing gender dysphoria. *Archives of sexual behavior*.

⁷⁵ 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-who-decides-when-transition-treatment-is-appropriate.html

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."

- 74. 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, 77 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.
- 75. 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

⁷⁶ 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/

⁷⁷ 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

for medical treatment. Parents would say that nobody ever discussed that other issues...might be implicated in the child's dysphoria." 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.

76. 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. It is healthy to have an open public discussion regarding 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)—researchers did too, including Dr. Johanna Olson-Kennedy, who posted on social media that "so many of us 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." Other major media outlets are feeling comparable pressure to vet transgender news stories prior to release. 80

⁷⁸ 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-

⁷⁹ 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/

⁸⁰ 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-transgender-news-stories-Radio-4s-Today-programme.html

- 77. The evidence demonstrates that desistance rates—that is, the share of adolescents who ceased identifying as transgender and accepted their natal sex—are around 90 percent for patients being treated with a "watchful waiting" approach.⁸¹ But 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,⁸² thereby triggering irreversible effects.⁸³ In other words, the "watchful waiting" method consistently predicts desistance. Taking the "affirmative" approach almost guarantees transition.
- 78. But 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,⁸⁴ but the fact is that transition regret is real.⁸⁵ Recently, a wave of rapid adolescent 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 so many detransitioners that suppression of their stories is becoming impossible. One

⁸¹ 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

⁸³ 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

⁸⁴ 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.dailymail.co.uk/news/article-4979498/James-Caspian-attacked-transgender-children-comments.html

⁸⁵ 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), 1000-1007. 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

recent study surveyed 237 detransitioners, both male and female, and noted that over half of the respondents had three mental health co-morbidities.⁸⁶ 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."

- 79. 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. ⁸⁷ "Lack of support from social surroundings (13%), financial concerns (12%) and discrimination (10%)" were the least compelling reasons for detransitioning. ⁸⁸
- 80. 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.⁸⁹ Consider the pioneer patient of the Dutch protocol, "B," who was followed for 22 years until the age of 35. It was reported that "he indicated no regrets about his treatment." 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." ⁹¹

⁸⁶ 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

⁸⁷ 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

⁸⁸ Vandenbussche (2021), p. 5.

⁸⁹ 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

⁹⁰ 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.

⁹¹ Biggs (2019) p. 49; Cohen-Kettenis et al. (2011), p. 845.

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.

- 81. The scholar/activist authors of a 2020 *JAMA Psychiatry* study paint an entire class of cautious therapeutic approaches as intrinsically harmful, using survey language asking transgender patients if a therapist had ever attempted to "try to stop you being trans." This sends a clear message to psychiatrists and psychotherapists alike about their role in the doctorpatient 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.
- 82. Yet the idea that it is a "conversion" to become convinced that perhaps you were not born in the wrong body and that you may be able to live with the body you have strains simple logic. 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.

⁹² 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

- 83. For these reasons, 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 psychological risks posed by any treatment approach. Such risks are real and ought to be discussed—this is what ethical informed consent does. But obtaining informed consent could be perceived as an attempt to "convert" the person from pursuing gender affirmation treatments (e.g., hormones, surgery).
- 84. The ideological capture of much of this field of treatment makes for a difficult environment for psychological treatment. 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."⁹⁴
- 85. Many other examples of undue pressure could be given, both within and outside the professions. Amazon.com'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. Even *reviews* of books are being retracted and withdrawn. 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.

⁹³ Levine (2019).

⁹⁴ Withers (2020), p. 865.

⁹⁵ 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

⁹⁶ 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/

E. Inconsistent Claims about Adolescents' Ability to Consent

- 86. 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. As gender therapist Diane Ehrensaft admits, "continuity of care in gender affirmation" from puberty blockers to cross-sex hormones results in "discontinuity in potential capacity to ever create progeny with their own genetic material." The bar to informed consent for such medical treatments—especially experimental ones—has long been elevated for minors.
- 87. But in a recent issue of *International Journal of Transgender Health*, Dutch child and adolescent psychiatrist Annelou de Vries and six co-authors registered their disappointment with the *Bell v Tavistock* decision (discussed below), 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. ⁹⁸ In asserting this, de Vries and her colleagues claim to concur with "all the major medical associations."
- 88. Even these medical associations, however, give grounds 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

⁹⁷ 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/

⁹⁸ 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

assuring that adolescents are cognitively and emotionally able to make life-altering decisions to change their name or gender marker, begin hormone therapy (which may affect fertility), or pursue surgery."⁹⁹ 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."¹⁰⁰

- 89. The American Medical Association (AMA) presents a curious case. 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." 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." 102
- 90. 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

⁹⁹ American Psychological Association (2015), p. 842.

¹⁰⁰ Hembree et al. (2017), p. 3884.

¹⁰¹ Madara, J. L. (2021, April 26). Official AMA letter to legislators. https://www.ama-assn.org/press-center/press-releases/ama-states-stop-interfering-health-care-transgender-children

¹⁰² 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."¹⁰³ This is widely recognized today in the conventional wisdom that it is not until around age 25 that (prefrontal) brain development is stabilized in human beings.

- 91. 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."¹⁰⁴
- 92. 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-altering consequences, the AMA asserts that minors are competent to make such decisions.
- 93. 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." In its December

¹⁰³ American Medical Association et al., p. 11.

¹⁰⁴ Haider, A. (2006) *Roper v. Simmons*: The role of the science brief. *Ohio state journal of criminal law 3*: 369-377, p. 372.

¹⁰⁵ 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.

- 94. In its 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." ¹⁰⁶
- 95. What has become 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." 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.
- 96. In a subsequent case (*AB v Tavistock and Portman NHS Trust*), parents were given the power to consent on behalf of their kids under age 16 without judicial review. But parental consent for an adolescent's sterilization is likely co-occurring here, given the new near-universal rates of transition from puberty blockers to cross-sex hormones.¹⁰⁸ Parental consent to sterilization used to be against the law in many locales, creating ethical dilemmas that commonly required judicial review.¹⁰⁹

¹⁰⁶ Bell & Av. Tavistock & Portman NHS Foundation Trust. (2020), para. 134.

¹⁰⁷ Bell & Av. Tavistock & Portman NHS Foundation Trust. (2020), para. 136.

¹⁰⁸ 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

¹⁰⁹ 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/

- 97. Two additional countries (Sweden and Finland) have also 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 adult-hood—about age 25—which affects young people's ability to assess the consequences of their decisions on their own future selves for rest of their lives. ¹¹⁰
- 98. "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." Finally, Finnish guidelines similarly recommend further study, citing "a need for more information on the disadvantages of procedures and on people who regret them."
- 99. 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 to 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-

¹¹⁰ 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

¹¹¹ Council for Choices in Healthcare (COHERE) (2020).

¹¹² Council for Choices in Healthcare (COHERE) (2020).

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.¹¹³

100. When the UK's 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." 114

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

- 101. 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 implementation of the U.S. Supreme Court's decision in *Bostock v. Clayton County, Georgia*. That decision held that firing an individual because they are transgender violates Title VII of the Civil Rights Act.
- 102. 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.¹¹⁵ But a mere five days later—after the inauguration of a new

¹¹³ Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) (2019).

¹¹⁴ Bell, K. (2020) Keira Bell case: Statements from BBC interview. Transcript available here: https://ourduty.group/2020/12/02/keira-bell-case-statements/

¹¹⁵ 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

presidential administration—the Civil Rights Division withdrew the memorandum. The whip-lash-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.

103. I have reviewed the Civil Rights Division's statement of interest filed in this law-suit, which accentuates the point to an even greater degree. The Civil Rights Division's January 17 memorandum articulated several reasons why the *Bostock* decision did not bear on the Equal Protection Clause. But on June 17, 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 ago renders undeniable the politically-charged nature of matters bearing on individuals who identify as transgender.

VI. RISK OF SUICIDE AS AN UNCLEAR MOTIVATION FOR "AFFIRMATIVE" TREATMENT

dismissed. However, such fears should not affect scholarly evaluations of the genuine risk of suicide or equate suicidality with suicide itself. The association of the two varies notably in subpopulations. What is merited, in place of references to "affirmative" treatments as "lifesaving," is an examination of the nature of suicide risk among the self-identified transgender population. Too often, however, suicidal "ideation" is equated with "attempted" suicide, and even seems to be treated as a proxy for suicide.

¹¹⁶ 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

¹¹⁷ 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

- 105. 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 notably in the general population over the past decade. 118
- 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. 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. 120
- 107. Nevertheless, localized estimates of suicidal ideation and attempts among transgender-identifying adolescents vary notably. A 2017 chart review from a Cincinnati gender clinic noted that among patients (ages 12-22) diagnosed with gender dysphoria, 30 percent reported at least one suicide attempt. 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

¹¹⁸ 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 119 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 120 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. 121 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

percent.¹²² Others note lower rates, including 14 percent in a Toronto clinic and 10 percent in an Australian clinic.¹²³

- 108. 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. 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).
- 109. 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. 125
- 110. 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

¹²² 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

¹²³ 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).

¹²⁴ 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 ¹²⁵ Biggs (2019).

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." ¹²⁶

111. 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 of "significant psychopathology" among dysphoric adolescents. This makes direct, unmediated claims about the causes of suicidal ideation very difficult.

112. Some propose suicidality as a central motivation for endorsing the "affirmative" approach to treating dysphoric adolescents. ¹²⁸ But "suicidality" is a subjective measure that may

¹²⁶ 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.

¹²⁷ 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

¹²⁸ 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

include suicidal ideation, planning, or actual documented attempts. Further, 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. But the actual suicide rate among older Americans remains well above that among young adults, and far above children below age 15. 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). 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 greater degree.

113. Simply documenting elevated "suicidality" among self-identified transgender youth does not recommend a particular treatment approach. As one psychoanalyst put it, "We treat suicide first of all by keeping people safe, and by helping them become more resilient." 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

_

¹³³ Shrier (2020), pp. 137-138.

¹²⁹ 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.

¹³⁰ 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.

¹³¹ 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

¹³² 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

suicidality among patients with gender dysphoria.¹³⁴ 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 a solitary or primary driver of suicidality, all the more since the majority of gender dysphoric minors never attempt suicide.

114. 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." 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. They also tended to ruminate about how others evaluated their bodies.

115. The specter of suicide has nevertheless become a central narrative among supporters of the affirmative treatment approach. Advocates for the "affirmative" approach 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. 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. Moreover, gender

¹³⁴ Peterson et al. (2017).

¹³⁵ Grossman & D'Augelli (2007), p. 527.

¹³⁶ Day et al. (2019), p. 2; Grossman & D'Augelli (2007).

¹³⁷ 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.

dysphoric youth commonly display significant psychiatric co-morbidities that contribute to their elevated rates of suicidal ideation and attempts. 138

VII. THE ROLE OF VALUES IN THE PRODUCTION OF SCIENCE

116. 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.

117. 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." ¹³⁹

118. 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 the "affirmative" approach. 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

¹³⁸ Swedish National Board of Health and Welfare (2020).

¹³⁹ Kincaid, H., Dupré, J., & Wylie, A., (Eds.). (2007). *Value-free science? Ideals and illusions*. Oxford University Press, pp. 4-5.

from early pubertal suppression."¹⁴⁰ That is, the Endocrine Society is more concerned with helping young people achieve a certain subjective satisfaction with their physical appearance than it is avoiding possible harms of experimental medications or addressing the long-term health and well-being of its young patients.

- 119. The Endocrine Society is not alone here. Adolescent psychiatrist Annelou de Vries and her colleagues, cited earlier, 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)." 141
- 120. 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?
- 121. 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." The concept of "gender identity" requires body dissociation de facto, subjugating material reality to the subjective feelings of youth susceptible to suggestion.

¹⁴⁰ Hembree et al. (2017), p. 3881.

¹⁴¹ de Vries et al. (2021), p. 4.

¹⁴² 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

- 122. Dr. Adkins describes common 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 instead of the sex assigned to them at birth." But she gets this wrong. 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, 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.
- 123. Bernadette Wren, who was a senior clinician at the Tavistock clinic until her retirement, 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." 144

¹⁴³ Adkins (2021), p. 7.

¹⁴⁴ 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.

124. 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 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." ¹⁴⁵

VIII. CONCLUSION

125. 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. American professional societies promote "affirmative" treatment strategies not because they are effective in long-term studies of psychological and physical health outcomes—they've not been shown to be—but in large part due to a demand-driven medical culture in which emphasis is placed on liking what one sees in a mirror, or, increasingly, how others respond to a selfie. Meanwhile, the basics of the explosion in gender dysphoria, especially among natal girls, remain understudied—perhaps now on purpose—and minors' ability to consent is wielded in ideologically motivated (and varying) ways. This is not how healthy medical research operates.

126. An obviously premature consensus has been contrived among some professionals 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 quash debate and to push medical

¹⁴⁵ 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

practice in directions that outpace and even contradict the available evidence. As I have docu-

mented, such practices are often openly observable. That is, researchers who are assumed by the

public to be unbiased and disinterested in the results have acted in ways contrary to this assump-

tion, even going so far as to suppress public discussion and debate. The pace and extent of ideo-

logical capture is staggering.

127. Given the state of disarray in the science here, states have compelling reasons to

protect their young people by requiring that they reach adulthood before submitting to the experi-

mental, life-altering gender transition treatments discussed above.

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

Executed on July 7, 2021.

Dr. Mark Regnerus

Mukm

MARK REGNERUS

(July 2021)

Department of Sociology The University of Texas at Austin Mail Code A1700 Austin, TX 78712 Office: CLA 3.524

Phone:

Email: regnerus@prc.utexas.edu

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." *Archives of Sexual Behavior* (conditional accept).
- Regnerus, Mark. 2020. "Understanding How the Social Scientific Study of Same-Sex Parenting Works," *Annals of Social Science* 12 (3): 43-60. https://doi.org/10.18290/rns20483-3
- Regnerus, Mark, Joseph Price, and David Gordon. 2017. "Masturbation and Partnered Sex: Substitutes or Complements?" *Archives of Sexual Behavior* 46: 2111-2121.
- Regnerus, Mark. 2017. "Is Structural Stigma's Effect on the Mortality of Sexual Minorities Robust? A Failure to Replicate the Results of a Published Study." *Social Science & Medicine* 188: 157-165.
- Regnerus, Mark, David Gordon, and Joseph Price. 2016. "Documenting Pornography Use in America: A Comparative Analysis of Methodological Approaches." *The Journal of Sex Research* 53(7): 873-881.
- Price, Joseph, Rich Patterson, Mark Regnerus, and Jacob Walley. 2016. "How Much More XXX is Generation X Consuming? Evidence of Changing Attitudes and Behaviors Related to Pornography Since 1973." *The Journal of Sex Research* 53(1): 12-20.
- Regnerus, Mark. 2012. "How Different are the Adult Children of Parents who have Same-Sex Relationships? Findings from the New Family Structures Study." *Social Science Research* 41: 752-770.
- Woodberry, Robert D., Jerry Z. Park, Lyman A. Kellstedt, Mark D. Regnerus, and Brian Steensland. 2012. "The Measure of American Religious Traditions: Theoretical and Measurement Considerations." *Social Forces* 91(1): 65-73.
- Uecker, Jeremy E. and Mark D. Regnerus. 2010. "Bare Market: Campus Sex Ratios, Romantic Relationships, and Sexual Behavior." *The Sociological Quarterly* 51: 408-435.
- 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.
- Uecker, Jeremy E., Nicole Angotti, and Mark D. Regnerus. 2008. "Going Most of the Way: 'Technical Virginity' Among American Adolescents." *Social Science Research* 37: 1200-1215.
- Uecker, Jeremy E., Mark D. Regnerus, and Margaret L. Vaaler. 2007. "Losing My Religion: The Social Sources of Religious Decline in Early Adulthood." *Social Forces* 85(4): 1-26.
- 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.
- Regnerus, Mark D. and Viviana Salinas. 2007. "Religious Affiliation and AIDS-based Discrimination in Sub-Saharan Africa." *Review of Religious Research* 48(4): 385-401.
- 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.
- Regnerus, Mark D. and Jeremy Uecker. 2006. "Finding Faith, Losing Faith: The Prevalence and Context of Religious Transformations during Adolescence." *Review of Religious Research* 47: 217-237.
- Regnerus, Mark D. and Amy Burdette. 2006. "Religious Change and Adolescent Family Dynamics." *The Sociological Quarterly* 47: 175-194.
- Regnerus, Mark D. and Laura B. Luchies. 2006. "The Parent-Child Relationship and Opportunities for Adolescents' First Sex." *Journal of Family Issues* 27: 159-183.
- Regnerus, Mark D. and Christian Smith. 2005. "Selection Effects in Studies of Religious Influence." *Review of Religious Research* 47: 23-50.
- Regnerus, Mark D. 2005. "Talking about Sex: Religion and Patterns of Parent-Child Communication about Sex and Contraception." *The Sociological Quarterly* 46: 81-107.
- Regnerus, Mark D., Christian Smith, and Brad Smith. 2004. "Social Context in the Development of Adolescent Religiosity." *Applied Developmental Science* 8: 27-38.
- Regnerus, Mark D. 2003. "Linked Lives, Faith, and Behavior: An Intergenerational Model of Religious Influence on Adolescent Delinquency." *Journal for the Scientific Study of Religion* 42: 189-203.
- Regnerus, Mark D. 2003. "Moral Communities and Adolescent Delinquency: Religious Contexts and Community Social Control." *Sociological Quarterly* 44: 523-554.
- 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

- Adolescents." Social Science Research 32: 633-658.
- Regnerus, Mark D. and Glen H. Elder, Jr. 2003. "Staying on Track in School: Religious Influences in High and Low-Risk Settings." *Journal for the Scientific Study of Religion* 42: 633-649.
- Rostosky, Sharon S., Mark D. Regnerus, and Margaret L.C. Wright. 2003. "Coital Debut: The Role of Religiosity and Sex Attitudes in the Add Health Survey." *Journal of Sex Research* 40: 358-367.
- 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.
- Smith, Christian, Melinda Denton, Robert Faris, and Mark D. Regnerus. 2002. "Mapping American Adolescent Religious Participation." *Journal for the Scientific Study of Religion* 41: 597-612.
- Ge, Xiaojia, Glen H. Elder, Jr., Mark D. Regnerus, and Christine Cox. 2001. "Pubertal Transitions, Overweight Self Perceptions, and Adolescent Psychosomatic Adjustment: Gender and Ethnic Differences." *Social Psychology Quarterly* 64: 363-375.
- 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.
- Regnerus, Mark, Christian Smith, and David Sikkink. 1998. "Who Gives to the Poor? The Role of Religious Tradition and Political Location on the Personal Generosity of Americans toward the Poor." *Journal for the Scientific Study of Religion* 37: 481-493.

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, 3rd 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. link.galegroup.com/apps/doc/EJ3010300238/OVIC?u=txshracd2598&xid=ea8e31f3. 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. (9th-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)