



Evidence Shows Sexual Orientation Can Change: Debunking the Myth of “Immutability”

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EXECUTIVE SUMMARY:

Many of the advances of the homosexual movement have been based on the claim that sexual orientation is “immutable.” For example, Justice Anthony Kennedy’s majority opinion in the 2015 Supreme Court case that redefined marriage to include same-sex couples rested upon that assertion. Key policy issues still being debated in which the supposed “immutability” of sexual orientation can be an issue include efforts by LGB activists to expand non-discrimination laws to protect sexual orientation (such as the proposed federal “Equality Act”), and efforts to restrict or ban sexual orientation change efforts (SOCE), sometimes called “conversion therapy.”

The concept of “sexual orientation” is multi-faceted, involving a combination of attractions, behaviors, and personal identity. Changes in any of these elements (sometimes called “sexual fluidity”), and a lack of “stability” or “exclusivity” in or among them, represents evidence that sexual orientation can change. This paper reports results from four large data sets reflecting longitudinal analysis of the same individuals over time in population-based samples (three from the United States and one from New Zealand). All demonstrate that significant change in each of the elements of sexual orientation is possible. The percentage changing from homosexuality to heterosexuality ranged from 13% to 53%, while the percentage changing from heterosexuality to homosexuality ranged only from 1% to 12%. This suggests that heterosexuality is largely stable but homosexuality is not. In one survey of “same-sex attracted respondents,” up to 38% of men and 53% of women “changed to heterosexuality” in only a six-year period.

FRC endorses the call by pro-LGB scholars Lisa Diamond and Clifford Rosky to “abandon the immutability argument once and for all.” Diamond, Rosky, and others on the Left argue that a belief in personal freedom should be sufficient support for pro-homosexual policies. However, this amounts to substituting the principles of the sexual revolution for the principles of the civil rights movement. The public would be wise to question instead whether the goals of the homosexual movement can be justified at all.

Introduction

Many of the gains that have been made by the homosexual movement – in public opinion, in legislation, and in the law – have rested upon the claim that “sexual orientation” is a personal characteristic that is “immutable” (“not capable of or susceptible to change”¹).

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The heart of the theory has been that any laws or practices which in any way disadvantage gays or lesbians – from making sodomy a crime to defining marriage as the union of a man and a woman to employment discrimination – are inherently unjust because a person’s sexual orientation (like their race) is fixed at (or before) birth and can never be changed through the life course.

This “immutability argument” played a central role in the most significant triumph for the homosexual political movement yet – the 2015 decision by the U.S. Supreme Court (*Obergefell v. Hodges*) to strike down all state laws that defined marriage as the union of one man and one woman. Justice Anthony Kennedy, writing for the slim 5-4 majority, asserted the immutability of sexual orientation in his review of “the Nation’s experiences with the rights of gays and lesbians,” declaring, “Only in more recent years have psychiatrists and others recognized that sexual orientation is both a normal expression of human sexuality and immutable.”² And he asserted its relevance to the case by saying, “Far from seeking to devalue marriage, the petitioners seek it for themselves And their immutable nature dictates that same-sex marriage is their only real path to this profound commitment.”³

Because sexual orientation is immutable, according to Justice Kennedy, an entire class of people was being denied any opportunity ever to exercise the “fundamental right” of marriage.⁴ That is why he deemed it necessary to strike down the one-man-one-woman marriage laws.⁵

Is Justice Kennedy’s blanket declaration that “sexual orientation is . . . immutable” true? This paper will demonstrate that it is not – and the contrary evidence, that sexual orientation can change, has only been growing.⁶

Key Issues

Although the Supreme Court essentially took the marriage issue out of the realm of democratic decision-making with their decision dictating a nationwide redefinition of marriage, there are still at least two very live issues of political and legislative debate in which the immutability of sexual orientation can be expected to influence the opinions of the public and of legislators, and thus possibly the outcome of the debate.

“Civil Rights” or “Non-Discrimination”

The first of these issues is the effort – first begun over forty years ago – to add “sexual orientation” (as well as, usually, “gender identity,” although this paper does not address that) to laws prohibiting “discrimination” in employment, public accommodations, and/or other areas of the law. Such efforts have been pursued at the local, state, and federal levels; and as this paper went to press the new Democratic majority in the U.S. House of Representatives had just announced a push for the passage of the latest version of such legislation at the federal level, the so-called “Equality Act.”⁷ (Family Research Council’s critique of an earlier version of the “Equality Act” can be found online.⁸) Also at issue could be policy decisions by private organizations, such as corporations or schools and colleges, to adopt “sexual orientation” as a protected category in their own internal non-discrimination policies.

The “immutability” question is relevant to this issue because the original paradigm for non-discrimination laws and policies arose in the context of efforts to end discrimination based on race – a characteristic which is clearly inborn, involuntary, and immutable. In fact, the Equality Act would amend the Civil Rights Act of 1964 – the key federal law to prohibit racial discrimination in employment and public accommodations – to add “sexual orientation” as a protected category. The argument that “sexual orientation” is immutable is used to support the idea that sexual orientation is comparable to

race, and therefore worthy of the same protection. A dramatic example was when *The Advocate*, the leading LGBT news magazine in the U.S., ran a cover in 2008 that starkly declared, “Gay Is the New Black.”⁹

Bans on Sexual Orientation Change Efforts

Pro-homosexual activists have long been critical of various forms of counselling or psychotherapy intended to help people with unwanted same-sex attractions to overcome those feelings.¹⁰ This kind of counselling or therapy can be referred to as “sexual orientation change efforts” (SOCE), or so-called “conversion therapy.”¹¹ Given that virtually all SOCE therapists offer it only for willing clients, there is somewhat of a chicken and egg question in understanding the hostility of homosexual activists to SOCE. Do they sincerely believe that sexual orientation is immutable – and therefore that efforts to change it are doomed to failure? Or are they bothered mostly by the fact that some clients and therapists – however small a minority – see homosexuality as something undesirable, and are they simply using arguments about immutability as a tactic to end a practice they find offensive?

In any case, arguments about the immutability of sexual orientation are clearly relevant to the debates over SOCE. If it has been proven that sexual orientation can *never* change, then therapeutic efforts to achieve such an outcome are futile (and, as California’s failed therapy ban of 2018, AB 2943, declared, even fraudulent¹²). On the other hand, if there is evidence that sexual orientation *can* change, even outside the context of therapy, that would make the possibility of therapy-induced change seem much more plausible.

I have written elsewhere about sexual orientation change efforts, concluding that critics’ assertions that they are ineffective and harmful are not supported by the evidence.¹³ However, please note that *this* paper is not intended to address SOCE per se, but only the prefatory question of whether sexual orientation change is possible under *any* circumstances.

As will be shown, a number of scholars – including ones who self-identify as gay or lesbian or are openly supportive of the homosexual movement – have concluded from the evidence that in fact sexual orientation *can* change over time. Some of those scholars remain skeptical of SOCE, however. I argue, though, from the analogy of weight loss. To say that sexual orientation can change, but *never* by therapeutic means, is like saying that overweight people *can* lose weight spontaneously – but *never* by adopting a diet and exercise regimen! This seems implausible, to say the least – although the long-term effectiveness of any *particular* diet and exercise regimen, like the long-term effect of any therapy related to sexual orientation, is still worthy of study.

What is “Sexual Orientation?”

To address the issue of whether sexual orientation can *change*, we must first have a clear understanding of what sexual orientation *is*. It is often assumed that sexual orientation is a unitary characteristic whose meaning is self-evident. This, however, is not the case.

Typically, when a definition of “sexual orientation” is offered, it is defined in terms of a person’s subjective *attractions* – is the individual sexually attracted to persons of the opposite sex (heterosexual), the same sex (homosexual), or both sexes (bisexual)?

However, there are at least two other aspects of sexual orientation. One is a person’s actual sexual *behavior* – does the individual have a sexual partner or partners only of the opposite sex, only of the same

sex, or of both sexes? The other is an person's *self-identification* – does the individual think of herself or himself – or identify herself or himself to others – as “straight,” “gay” or “lesbian,” “bisexual,” or something else?

The American Psychological Association defines sexual orientation this way (emphasis added):

Sexual orientation refers to an enduring pattern of emotional, romantic, and/or sexual *attractions* to men, women, or both sexes. *Sexual orientation also refers* to a person's sense of *identity* based on those attractions, related *behaviors*, and membership in a *community* of others who share those attractions [emphasis added].¹⁴

Thus, the APA definition includes all three of the components I have mentioned – attractions, behavior, and identity – while even adding a fourth, “membership in a community.”

One of the first comprehensive modern surveys of sexuality in the United States, the National Health and Social Life Survey (NHSL) by the University of Chicago, conducted in 1992 and published in 1994, reached a similar conclusion. Authors Edward O. Laumann, et al., broke down same-sex sexuality into “desire,” “behavior,” and “identity,” describing these at various times as “dimensions,” “aspects,” or “components” of sexual orientation.¹⁵

Like the assumption that the meaning of sexual orientation is clear, there is often an assumption that these three elements of a person's sexuality – attractions, behavior, and self-identification – will be consistent with each other, or “congruent.” This assumption, too, is mistaken. Research has clearly shown, for example, that people who report having exclusively same-sex attractions may not have exclusively same-sex sexual partners, or people who have exclusively same-sex partners may not publicly identify as homosexual.

Laumann's report on the NHSL data demonstrated this with a Venn diagram showing how much overlap there is – and is not – between different elements of same-sex sexuality:

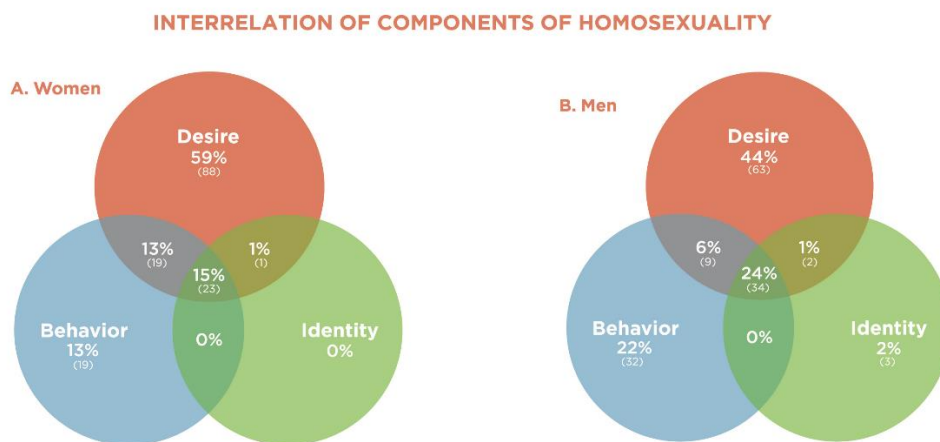
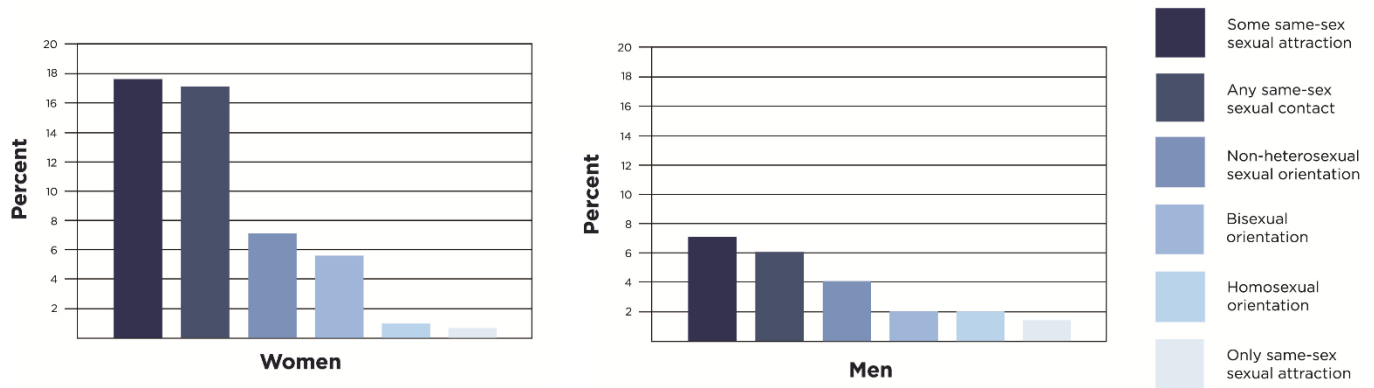


Fig. 8.2 Interrelation of components of homosexuality. A, For 150 women (8.6 percent of the total 1,749) who report any adult same-gender sexuality. B, For 143 men (10.1 percent of the total 1,410) who report any adult same-gender sexuality.

Edward O. Laumann, John H. Gagnon, Robert T. Michael, and Stuart Michaels, *The Social Organization of Sexuality: Sexual Practices in the United States* (Chicago: University of Chicago Press, 1994), p. 299.

Another chart, drawing on more recent data from a large federal survey, shows the large differences between various measures of same-sex sexuality:

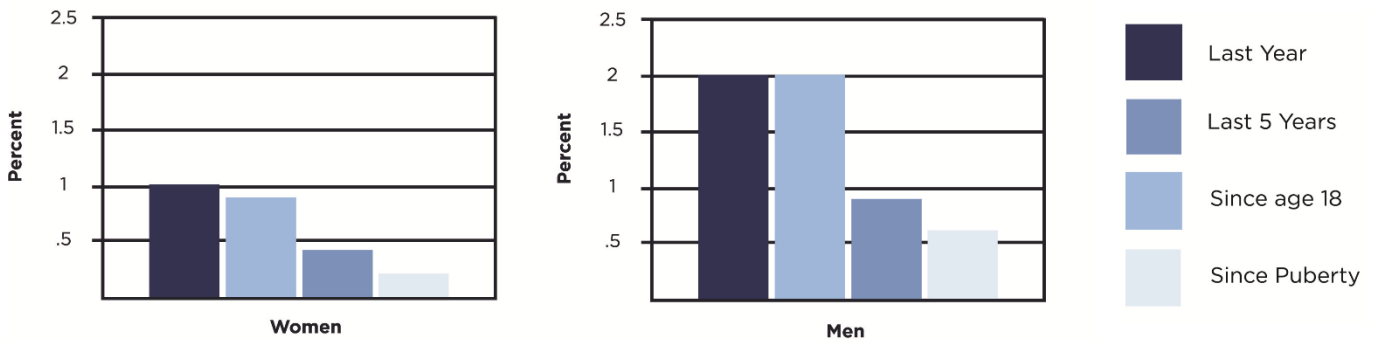
**DIFFERENT MEASURES OF SAME-SEX SEXUALITY;
U.S. ADULTS AGED 18-44**



Source: Casey E. Copen, Anjani Chandra, Isaedmarie Febo-Vazquez, "Sexual behavior, sexual attraction, and sexual orientation among adults aged 18-44 in the United States: Data from the 2011-2013 National Survey of Family Growth," *National Health Statistics Reports* No. 88 (Hyattsville, MD: National Center for Health Statistics, January 7, 2016), Tables 1-3, pp. 7-9; online at: <https://www.cdc.gov/nchs/data/nhsr/nhsr088.pdf>

In fact, the percentage of people who are exclusively homosexual in their sexual behavior for a lifetime is extraordinarily small, as indicated by this chart also based on the 1994 NHSLS data:

**PERCENTAGE OF PEOPLE WHO HAVE ENGAGED IN
EXCLUSIVELY HOMOSEXUAL (AND NO HETEROSEXUAL)
ACTIVITY IN GIVEN TIME PERIOD**



Edward O. Laumann, John H. Gagnon, Robert T. Michael, and Stuart Michaels, *The Social Organization of Sexuality: Sexual Practices in the United States* (Chicago: University of Chicago Press, 1994), p. 310-12.

This creates a challenge for labelling any one individual's "sexual orientation." If a person has had only opposite-sex romantic or sexual partners, and publicly identifies as heterosexual, but admits to experiencing same-sex attractions, are we to say that person is *really* "gay?" Are we to disregard their behavior, and disrespect their own self-identification?

While some may cling to a definition of “sexual orientation” that is based on attractions alone, in the context of the public policy debates we have mentioned, it is clear that only a broader definition, that includes both behavior and identification, makes sense. For example, the proposed federal “Equality Act” would prohibit discrimination on the basis of “sexual orientation,” which it defines as “homosexuality, heterosexuality, or bisexuality.”¹⁶ Yet surely it is the intention of the authors to prohibit “discrimination” on the basis of homosexual behavior or a homosexual identity – not just on the basis of homosexual attractions.

The laws recently enacted in some states to restrict “sexual orientation change efforts” (or so-called “conversion therapy”) explicitly restrict efforts to change behaviors, not just attractions:

“Sexual orientation change efforts” means any practices by mental health providers that seek to change an individual’s sexual orientation. This includes efforts to change behaviors or gender expressions, or to eliminate or reduce sexual or romantic attractions or feelings toward individuals of the same sex.¹⁷

Since the proposed legal protections encompass more than just attractions, it seems reasonable that our examination of the “immutability” of sexual orientation vs. the possibility of “change” should encompass more than just attractions as well.

What Is a “Change” in Sexual Orientation?

Since “sexual orientation” can involve any of three separate elements – attractions, behavior, and identity – then “sexual orientation change” should be able to involve any of the three elements as well. Particularly in the context of the debate over SOCE, it is sometimes assumed that unless a person goes from exclusively homosexual in attractions, behavior, and identity to exclusively heterosexual on all three elements, the person has not experienced “sexual orientation change.” However, it is more realistic to say that if individuals experience a significant level of change in *any* of these three areas, they have experienced some meaningful “change” in sexual orientation.

Thus (properly) understood, the evidence in the scholarly literature makes it clear that changes in the elements of sexual orientation are not only possible – they are fairly common.

How Do Scholars Describe “Sexual Orientation Change?”

One reason many people in the general public may not be aware of the extensive literature on the possibility of sexual orientation change is that “change” is not the word usually used in the scholarly literature. Instead, the term “sexual fluidity” is often used. Perhaps the most prominent scholar in the field, professor Lisa M. Diamond of the University of Utah (who identifies as a lesbian), even wrote an entire book on her studies regarding women’s sexuality titled *Sexual Fluidity*.¹⁸ Diamond and her law professor colleague Clifford J. Rosky have written the most comprehensive recent critique of “immutability,” to which we will return later (and from which we will quote in the course of this paper).¹⁹

On the flip side, the case *against* the “immutability” of sexual orientation is often not recognized, because the term used in the literature is “stability.” Studies which find evidence that elements of sexual orientation lack “stability” over time are studies that undermine the “immutability” thesis, and demonstrate sexual orientation change instead.²⁰

A third term to be aware of is “exclusivity.” Surveys may identify a significant number of people who experience at least some measure of same-sex sexuality (attractions, behavior, or identity) – but the number who are *exclusively* homosexual in their attractions, behavior, or self-identification, or in all three, is usually much smaller.

At one time, we had little way of tracking sexual orientation over time. It is challenging enough to conduct a survey, representative of the national population, with a large enough sample to generate significant numbers of respondents who identify with any of the elements of same-sex sexuality. But to be able to identify *changes* in sexual orientation, we need such a sample that can be tracked *longitudinally* over time – that is, where large numbers of *the same individuals* are surveyed over a period of time (often years or even decades) in order to see if their responses change over time.

Fortunately, several such surveys have been conducted over the last two decades or so, providing us with much better data than what was available before the 21st century. This paper will summarize the findings of six different studies based on four different databases of longitudinal data. I will go through them roughly in order of the age groups addressed – two involve the transition from adolescence to young adulthood, one involves primarily young adults, and one involves adults in mid-life.

Longitudinal Studies of Sexual Orientation

1. National Longitudinal Survey of Adolescent to Adult Health (“Add Health”)²¹

This survey began with a nationwide, school-based sample of 20,747 7th to 12th graders. Their median age at the time of the first interviews (Wave 1) was 15.8 years old; they were re-interviewed a year later (median age 16.7), and Wave 3 consisted of follow-up interviews when participants were between 18 and 26 (median age 21.7).²² Participants were asked about their romantic attractions and sexual behavior in all three waves; only at Wave 3 were they asked how they identify their sexual orientation.

Attractions and Behaviors

One might expect that if surveys do show change in the components of sexual orientation over time, they would be likely to move in a direction from heterosexuality toward homosexuality. It might be theorized that because of the normative nature of heterosexuality, some people who have same-sex attractions might feel pressure to deny them, not to act upon them, or to conceal same-sex sexual behavior. As time goes on, they might become more willing to abandon the “mask” of heterosexuality and acknowledge their homosexual nature. On the other hand, if core sexual orientation is immutable, then those who show (and acknowledge) manifestations of homosexuality at a young age might be expected to consolidate that identity as they grow older.

This is not, however, what the research shows. As Ritch Savin-Williams and Geoffrey Ream note in their 2007 article:

Although the between wave agreement data were high (usually around 70% for attraction and 95% for behavior), this was largely because of the stability of opposite-sex attraction and behavior. . . . The data . . . highlight the high proportion of participants with same- [homosexual] and both-sex [bisexual] attraction and behavior that migrated into opposite-sex [heterosexual] categories between waves.²³

The *percentage* of “opposite-sex attracted and behaving individuals” (i.e., heterosexuals) who “migrated to nonheterosexual categories” was much smaller; but because this base population (of heterosexuals) was much larger, the raw *numbers* of people moving in that direction (toward same-sex sexuality) was actually higher.²⁴

However, the authors reiterated,

All attraction categories other than opposite-sex [heterosexual] were associated with a lower likelihood of stability over time. That is, individuals reporting any same-sex attractions were more likely to report subsequent shifts in their attractions than were individuals without any same-sex attractions [heterosexuals].²⁵

In other words, people who at first reported exclusively heterosexual attractions and behavior tended to remain very stable in their sexuality; but change was much more common among those who reported any measure of same-sex sexuality.

Even so, one might suppose that the shifts occurring among those who report same-sex sexuality would be from homosexuality toward bisexuality, or vice versa, rather than shifting toward exclusive heterosexuality. Yet this also was not borne out:

Those who engaged in same/both-sex [homosexual or bisexual] behavior during the first two waves were more likely to report Wave 3 exclusive opposite-sex [heterosexual] behavior than those who engaged in opposite-sex [heterosexual] behavior were to later report same/both-sex [homosexual or bisexual] behavior.²⁶

In other words, movement from some same-sex behavior to *exclusively* opposite-sex (heterosexual) behavior was more common than movement from heterosexual behavior to *any* same-sex sexual behavior.

Savin-Williams and Ream also gave some indication of how extraordinarily rare *exclusive* homosexuality actually is. For one statistical analysis of behavior, “Same- [homosexual] and both-sex [bisexual] behavior was collapsed into one category because exclusively same-sex [homosexual] behavior was so rare in all three waves (usually <1%).”²⁷ The authors also noted that “if having romantic attraction to both sexes [bisexuality] counted as same-sex oriented, then the prevalence rate was nine times higher than if the criterion was exclusive same-sex [homosexual] attraction.”²⁸

Identity

Researcher Ritch Savin-Williams of Cornell University and two other researchers re-examined the data following a fourth wave of interviews, when participants were between 24 and 34 (median age 28.5).²⁹ Their 2012 article examined stability and changes in sexual orientation self-identification between Wave 3 (the first time the identity question was asked) and Wave 4 (approximately six years later).

Survey respondents could identify themselves as “100% heterosexual (straight);” “mostly heterosexual,” but with some same-sex attractions; “bisexual;” “mostly homosexual,” but with some opposite-sex attractions; or “100% homosexual (gay).”³⁰

A chart and a table dramatically illustrate the movement that occurred between all of these categories, just in the six years between Wave 3 and Wave 4. The chart featured the changes in all directions, with

the exception that the mostly homosexual and 100% homosexual group were combined “in order to comply with the Add Health contract requiring displayed cell frequencies to be greater or equal to 3” (yet another indication of how rare exclusive homosexuality is).³¹

The chart (“Fig. 1 Change in sexual orientation identity between waves”³²) gives more detailed information, but is “unweighted.”³³ With that as a caveat, it provides fascinating information as to the changes that are possible, in what direction, and to what degree.

Since changes from homosexual to heterosexual are the most controversial (particularly in the debate over SOCE therapy bans), it is interesting to consider the different ways that such a “change” might be measured.

If we look at anyone with any indication of same-sex attraction (homosexual, bisexual, or “mostly heterosexual”) and calculate how many had at least some movement in a heterosexual direction, we find that 105 out of 323 men with same-sex attraction (33%) experienced a change in a heterosexual direction. Meanwhile 382 out of 907 women with same-sex attraction (42%) moved in a more heterosexual direction.

However, some might argue that someone who still retains some same-sex attraction (moving, say, from homosexual to bisexual, or bisexual to “mostly heterosexual”) has not really experienced the kind of “change” people think of in connection with SOCE therapies. So another question might be: How many of the people with at least some same-sex attractions saw the elimination of *all* such attractions and moved to the “100% heterosexual” category? Among men, this occurred with 95 of 323, or 29% of those with same-sex attractions. Among women, 306 of 907 – 34% – lost all same-sex attractions they once had.

Often when people think of “sexual orientation change,” however, they think of a more comprehensive transformation from homosexual to heterosexual. Yet in the unweighted data, even this most dramatic of changes in sexual orientation identification, from homosexual (100% or “mostly,” since the chart lumps them together) to “100% heterosexual,” was actually experienced by 8 of the 113 homosexual men (7%) and 8 of the 64 homosexual women (12.5%).

The table that presented the weighted data (“Table 2: Sexual orientation identity at Wave 3 and Wave 4”³⁴) had the advantage of separating out all five sexual orientation categories (including “mostly homosexual” and “100% homosexual,” which were lumped together in the chart). However, it had the disadvantage of not including the percentage changing from each category to each other category. Nevertheless, it indicated that even among the respondents who identified as “100% homosexual” in Wave 3 – who one might expect to be the most resistant to change – 29.2% of the men and 33.1% of the women moved “towards heterosexual” identities.

This means that some of the statements in the article’s narrative were actually misleading. For example, the authors state that “among both sexes the most stable identities were the anchors of the self-reported sexual orientation identity scale: 100% heterosexual and 100% homosexual.”³⁵ They also note “Wave 3 100% heterosexuals identifying as 100% homosexual in Wave 4” (an example of “individuals who ‘came out of the closet’”), but declare, “The reverse, 100% homosexuals transitioning to heterosexuality, seldom occurred.”³⁶

This verbal equivalency between the “100% heterosexual” and “100% homosexual” populations is falsified by the data showing that the 29.2% of “100% homosexual” men who shifted “towards heterosexual” identities was *ten times* the 2.9% of “100% heterosexual” men who shifted “towards

homosexual” identities; and the 33.1% of “100% homosexual” women who shifted “towards heterosexual” identities was almost *three times* the 11.9% of “100% heterosexual” women who shifted “towards homosexual” identities.³⁷

Diamond and Rosky summarized this article this way:

Of the 5.7% of men and 13.7% of women who chose one of the nonheterosexual descriptors at Wave 3, 43% of the men and 50% of the women chose a different sexual orientation category six years later. Of those who changed, two-thirds changed to the category *100% heterosexual* [emphasis in the original].³⁸

2. Growing Up Today Study (GUTS)³⁹

As described in a 2011 article in the *Archives of Sexual Behavior* by Miles Q. Ott, et al.,

The Growing Up Today Study (GUTS) is a longitudinal cohort study of male and female adolescents living throughout the United States. GUTS participants were the children of women in the Nurses’ Health Study II (NHSII), a prospective cohort study of over 116,000 female registered nurses⁴⁰

Children ages 9-14 were first enrolled in the study in 1996. Collection of data on sexual orientation identity began in 1999, when participants were ages 12-17, and the study reported here included data from four waves – 1999, 2001, 2003, and 2005.⁴¹ The Ott et al. study looks at each comparison of one wave’s responses to the next for an individual as one “transition.” Therefore, in the end the study looked at data on 26,010 “transitions” provided by 11,109 separate participants.

As with the Add Health studies, respondents were given the opportunity to place themselves in one of six categories: “completely” or “mostly” heterosexual or homosexual, as well as bisexual or “unsure.” As with the Savin-Williams, et al. (2012) paper, it was possible to identify transitions from each of the five sexual orientation identities to each of the others. Ott, et al. reported the key data in two tables (one for each sex), with each of them broken down by age group into those ages 12-17 or 18-21 at the start of the transition. Here is some of what I found from examining the data:⁴²

Males 12-17 years old

- Of those with any same-sex attraction, 50% (155 out of 310) moved toward a more heterosexual identity.
- Of those with any same-sex attraction, 43% (143/310) *lost all same-sex attraction*, becoming “completely heterosexual.”
- Of those who initially identified themselves as “completely homosexual,” 25% (7/28) moved toward a more heterosexual identity.
- Of those who initially identified themselves as “completely homosexual,” 11% (3/28) changed to “completely heterosexual” just two years later.
- In contrast, of those who initially identified themselves as “completely heterosexual,” only 3.7% moved toward a more homosexual identity.
- Of those with any opposite-sex attraction, only 4.1% moved toward a more homosexual identity.

Males 18-21 years old

- Of those with any same-sex attraction, 29% (73/256) moved toward a more heterosexual identity.
- Of those with any same-sex attraction, 25% (63/256) *lost all same-sex attraction*, becoming “completely heterosexual.”
- Of those who initially identified themselves as “completely homosexual,” 11% (5/46) moved toward a more heterosexual identity.
- Of those who initially identified themselves as “completely homosexual,” 2.2% (1/46) changed to “completely heterosexual” two years later.
- In contrast, of those who initially identified themselves as “completely heterosexual,” only 3.9% moved toward a more homosexual identity.
- Of those with any opposite-sex attraction, only 4.7% moved toward a more homosexual identity.⁴³

Females 12-17 years old

- Of those with any same-sex attraction, 47% (382/817) moved toward a more heterosexual identity.
- Of those with any same-sex attraction, 41% (334/817) *lost all same-sex attraction*, becoming “completely heterosexual.”
- Of those who initially identified themselves as “completely homosexual,” 57% (4/7) moved toward a more heterosexual identity.
- Of those who initially identified themselves as “completely homosexual,” 29% (2/7) changed to “completely heterosexual” just two years later.
- In contrast, of those who initially identified themselves as “completely heterosexual,” only 7.0% moved toward a more homosexual identity.
- Of those with any opposite-sex attraction, only 7.1% moved toward a more homosexual identity.

Females 18-21 years old

- Of those with any same-sex attraction, 35% (290/820) moved toward a more heterosexual identity.
- Of those with any same-sex attraction, 29% (235/820) *lost all same-sex attraction*, becoming “completely heterosexual.”
- Of those who initially identified themselves as “completely homosexual,” 35% (7/20) moved toward a more heterosexual identity.
- Of those who initially identified themselves as “completely homosexual,” 5% (1/20) changed to “completely heterosexual” just two years later.

- In contrast, of those who initially identified themselves as “completely heterosexual,” only 6.2% moved toward a more homosexual identity.
- Of those with any opposite-sex attraction, only 6.7% moved toward a more homosexual identity.⁴⁴

Diamond and Rosky summarized the GUTS data in Ott, et al. this way:

Of the 7.5% of men and 8.7% of women who chose a nonheterosexual descriptor at ages 18 to 21, 43% of the men and 46% of the women chose a different category by age 23. Among the same-sex-attracted youth who changed, 57% of the men’s changes and 62% of the women’s changes involved switching to *Completely heterosexual* [Emphasis in the original].⁴⁵

Remember that all of the data presented above deals with changes from one wave of data collection to the next—in other words, changes that occurred *in only two years*. It is somewhat disappointing that the paper did not present more comparisons from the first wave of data collection to the last—which might have yielded even more dramatic rates of change.

Two other facts from this study are worth noting. A theory that youth who describe themselves as “unsure” of their sexual orientation (what is sometimes called questioning) are likely to be on the way to adopting a sexual minority (homosexual or bisexual) identity was *not* borne out. The study found that “of those who described themselves as ‘unsure’ of their orientation identity at any point, 66% identified as completely heterosexual at other reports and never went on to describe themselves as a sexual minority.”⁴⁶

In addition, the “coming out” scenario described by Savin-Williams, et al.—a transition from “completely heterosexual” to “completely homosexual”—was vanishingly rare. It occurred in 0.1% of cases in three of the four groups; among females 12-17 it was reported in *less than* 0.1% of cases.⁴⁷ The modest number who reported the opposite transformation, from “completely homosexual” to “completely heterosexual” in only two years—a cumulative total of 7 out of 101, or 6.9%—is impressive by comparison.

3. Dunedin (New Zealand) Multidisciplinary Health and Development Study (DMHD)⁴⁸

Although most of the longitudinal surveys of sexual orientation have been conducted in the United States, two important articles have been published concerning findings on this topic from a study of about 1,000 children who were born in Dunedin, New Zealand in 1972 and 1973. The first, by Nigel Dickson and two colleagues in 2003, compared answers to questions that were asked about sexual attractions and behaviors at ages 21 and 26.⁴⁹

Sexual Attractions, Ages 21-26

Clear data on direction and magnitude of change between the two surveys was provided only for sexual attractions.⁵⁰ Unfortunately, the article did not provide the actual questions used in the survey, saying only that “six Kinsey-style options” were offered.⁵¹ Dickson, et al. condensed the responses into three categories of attraction: “Only opposite sex,” “Occasional attraction to same sex,” and “Major attraction to same sex.”

Here are the changes in sexual attractions that were described between ages 21 and 26:

Men

- Of those with any same-sex [homosexual] attraction (“major” or “occasional”), 30% (6/20) moved toward more heterosexual attractions.
- Of those with any same-sex attraction, 25% (5/20) *lost all same-sex attraction*, moving to “only opposite sex” attractions.
- Of those who initially reported “major [homosexual] attraction to same sex,” 20% (1/5) moved toward more heterosexual attractions.
- In contrast, of those who initially reported “only opposite sex” attractions, only 2.1% (9/428) moved toward more homosexual attractions.

Women

- Of those with any same-sex [homosexual] attraction, 47.5% (19/40) moved toward more heterosexual attractions.
- Of those with any same-sex attraction, 40% (16/40) *lost all same-sex attraction*, moving to “only opposite sex” attractions.
- Of those who initially reported “major [homosexual] attraction to same sex,” 63% (5/8) moved toward more heterosexual attractions.
- Of the women who initially reported “major [homosexual] attraction to same sex,” 25% (2/8) moved to “only opposite sex” attractions five years later.
- In contrast, of those who initially reported “only opposite sex” attractions, only 12% (45/390) moved toward more homosexual attractions.

The authors concluded:

Much same-sex attraction is non-exclusive and unstable. The large size of this unstable group . . . is consistent with a large role for the social environment. . . . Overall these findings argue against any single explanation for homosexual attraction.⁵²

Sexual Attraction, Experience, and Identity, Ages 21-38

A 2013 follow-up article featured results of surveys at the age of 21, 26, 32, and 38.⁵³ Detailed information was given on rates of change for sexual “attraction” (3 wave-to-wave comparisons, from ages 21 to 38), sexual behavior or “experience” (2 wave-to-wave comparisons, ages 26-38), and sexual “identity” (one wave-to-wave comparison, ages 32-38). Because of the relatively low numbers of those reporting same-sex attraction, experience, or identity, I have used the Ott, et al. technique of lumping together all “transitions” from wave to wave to calculate percentages of change. That resulted in the following calculations:

Attraction, Men

- Of those with “initially mixed” [opposite-sex and same-sex] attractions, 33% of all transitions (18/54) were “away from same-sex” attractions.

- In contrast, of those with “initially mixed” attractions, only 9.3% of all transitions (5/54) were “towards same-sex” attractions.
- Of those with “initially only same” sex attractions, 13% of transitions (2/15) were “away from same-sex” attractions.
- In contrast, of those with “initially only opposite” sex attractions, only 1.7% of transitions were “towards same-sex” attractions.

Attraction, Women

- Of those with “initially mixed” attractions, 51% of all transitions (88/173) were “away from same-sex” attractions.
- In contrast, of those with “initially mixed” attractions, only 8.1% of all transitions (14/173) were “towards same-sex” attractions.
- Of those with “initially only same” sex attractions, 33% of transitions (3/9) were “away from same-sex” attractions.
- In contrast, of those with “initially only opposite” sex attractions, only 7.8% of transitions were “towards same-sex” attractions.

Experience, Men

- Of those with “initially mixed” experience, 60% of all transitions (12/20) were “away from same-sex” experience.
- In contrast, of those with “initially mixed” experience, only 20% of all transitions (4/20) were “towards same-sex” experience.
- Of those with “initially only same” sex experience, 9.1% of transitions (1/11) were “away from same-sex” experience.
- In contrast, of those with “initially only opposite” sex experience, only 1.2% of transitions were “towards same-sex” experience.

Experience, Women

- Of those with “initially mixed” experience, 81% of all transitions (22/27) were “away from same-sex” experience.
- In contrast, of those with “initially mixed” experience, only 11% of all transitions (3/27) were “towards same-sex” experience.
- Of those with “initially only same” sex experience, 14% of transitions (1/7) were “away from same-sex” experience.
- In contrast, of those with “initially only opposite” sex experience, only 2.3% of transitions were “towards same-sex” experience.

Identity, Men

- Of those who initially had any same-sex sexual identity (“gay” or “bisexual”), 7.1% (1/14) transitioned “away from same-sex” identities.
- In contrast, of those who initially had a heterosexual identity, only 1.2% transitioned “towards same-sex” (“gay” or “bisexual”) identities.

Identity, Women

- Of those who initially had any same-sex sexual identity (“lesbian” or “bisexual”), 35% (6/17) transitioned “away from same-sex” identities.
- In contrast, of those who initially had a heterosexual identity, only 1% transitioned “towards same-sex” (“lesbian” or “bisexual”) identities.⁵⁴

This study is valuable for demonstrating that “variation of reported sexual attraction, experiences, and identity,” already demonstrated in adolescents and young adults, “continues across early and mid-adulthood.”⁵⁵ Diamond and Rosky noted that in their summary of the Dunedin data as well, saying:

... [R]ates of change do not appear to decline as respondents get older. Rates of change in attractions among same-sex-attracted men ranged from 26% to 45%, and rates of change in same-sex-attracted women ranged from 55% to 60%. Among the same-sex-attracted men reporting change, between 67% and 100% of the changes were toward heterosexuality, and this also was true for 83% to 91% of the same-sex-attracted women undergoing changes.⁵⁶

4. National Survey of Midlife Development in the United States (MIDUS I and II)⁵⁷

This survey collected data on sexual orientation identity (defined on the basis of sexual attractions) for 2,560 American adults ranging in age at Wave 1 from 25 to 74, with an average age of approximately 47. Wave 1 data was collected from 1994 to 1995, and Wave 2 data between 2004 and 2006. Only three sexual orientation identity categories were used: heterosexual, bisexual, and homosexual.

The key data on sexual orientation change was reported in Table 2:⁵⁸

Identity, Men

- Of those who initially had any same-sex sexual identity (“homosexual” or “bisexual”), 16% (6/38) transitioned toward a more heterosexual identity.
- In contrast, of those who initially had a heterosexual identity, only 0.8% transitioned towards a more homosexual (“homosexual” or “bisexual”) identity.

Identity, Women

- Of those who initially had any same-sex sexual identity (“homosexual” or “bisexual”), 50% (14/28) transitioned toward a more heterosexual identity.
- In contrast, of those who initially had a heterosexual identity, only 1% transitioned “towards same-sex” (“lesbian” or “bisexual”) identities.⁵⁹

The narrative summary of the results by authors Mock and Eibach said this:

Overall, 55 (2.15%) participants reported a different sexual orientation identity at Wave 2 compared to Wave 1. Among women, 1.36% with a heterosexual identity changed, 63.3% with a homosexual identity changed, and 64.71% with a bisexual identity changed. Among men, 0.78% with a heterosexual identity changed, 9.52% with a homosexual identity changed, and 47.06% with a bisexual identity changed.⁶⁰

As was evident from the other studies I have examined, the authors noted that “for both men and women heterosexuality was significantly more stable than homosexuality or bisexuality.”⁶¹

Diamond and Rosky noted these highlights from the MIDUS study:

... [F]ew respondents (less than 1% among both men and women) described themselves as homosexual or bisexual. Yet among this group 64% of the women and 26% of the men identified their sexual orientation differently 10 years later (Mock & Eibach, 2012). Half of the men’s changes and 55% of the women’s changes involved switching to heterosexuality.⁶²

Does it *Matter* Whether Sexual Orientation is “Immutable?”

Some people on both sides of the moral, legal, political, and cultural divides over homosexuality have argued that it really does not matter whether sexual orientation is immutable or not. On the Left, some argue that individuals should be free to enter into sexual relationships with others of the same sex for any reason – not just because they have no meaningful alternative. They further argue that those behavioral choices⁶³ should be protected by law.⁶⁴

Among conservatives, on the other hand (particularly religious conservatives), some may concede that a homosexual orientation is immutable – but nevertheless encourage those with such an orientation to choose abstinence from homosexual relationships in order to comply with religious or moral teachings, and/or to avoid the health risks associated with homosexual conduct.⁶⁵

However, there seems to be little doubt that the question of whether sexual orientation is immutable has a significant impact on public opinion regarding policy issues related to homosexuality. Those who believe in the immutability of sexual orientation are more likely to take the pro-homosexual position in policy debates, while those who believe that sexual orientation can change are more likely to question the need or justification for special laws to protect homosexuals.⁶⁶

The key role that Justice Kennedy’s belief in the immutability of sexual orientation played in the Supreme Court’s 2015 marriage decision clearly shows that immutability arguments are still playing a major role – and still being used to advance “LGBT rights” issues. Ironically, not only was Justice Kennedy wrong on the science about sexual orientation, but his citation of an amicus (“friend of the court”) brief in support of this contention does not even appear to have been accurate. Kennedy cited a brief by the American Psychological Association – but an examination of that brief shows that it does not even mention the word “immutable” or “immutability.”⁶⁷ (The closest it comes is to say that sexual orientation is “highly resistant to change,” but that is not the same as “immutable,” and in other places the APA has actually made significant concessions regarding the possibility of sexual orientation change and even the potential benefits of SOCE.⁶⁸)

There was, however, a different amicus brief that *did* make an argument asserting “the immutability of sexual orientation.”⁶⁹ However, even this brief made its argument by *redefining* the concept of “immutability” to include “characteristics that are *capable of being changed* but are of such fundamental importance that persons should not be required to change them, such as religious beliefs.”⁷⁰

This argument, however, was challenged in a brief filed by psychiatrist Paul McHugh. It argued:

The Court’s jurisprudence makes clear that immutability is a necessary condition for recognizing a new protected class. The Court’s precedents teach that immutability denotes a characteristic “determined solely by the accident of birth.”⁷¹

McHugh goes on to debunk the idea that homosexuality is innate, and notes, “Sexual orientation can and often does change over time.”⁷²

The End of Immutability?

As has already been noted, perhaps the strongest critique of the “immutability” theory yet has come from LGBT allies Lisa Diamond and Clifford Rosky in their 2016 article on “Scrutinizing Immutability.” I have already cited their summaries of some of the key studies on sexual orientation change. They bring this data together in a single table showing rates and directions of change in twelve different time transitions (six for each sex) reported in the four major datasets. In these 12 transitions, the rates of change from “any same-sex attractions” at the first assessment to “heterosexuality” at the second assessment ranged from a low of 13% to a high of 53%.⁷³ By contrast, the rates of those “who reported exclusively heterosexual attractions at first assessment [who] ended up reporting same-sex attractions at second assessment” ranged from a low of 1% (three times) to a high of 12%.⁷⁴

Diamond and Rosky, though LGBT allies, were as critical of Justice Kennedy’s remarks in the *Obergefell* decision as I have been, describing “the Court’s casual, scientifically inaccurate references to immutability” and lamenting that “the Supreme Court has a view of sexual orientation that is several decades out of date.”⁷⁵

Diamond and Rosky conclude, “Given the consistency of these findings, it is not scientifically accurate to describe same-sex sexual orientation as a uniformly immutable trait.”⁷⁶ Yet as recently as 2014, 200 Western scientists submitted a letter to the President of Uganda that mis-characterized the science:

The authors deployed the same exaggerations of scientific evidence that have long characterized immutability debates, concluding that “all sexual orientations are biologically based, largely innate and mostly unchangeable.”⁷⁷

Therefore, Family Research Council can heartily endorse Diamond and Rosky’s conclusion that “the time has finally come for U.S. advocates, lawyers, and scientists to abandon the immutability argument once and for all.”⁷⁸

Unfortunately, Diamond and Rosky’s careful analysis of the evidence for the generalized possibility of sexual orientation change is not matched by equally careful analysis of the evidence⁷⁹ regarding the possibility of such change being mediated by therapeutic methods (SOCE) – which they dismiss. Christopher H. Rosik has critiqued this aspect of Diamond and Rosky’s work, writing that “it appears their ideological and moral commitments kept them from acknowledging (i.e., blinded them to) the plausibility of therapy-assisted sexual attraction fluidity in the context of SOCE.”⁸⁰

Diamond and Rosky, and some other commentators on the Left, still advocate for an LGBT political agenda—but they do so on the basis of arguments for personal freedom, rather than arguments about the nature of sexual orientation itself. Social worker Michael C. LaSala put this view colloquially in a critique of immutability he wrote for *Psychology Today*:

If we truly believe that it is acceptable to have sexual and romantic relationships with the same sex, then it shouldn't matter whether or not sexual orientation is changeable. If it is really OK, we should be as accepting of a person who has a relationship with a man and then a woman as we would of someone who usually eats vanilla ice cream and then decides to start eating pistachio. So what? Sex between two consenting adults, like eating ice cream, should be about pleasure, personal preferences, or expressions of love and affection, not about social rules and definitions.⁸¹

This approach may be appealing to those who have already enlisted as soldiers in the sexual revolution. However, it amounts to replacing an argument rooted in the principles of “civil rights” with an argument rooted in the principles of the sexual revolution.

Whether that will be as effective in winning allies for the LGBT movement among the general public remains to be seen. This paper has presented significant evidence in favor of the possibility of sexual orientation change and against “immutability,” including surveys showing that of “same-sex attracted respondents,” up to 38% of men and 53% of women “changed to heterosexuality” in only a six-year period.⁸² In light of this evidence debunking one of its key historical premises, the public would be wise to question whether the goals of the homosexual movement to reshape American law, society, and institutions can be justified at all.

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¹ Merriam-Webster's Collegiate Dictionary, Eleventh Edition (2003), s.v. “immutable.”

² *Obergefell v. Hodges*, 135 S. Ct. 2596 (2015), <https://casetext.com/case/obergefell-v-hodges>.

³ *Ibid.*, 2594.

⁴ *Ibid.*, 2602.

⁵ A more detailed analysis and critique of this aspect of Justice Kennedy's ruling can be found here: Peter Sprigg, “Is Homosexuality ‘Immutable?’ Justice Kennedy's Shaky Bridge to Redefining Marriage,” Family Research Council, August 5, 2015, accessed March 25, 2019,

<https://www.frcblog.com/2015/08/homosexuality-immutable-justice-kennedys-shaky-bridge-redefining-marriage/>.

⁶ In researching this paper, I looked at a number of academic studies as well as online sources regarding the question of whether sexual orientation is immutable or can change. Interestingly, I found a statement supporting the possibility of change coming from an unlikely source: Planned Parenthood. A page on their website declares, “Your sexual orientation can change over your lifetime.” See: “What causes sexual orientation?” Planned Parenthood, accessed March 25, 2019, <https://www.plannedparenthood.org/learn/sexual-orientation-gender/sexual-orientation/what-causes-sexual-orientation>.

⁷ Chris Johnson, “Equality Act returns — with House Democrats in majority,” *Washington Blade*, March 13, 2019, accessed March 25, 2019, <https://www.washingtonblade.com/2019/03/13/equality-act-returns-with-house-democrats-in-majority/>.

⁸ Peter Sprigg, “Questions and Answers about the Proposed Federal ‘Equality Act,’” Family Research Council, February 2016, <https://downloads.frc.org/EF/EF16B18.pdf>.

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- ⁹ Michael Joseph Gross, "Gay is the New Black?" *The Advocate*, November 16, 2008, accessed March 25, 2019, <https://www.advocate.com/news/2008/11/16/gay-new-black>. (Note that the headline in the online version of the article included a question mark, but the cover of the print edition did not.) The accompanying article did not actually rest on an "immutability" argument, however. Author Gross declared, "Gay is the new black in only one meaningful way. At present we are the most socially acceptable targets for the kind of casual hatred that American society once approved for habitual use against black people." However, the article was written in the wake of the passage of Proposition 8 in California, which amended that state's constitution to define marriage as the union of a man and a woman. The article noted that according to exit polls, 70% of black voters supported Prop. 8 – suggesting that African-Americans themselves do not agree with the contention that "gay is the new black."
- ¹⁰ When people speak of "sexual orientation change," they are generally referring to efforts to reduce or eliminate homosexual attractions. However, SOCE can also be targeted at helping an individual feel comfortable with abstaining from homosexual conduct – even if the feelings remain – or at increasing heterosexual attractions or comfort with a heterosexual relationship. The latter is particularly a focus for some same-sex attracted clients who are already married to someone of the opposite sex and wish to preserve the marriage.
- ¹¹ Practitioners of such efforts almost never use the term "conversion therapy" – only critics call it that. While some practitioners have criticized the term "sexual orientation change efforts" as well, I have continued to use SOCE as the most accurate way of describing the practice that includes both therapy conducted by licensed mental providers and counselling provided by religious or other counselors who may not be licensed.
- ¹² Peter Sprigg, "California's Effort to Ban 'Conversion Therapy' Failed. Here's a Better Path We Can All Agree On." *The Daily Signal*, September 13, 2018, accessed March 25, 2019, <https://www.dailysignal.com/2018/09/13/californias-effort-to-ban-conversion-therapy-failed-heres-a-better-path-we-can-all-agree-on/>.
- ¹³ See, e.g., Peter Sprigg, "Are Sexual Orientation Change Efforts (SOCE) Effective? Are They Harmful? What the Evidence Shows," Family Research Council, September 2018, <https://downloads.frc.org/EF/EF18104.pdf>.
- ¹⁴ "Answers to Your Questions: For a Better Understanding of Sexual Orientation and Homosexuality," American Psychological Association, <https://www.apa.org/topics/lgbt/orientation.pdf>.
- ¹⁵ What Laumann et al. refer to as "desire" is actually a composite derived from two separate questions surveying what they refer to as "appeal" and "attraction." See Chapter 8 on "Homosexuality" in: Edward O. Laumann, John H. Gagnon, Robert T. Michael, and Stuart Michaels, *The Social Organization of Sexuality: Sexual Practices in the United States* (Chicago: University of Chicago Press, 1994), 283-320. Other scholars have also divided what I call "attractions" into sub-categories, such as "fantasy" or "arousal," but all refer to an emotional or psychological aspect of sexual orientation, as distinct from overt behaviors or identity.
- ¹⁶ *Equality Act*, S 1006, 115th Cong., 1st sess. (May 2, 2017), 16, <https://www.congress.gov/115/bills/s1006/BILLS-115s1006is.pdf>.
- ¹⁷ California Senate Bill No. 1172, signed September 30, 2012, https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB1172.
- ¹⁸ Lisa M. Diamond, *Sexual Fluidity: Understanding Women's Love and Desire* (Cambridge, Mass.: Harvard University Press, 2008).
- ¹⁹ Lisa M. Diamond and Clifford J. Rosky, "Scrutinizing Immutability: Research on Sexual Orientation and U.S. Legal Advocacy for Sexual Minorities," *The Journal of Sex Research* 53 (2016): 363-391; accessed March 25, 2019, https://www.tandfonline.com/doi/full/10.1080/00224499.2016.1139665?casa_token=4qVfMTcc3zYAAAAA:VlduXTu7lj2O8f5IYB_PfjYDsSt43XFi9aFWTeUnERrM7SDTveAhrYSmzn1WVgzOHvKxOZgNA2Q.
- ²⁰ One scholar who has done several studies of "sexual orientation stability," especially among youth, is Ritch Savin-Williams of Cornell University. See, for example: Ritch C. Savin-Williams and Geoffrey L. Ream, "Prevalence and Stability of Sexual Orientation Components During Adolescence and Young Adulthood," *Archives of Sexual Behavior* 36 (2007): 385-394, accessed March 25, 2019, <https://link.springer.com/content/pdf/10.1007%2Fs10508-006-9088-5.pdf>.
- ²¹ I will cite specific journal articles that are based on the Add Health data herein, but the official website for the study itself is: <https://www.cpc.unc.edu/projects/addhealth>.
- ²² Savin-Williams and Ream (2007), 387.
- ²³ *Ibid.*, 388.
- ²⁴ *Ibid.*, 388-89.
- ²⁵ *Ibid.*, 389.
- ²⁶ *Ibid.*

²⁷ Ibid.

²⁸ Ibid., 392.

²⁹ Ritch C. Savin-Williams, Kara Joyner, and Gerulf Rieger, "Prevalence and Stability of Self-Reported Sexual Orientation Identity During Young Adulthood," *Archives of Sexual Behavior* 41 (2012): 104, accessed March 25, 2019, <https://link.springer.com/content/pdf/10.1007%2Fs10508-012-9913-y.pdf>.

³⁰ They could also state if they were "not sexually attracted to either males or females." Ibid., 105. Note that although the authors report this as a measure of "sexual orientation identity," the definitions given to the respondents make reference to "attractions," so this category might be better thought of as an identity/attraction composite.

³¹ Ibid., 107.

³² Ibid.

³³ Studies such as the Add Health survey often use "over-samples" of certain minority groups to insure that their experience is included in the survey and/or to allow for meaningful analysis of the results within those sub-groups. When data is reported as "unweighted," it means that all participants are counted equally and the responses of all are indicated numerically, including the over-sampled groups. This means that the "unweighted" results may not be statistically representative of the entire country. Data that is "weighted" applies the results from each sub-group in proportion to their representation in the national population, yielding percentages that may more closely approximate what would be found in the entire country. For a further explanation of "oversampling" and "weighting," see Andrew Mercer, "Oversampling is used to study small groups, not bias poll results," Pew Research Center, October 25, 2016, accessed March 25, 2019, <https://www.pewresearch.org/fact-tank/2016/10/25/oversampling-is-used-to-study-small-groups-not-bias-poll-results/>.

³⁴ Savin-Williams, et al. (2012), 108.

³⁵ Ibid., 106.

³⁶ Ibid., 109.

³⁷ The difference among women was not "statistically significant," but the difference among men was. With very small sample sizes (only 30 women identified as "100% homosexual"), it is difficult to achieve "statistical significance," but large "effect sizes," as here, still indicate that a meaningful difference probably exists.

³⁸ Diamond and Rosky (2016), 369.

³⁹ The official website for the GUTS study can be found at: <http://nhs2survey.org/gutswordpress/>.

⁴⁰ Miles Q. Ott, Heather L. Corliss, David Wypij, Margaret Rosario, S. Bryn Austin, "Stability and Change in Self-Reported Sexual Orientation Identity in Young People: Application of Mobility Metrics," *Archives of Sexual Behavior* 40(3) (2011): 521, accessed March 25, 2019, <https://link.springer.com/content/pdf/10.1007%2Fs10508-010-9691-3.pdf>.

⁴¹ Ibid., 521-22.

⁴² I omitted the "unsure" category from my analysis. The Ott paper provides data in percentage terms; I translated some of these figures into raw numbers in order to be able to aggregate them in different ways.

⁴³ Table 3, "Sexual orientation identity transition matrices and mobility scores for male adolescents, by age group," Ott, et al. (2011), 525.

⁴⁴ Table 4, "Sexual orientation identity transition matrices and mobility scores for female adolescents, by age group," Ott, et al. (2011), 526.

⁴⁵ Diamond and Rosky (2016), 369-370.

⁴⁶ Ott, et al. (2011), 519.

⁴⁷ Ott, et al. (2011), 525-26.

⁴⁸ The official website of the Dunedin study can be found at: <https://dunedinstudy.otago.ac.nz/>.

⁴⁹ Nigel Dickson, Charlotte Paul, Peter Herbison, "Same-sex attraction in a birth cohort: prevalence and persistence in early adulthood," *Social Science & Medicine* 56 (2003): 1607-1615, accessed March 25, 2019, <https://www.sciencedirect.com/science/article/abs/pii/S0277953602001612>.

⁵⁰ "Fig. 1. Persistence and change in current sexual attraction reported at ages 21 and 26," Dickson et al. (2003), 1612.

⁵¹ The Kinsey Scale is actually a seven-point scale—0 through 6, inclusive—on which 0 is exclusively heterosexual, 6 is exclusively homosexual, and 3 is equally heterosexual and homosexual. See: "The Kinsey Scale," Kinsey Institute at Indiana University, accessed March 25, 2019, <https://kinseyinstitute.org/research/publications/kinsey-scale.php>.

⁵² Dickson, et al. (2003), 1614.

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- ⁵³ Nigel Dickson, Thea van Roode, Claire Cameron, and Charlotte Paul, "Stability and Change in Same-Sex Attraction, Experience, and Identity by Sex and Age in a New Zealand Birth Cohort," *Archives of Sexual Behavior* 42 (2013): 753-763, accessed March 25, 2019, <https://link.springer.com/content/pdf/10.1007%2Fs10508-012-0063-z.pdf>.
- ⁵⁴ "Table 4: Changes in level of same-sex attraction, experience, and identity for entire sample and by initial level of attraction, experience, and identity," in Dickson, et al. (2013), 759.
- ⁵⁵ *Ibid.*, 753.
- ⁵⁶ Diamond and Rosky (2016), 370.
- ⁵⁷ For a description of the study, see "History & Overview of MIDUS," MIDUS, accessed March 25, 2019, <http://midus.wisc.edu/scopeofstudy.php>.
- ⁵⁸ "Table 2: Self-report of sexual orientation identity from Wave 1 to Wave 2 by gender," in Steven E. Mock and Richard P. Eibach, "Stability and Change in Sexual Orientation Identity Over a 10-Year Period in Adulthood," *Archives of Sexual Behavior* 41 (2012): 646, accessed March 25, 2019, <https://link.springer.com/article/10.1007/s10508-011-9761-1>.
- ⁵⁹ *Ibid.*
- ⁶⁰ *Ibid.*, 645.
- ⁶¹ *Ibid.*, 646.
- ⁶² Diamond and Rosky (2016), 370.
- ⁶³ Even if one's underlying "orientation" is not a choice, no one denies that consensual sexual relationships are a choice.
- ⁶⁴ This paper will explore in depth some examples of this view in the academic literature. An example at the popular level is: Megan McArdle, "'Born This Way'? The Answer Shouldn't Affect Gay Rights," *Bloomberg*, June 14, 2017, accessed March 25, 2019, <https://www.bloomberg.com/opinion/articles/2017-06-14/-born-this-way-the-answer-shouldn-t-affect-gay-rights>.
- ⁶⁵ As a possible example, see: "Statement on Sexual Ethics and Christian Obedience," Revoice, accessed March 25, 2019, <https://revoice.us/about/our-beliefs/statements-of-conviction/statement-on-sexual-ethics-and-christian-obedience/>.
- ⁶⁶ For example, a pair of researchers nearly twenty years ago put it this way: "Condemning attitudes toward lesbians and gay men were correlated . . . negatively with [beliefs in] immutability." Peter Hegarty and Felicia Pratto, "Sexual orientation beliefs: Their relationship to anti-gay attitudes and biological determinist arguments," *Journal of Homosexuality* 41 (2001): 121-135, accessed March 25, 2019, <http://epubs.surrey.ac.uk/125676/6/Hegarty%20paper.pdf>.
- ⁶⁷ "Brief of the American Psychological Association, et al. as *Amici Curiae* in Support of Petitioners," *Obergefell v. Hodges*, Supreme Court of the United States (2015), https://www.supremecourt.gov/ObergefellHodges/AmicusBriefs/14-556_American_Psychological_Association.pdf.
- ⁶⁸ Peter Sprigg, "The Hidden Truth About Changing Sexual Orientation: Ten Ways Pro-LGBT Sources Undermine the Case for Therapy Bans," Family Research Council, May 2018, <https://downloads.frc.org/EF/EF18E83.PDF>.
- ⁶⁹ "Brief of *Amicus Curiae* GLMA: Health Professionals Advancing LGBT Equality and the American Academy of Nursing Concerning the Immutability of Sexual Orientation in Support of Petitioner," *Obergefell v. Hodges*, Supreme Court of the United States, March 5, 2015, accessed March 25, 2019, https://www.researchgate.net/publication/292993953_Brief_of_Amici_Curiae_GLMA_Health_Professionals_Advancing_LGBT_Equality_and_the_American_Academy_of_Nursing_Concerning_the_Immutability_of_Sexual_Orientation_in_Support_of_Petitioners_James_Obergefell.
- ⁷⁰ *Ibid.*, 7.
- ⁷¹ "Brief *Amicus Curiae* of Dr. Paul McHugh in Support of Respondents," *Obergefell v. Hodges*, Supreme Court of the United States, April 3, 2015, <http://sblog.s3.amazonaws.com/wp-content/uploads/2015/03/14-556-14-562-14-571-14-574-bsac-McHugh-2.pdf>, 15.
- ⁷² *Ibid.*, 20.
- ⁷³ The range for males was from 13% to 38%. The range for females was from 29% to 53%.
- ⁷⁴ In the transition showing the lowest rate of change from homosexuality toward heterosexuality (13%), the rate of change in the other direction was only 1%. In the transition showing the highest rate of change from

heterosexuality toward homosexuality (12%), the rate of change in the opposite direction was more than four times higher (50%). Calculated from: "Table 1. *Prevalence of Change in Sexual Attractions Across Longitudinal Studies*," in Diamond and Rosky (2016), 369.

⁷⁵ Diamond and Rosky (2016), 379.

⁷⁶ *Ibid.*, 370.

⁷⁷ *Ibid.*, 372.

⁷⁸ *Ibid.*, 375.

⁷⁹ Sprigg, "Are Sexual Orientation Change Efforts (SOCE) Effective? Are They Harmful? What the Evidence Shows."

⁸⁰ Christopher H. Rosik, "The Quiet Death of Sexual Orientation Immutability: How Science Loses When Political Advocacy Wins," 20,

<https://static1.squarespace.com/static/55efa8b5e4b0c21dd4f4d8ee/t/58b8751e197aea309056473b/1488483624144/Rosik+-+JHS+vol.+7.pdf>.

⁸¹ Michael C. LaSala, "Sexual Orientation: Is It Unchangeable?" *Psychology Today*, May 17, 2011, accessed March 25, 2019, <https://www.psychologytoday.com/us/blog/gay-and-lesbian-well-being/201105/sexual-orientation-is-it-unchangeable>.

⁸² Change from age 26-32 in DMHD study (Dickson, et al., 2013); as displayed in "Table 1. *Prevalence of Change in Sexual Attractions Across Longitudinal Studies*," in Diamond and Rosky (2016), 369.