

## ***Journal of Human Sexuality***

The *Journal of Human Sexuality* is an academic, peer-reviewed journal, an official publication of the National Association for Research and Therapy of Homosexuality (NARTH).

### *Editorial Offices:*

5282 So. Commerce Drive—Suite D272, Murray, UT 84107  
Telephone: 1-888-364-4744; E-mail: [journal@narth.com](mailto:journal@narth.com); Web: <http://www.narth.com>

### **Editorial Board**

Editor: Philip M. Sutton, PhD  
NARTH Officers  
Members of NARTH Scientific Advisory Committee  
Managing Editor: David C. Pruden, M.S.

### **National Association for Research and Therapy of Homosexuality**

5282 So. Commerce Drive—Suite D272, Murray, UT 84107  
E-mail: [info@narth.com](mailto:info@narth.com); Web: <http://www.narth.com>

### **Board of Directors**

Christopher Rosik, PhD, President  
Julie Harren Hamilton, PhD, Past President  
Chauncey Adams, PhD  
Michelle Cretella, MD  
Anthony Duk, MD  
Floyd Godfrey, LPC  
Daniel Harrop, MD  
Joseph Nicolosi, PhD  
Carolyn Pela, PhD  
Philip M. Sutton, PhD  
David C. Pruden, MS, Executive Director

© Copyright 2013, by the National Association for Research and Therapy of Homosexuality. All rights reserved. Written permission to reprint articles or reproduce materials from this journal for publication, use in the classroom, research, and other scholarly purposes must be requested from [journal@narth.com](mailto:journal@narth.com). NARTH reserves the right to deny permission at its sole discretion.

Requests for copies of this journal should be addressed to the National Association for Research and Therapy of Homosexuality, 5282 So. Commerce Drive—Suite D272, Murray, UT 84107 or can be ordered by phone at 1-888-364-4744 or online at <http://www.narth.com>.

# Contents

Editor’s Comments .....	3
-------------------------	---

## Papers

Carolyn Pela, Narrative Therapy and Women with Same-Sex Attraction (SSA): Claiming Lost Stories .....	9
--	---

Lester G. Pretlow, The Impact of Neurophysiologic Development on the Regulation and the Management of Homosexual Impulses .....	24
--	----

Neil E. Whitehead, Is First Same-Sex Attraction a Developmental Milestone? .....	37
--	----

## Book Review

Philip M. Sutton and Robert L. Vazzo, What <i>Did</i> Make Me Do It? A Review and Summary of Neil Whitehead and Briar Whitehead’s <i>My Genes Made Me Do It!—Homosexuality and the Scientific Evidence</i> .....	63
---	----

## Documents in Defense of Client and Therapist Rights

Rosik, Christopher H. (May 7, 2012). California Senate Bill 1172: A Scientific and Legislative Travesty—A Look at the Bill’s Misuse of Science.....	83
--	----

Rosik, Christopher H. (May 18, 2012). Fact-Checking California Senate Bill 1172—Serious Inaccuracies and Distortions Abound: Are Politicians Willing to Listen?.....	94
--	----

Rosik, Christopher H. (August 15, 2012). The (Complete) Lack of a Scientific Basis for Banning Sexual-Orientation Change Efforts (SOCE) with Minors. ....	103
--	-----

International Federation for Therapeutic Choice (October 1, 2012). IFTC Intervention at OSCE/ODIHR 2012 Human Dimension Implementation Meeting—Warsaw, Poland.....	112
--	-----

Rosik, Christopher H. (July 26, 2013). Countering a One-Sided Representation of Science: NARTH Provides the “Rest of the Story” for Legal Efforts to Challenge Antisexual Orientation Change Efforts (SOCE) Legislation.....	120
--	-----

## **Editor's Comments**

The National Association for Research and Therapy of Homosexuality (NARTH) is a professional and scientific organization founded in 1992. NARTH's mission is to promote and ensure a fair reading and the responsible conduct and reporting of scientific and clinical research about the factors that contribute to and/or co-occur with homosexuality (same-sex attraction and behavior, or SSA) and that allow psychological care to be effective for those with unwanted SSA. NARTH upholds the rights of individuals with unwanted SSA to receive competent professional medical and mental health care and the rights of professionals to offer that care.

In 2009, NARTH launched the *Journal of Human Sexuality (JHS)* in service of this mission and as a way of presenting, encouraging, and producing quality clinical and scientific scholarship on these topics. After its inaugural issue, *JHS* also has included articles on other sexual minority issues and on human sexuality in general.

### **Same-Sex Attraction is a *Bio-Psycho-Social* Phenomenon**

In 2008, the American Psychological Association (APA) published a brochure titled *Answers to Your Questions for a Better Understanding of Sexual Orientation & Homosexuality*.

In this brochure, APA addressed the question of what causes a person to have a particular sexual orientation with this statement:

There is no consensus among scientists about the exact reasons that an individual develops a heterosexual, bisexual, gay or lesbian orientation. Although much research has examined the possible genetic, hormonal, developmental, social, and cultural influences on sexual orientation, no findings have emerged that permit scientists to conclude that sexual orientation is determined by any particular factor or factors. Many think that nature and nurture both play complex roles. (p. 4)

### *Editor's Comments*

Reflecting on this statement, which was a significant change from a decade-old APA statement that emphasized the genetic and biological bases of homosexuality, Byrd (2008) noted that APA finally had concluded that “a bio-psycho-social model best fits the data.”

Unfortunately, the general public has failed to hear—or at least to understand—that the APA does *not* espouse the belief that persons with SSA are “born that way”! The first volume of the *Journal of Human Sexuality* concluded after a review of public opinion polls that “over the past few decades there has been a clear trend toward the belief that homosexuals are born that way—a belief that is increasing among the general public, as well as in the homosexual community” (NARTH, 2009, p. 44). And a recent Gallup poll reported:

Currently, 47% of Americans view being gay or lesbian as a sexual orientation individuals are born with, while 33% instead believe it is due to external factors such as upbringing or environment. That 14-percentage-point gap in favor of “nature” over “nurture” is the largest Gallup has measured to date. (May 16, 2013)

Clearly, much education is needed if the public is to come to understand with the APA that “nature and nurture both play complex roles” in the development of SSA. With that goal in mind, volume 5 of the *JHS* offers several articles and a book review. Readers unaware of the range of opinions, theories, and studies about how SSA develops are encouraged to begin with the review and summary of Neil Whitehead and Briar Whitehead’s book, *My Genes made Me Do It!* This review/summary tries to simplify what is already an excellent, comprehensive review by the Whiteheads of the scientific and clinical evidence about the bio-psycho-social causes of SSA.

The articles by Lester G. Pretlow (“The Impact of Neurophysiologic Development on the Regulation and the Management of Homosexual Impulses”) and by Neil E. Whitehead (“Is First Same-Sex Attraction a Developmental Milestone?”)

provide an in-depth examination of questions about how biological factors in particular may influence the development of SSA. Finally, the article by Carolyn Pela—"Narrative Therapy and Women with Same-Sex Attraction (SSA): Claiming Lost Stories"—describes how clinicians may better serve some women but also focuses on how the human need for understanding and drawing meaning from the experiences of our lives may contribute to developing or maintaining SSA.

### **In Defense of Client and Therapist Rights**

Volume 5 of the *JHS* also contains a number of documents in a section entitled "In Defense of Client and Therapist Rights." These documents express NARTH's commitment to the responsible conduct, dissemination, and use of science by professionals and public policymakers, legislators, and other nonmental health professionals involved in promoting personal and public medical and mental health. In particular, these documents express NARTH's unabashed *advocacy* in support of the rights of licensed mental health professionals and their clients to give and receive competent care.

When volume 4 of *JHS* was published a year ago, the governor of the state of California had just signed SB 1172, which seeks to prevent licensed mental health providers from helping *minors* either to change their behaviors or expressions of gender, or to eliminate or reduce sexual or romantic attractions or feelings toward persons of their own gender. Nine months after the California bill was passed, the governor of the state of New Jersey passed a similar bill preventing licensed medical and mental health professionals from serving minors in this way.

This section includes a number of documents with which NARTH and/or NARTH clinical partners have attempted to clarify what clinical and scientific research does and does not reveal about the alleged harmfulness of "sexual orientation change efforts" (SOCE). Unfortunately, as these laws were written and revised, the APA and

### *Editor's Comments*

other national associations of mental health professionals were negligent in clarifying the nature of the actual research on the potential harmfulness of SOCE—and *all* approaches—to professional care. While the APA and others have persistently warned of the potential harmfulness of SOCE for clients, these associations have failed to inform the general public that *every* approach to medical and mental health care has the potential for harmful—or at least unwanted—side effects.

Lambert (2013) reports that reviews “of the large body of psychotherapy research,” particularly the research “literature on negative effects” of psychotherapy, offer “substantial ... evidence that psychotherapy can and does harm a portion of those it is intended to help.” These include “the relatively consistent portion of adults (5% to 10%) and a shockingly high proportion of children (14% to 24%) who deteriorate while participating in treatment” (p. 192). This general finding is found for all approaches to psychotherapy for all manner of presenting problems.

Can anything but ideological bias allow the APA and others to warn against the *potential* harmfulness of SOCE while failing to warn about the documented harmfulness of *all* approaches? We think that anyone who gives the documents in this section of *JHS* a fair reading will realize that nonscientific and nonprofessional standards—under the guise of science—are being used to prevent medical and mental health professionals from offering care to which minors and their parents freely consent. We think that readers may agree with the NARTH president’s response to the news that California governor Jerry Brown has signed SB 1172 into law: “Anecdotal stories of harm are no basis from which to ban an entire form of psychological care. If they were, the psychological professions would be completely out of business” (Rosik, October 1, 2012).

**A Note for Potential Authors**

Authors of articles, reviews, and official statements of *JHS* are held to the same criteria; namely, what is written needs to be based on a fair reading and the responsible reporting of scientific data and demonstrable professional experience. Readers of *JHS* are invited to review this, as well as past and future volumes, and to decide for themselves and even critique how well—or poorly—we have achieved this goal. Authors interested in submitting papers for future volumes should contact the editor at 1-888-364-4744 or via e-mail at [info@narth.com](mailto:info@narth.com)

Philip M. Sutton, PhD

Editor, *Journal of Human Sexuality*

National Association for Research and Therapy of Homosexuality (NARTH)

## References

- American Psychological Association. (2008). *Answers to your questions: For a better understanding of sexual orientation and homosexuality*. Washington, DC: Author. Retrieved from [www.apa.org/topics/orientation.pdf](http://www.apa.org/topics/orientation.pdf)
- Byrd, A. D. (2008). *APA's new pamphlet on homosexuality de-emphasizes the biological argument, supports a client's right to self-determination*. Retrieved from <http://www.narth.com/docs/deemphasizes.html>
- Jones, J. M. (May 16, 2013). *More Americans see gay, lesbian orientation as birth factor: By 47% to 33%, Americans say it is inherent rather than product of environment*. Gallup Poll. Retrieved from <http://www.gallup.com/poll/162569/americans-gay-lesbian-orientation-birth-factor.aspx>
- Lambert, M. (2013). The efficacy and effectiveness of psychotherapy. In Michael J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (6th ed.), pp. 169–218. Hoboken, NJ: Wiley.
- National Association for Research and Therapy of Homosexuality (NARTH) Scientific Advisory Committee (2009). What research shows: NARTH's response to the American Psychological Association's (APA) claims on homosexuality. *Journal of Human Sexuality, 1*, 1–128. Retrieved from <http://www.scribd.com/doc/115507777/Journal-of-Human-Sexuality-Vol-1>
- Rosik, Christopher H. (October 1, 2012). Governor signs SB 1172—NARTH responds: Statement regarding the signing into law of California Senate Bill 1172. Retrieved from <http://narth.com/2012/10/governor-signs-sb-1172-narth-responds/>

# **Narrative Therapy and Women with Same-Sex Attraction (SSA): Claiming Lost Stories**

Carolyn Pela<sup>1</sup>

---

<sup>1</sup> Carolyn Pela, PhD, is the chair of the Department of Behavioral Studies at Arizona Christian University in Phoenix, Arizona. A licensed marriage and family therapist, she specializes in treating sexual issues and eating disorders and conducts marriage and family therapy.

## **Abstract**

A metaphor of the construction of a Roman arch has been used to describe the process of narrative therapy. This metaphor is applied to the process of conducting narrative therapy with women presenting with same-sex attraction (SSA). The dominant cultural narrative about SSA is that it is part of the client's identity and is intransient. The foundational philosophy of narrative therapy is suspicious of any claim of permanence. Narrative therapy for SSA helps individuals deconstruct stories that have limited options about sexuality and then facilitates construction of stories that support self-determination. This report offers an alternative to the purely biological, developmental, and psychodynamic approaches to interacting with same-sex attraction.

## **Narrative Therapy and Women with SSA: Claiming Lost Stories**

Marriage and family therapist Bill O’Hanlon (1994) has used the metaphor of the careful construction of a Roman arch to explain the process of narrative therapy. The classical Roman arch is built with wedge-shaped stones that are held together with the pressure of gravity (Lusted, 2009). The builders carefully and patiently shape each stone to fit with the adjoining stones. When the final stone, the keystone, is put in place, the arch becomes a solid structure—but until the keystone is positioned, the arch needs external support (Lusted, 2009). It may be helpful to imagine the builders laying the stones one at a time, first on the right, then on the left, continuing to alternate sides. Finally, the builders solidify the new construction with the keystone at the center top of the arch. While the stones of the arch are representative of the steps of narrative therapy, the supporting structure is the metaphor for the therapist and other collaborators who are involved in the reconstruction of the client’s narrative.

### **Laying the Foundation**

A solid arch needs a solid foundation; in this case, a solid foundation is built with a clear understanding of the philosophy of narrative therapy. The founders of narrative therapy, Michael White and David Epston (Nichols, 2010; O’Hanlon, 1994), approached their work with individuals and families influenced by Bateson’s communications theory and Michel Foucault’s views on the power of words (White & Epston, 1990). In brief, narrative therapy is concerned with identifying troublesome stories, deconstructing these stories, and constructing (or reclaiming lost) helpful stories. Yarhouse (2008) has written a comprehensive yet accessible review of Foucault’s influence on the development of narrative therapy. In summary, Foucault, White, and Epston claim that individuals’ realities are constructed within society and through the use of language (White & Epston, 1990). This cocreation of reality is synergistic as we rehearse, elaborate, and together create the discourse.

“Life is about telling and retelling” (M. White, personal communication, October 11, 1996), and because of our tendency to rehearse these stories and to see only what we already believe to be reality, our personal discourses become fixed, shaping our identity. An example is the current Western cultural story about homosexuality as a fixed component of an individual’s identity. The dominant narrative continues with the supposition that dissatisfaction with the influence of homosexuality on oneself is actually internalized homophobia. When these dominant discourses are clearly troubling to the individual, the narrative therapist’s task is to collaboratively deconstruct the story and build (or discover, reclaim, etc.) a more helpful story.

Underlying this task is the narrative supposition that the problem—not the client—is the problem. This view necessarily impacts the language used in the deconstruction of the old story and ultimately creates freedom from the dominant discourse that the problem is within the individual. This brings into play the core technique of externalization of the problem. Externalizing language begins with the first interview as the therapist asks the client about the problem using language that places the problem outside of the client. Typically, the story that the client brings to therapy is the dominant cultural story that contends that the problem is who she is—whereas the narrative therapist insists, through the consistent use of externalizing language, that the identity of the client is separate from the problem.

Narrative theory is philosophically opposed to practicing psychotherapy from the dominant tradition, which privileges the therapist with knowledge about the client that the client herself is not privy to (White & Epston, 1990). A power differential between the counselor and therapist was troubling to Michael White (M. White, personal communication, October 11, 1996), and the limitations that come with these fixed narratives are problematic in the quest to discover a more helpful story. For example, the dominant paradigm concerning women with same-sex attraction (SSA) may be that they tend to *be* “borderline” or *have* “poor ego functioning.” Since therapy is a collaborative

process between the client and the therapist in which stories are cocreated, the concern of the narrative philosophy is that these stories about the woman, owned by the therapist, will permeate the conversation and quite possibly lead to the continued power of SSA over the woman. Challenging the dominant psychotherapeutic approaches, narrative therapy seeks to privilege the client's understanding of the development and meaning of the problem in order to locate the stories that have been lost under the dominant cultural narratives (including the stories from the mainstream mental health culture) and the client's unhelpful, personal narratives.

With this foundational understanding of reality, the narrative approach to SSA will inherently question the current cultural discourse about same-sex attraction (along with related stories about homosexuality, sexual orientation, and gender identity), and will defer to the meaning the client has developed. Toward that end, the therapist will want to ask questions that reveal the client's perceptions. For example, is she bothered, distressed, limited, coerced, or oppressed by the SSA discourse? What is her understanding of the discourse? What does SSA say that she can and cannot do or be? Is she satisfied with these limits or are they distressing? As discussed earlier, one does not need to look far to find the dominant cultural discourse of SSA; this narrative views SSA as permanent and intransient. Conversely, the viewing of problems from a narrative perspective automatically brings those problems claiming intransience under suspicion ("stability is an illusion"—M. White, personal communication, October 11, 1996). A natural response to SSA from a narrative perspective is to doubt the claim that women should accept and embrace unwanted SSA as an identity.

Alice Morgan (2006) has published a comprehensive, user-friendly review of narrative therapy. For those interested in pursuing a clearer understanding and possibly desiring to incorporate narrative theory into their work, Morgan's *What Is Narrative Therapy?* is highly recommended.

## **Building the Arch**

### **Stone #1: Identifying the Problem**

Beginning with laying this first stone—identification of the problem—it is important to start privileging the client’s account of her relationship to the problem and her agenda for therapy. This therapeutic predisposition will influence the language the therapist chooses and will set the stage for laying the subsequent stones.

The process of problem-labeling often results in the emergence of subtexts that become the agreed-upon label for the problem. For a woman initially presenting with a global problem of SSA, these subtexts may involve the impact of sexual abuse, the emptiness that she may feel, or a troubling relationship with her father. She may have concluded that men are unsafe or that she cannot have “normal” relationships with them. She may believe that she cannot have nonsexual relationships with women. Through the conversation around the presenting problem of SSA, the collaborators (therapist and client) may finally label the initial problem as one or more of these subtexts.

Whether the collaboration results in the global problem-label of SSA or a subtext of the SSA narrative (mother-hunger, fear of femininity, wounds from father, etc.), it is important to make this label clear before moving on. If the label does not resonate with the client or if she is using a label that the therapist does not yet understand, the therapist and client cannot set an agenda. A mutual understanding of the label is also a confirmation of the therapist’s awareness of the client’s perspective. Further, a clear and salient label is essential for continuing the use of externalizing language and for successfully personifying the problem. .

When working with a woman experiencing SSA, another task in laying this first stone is discovering if the client has adopted cultural stories around SSA. For example, she may have adopted the “born that way” paradigm. She may also see SSA as an integral piece of her identity, with the internalized conclusion, “I am a lesbian.” According

to narrative philosophy, we are prone to rewrite our own history so that it becomes congruent with our current reality. She may have done this, and the resulting theme of her story may read, "I have always been sexually attracted to women." Additionally, she may have created an identity deeply informed by her relationship with the gay community. A narrative therapist will keep in mind that the deconstruction of the problematic personal narrative may involve the deconstruction of the dominant cultural narrative.

### **Stone #2: Discovering the Client's Agenda**

Discovering the agenda of the client should naturally progress from laying the first stone. The agenda often begins to take shape during the first step, but it needs further honing and should be firmly set in place during this phase. When laying this second stone, it is important to continue to use externalizing language, insisting that the problem is the problem. During this phase, the therapist discovers more about the client's relationship with the problem.

White (1991) provided a categorization of two types of questions that may be used for the process of clarifying the client's agenda: landscape-of-action questions and landscape-of-consciousness questions. Landscape-of-action questions direct the individual toward revealing preferred events in her life. They ask, "What does she want to be doing differently?" Landscape-of-consciousness questions focus on preferred beliefs and values that are lived out through the woman's actions. They may ask, "What does she want to be feeling or believing?" Examination of the relationship between preferred actions and preferred beliefs may further reveal the source of distress that the client is experiencing. Establishing congruence between actions and values may be the sole agenda of a woman experiencing SSA.

Some examples of the final agendas for women that I have worked with are diminishing SSA, resolving the incongruence between her values and her actions or desires (often resulting in a heterosexual orientation and identity), a wish to pursue

celibacy, or even acceptance of SSA. It is possible that a more nuanced agenda will emerge from the conversation with the client. Perhaps the agenda is specifically about dealing with sexual abuse or a problematic relationship. The client may have complex goals, but the goals need to be simplified into a workable agenda.

Laying stone #2 may be an iterative process with establishing stone #1. As the agenda becomes clear, the problem definition may shift. During the construction of the agenda, the problem may be further deconstructed, revealing a different view of the problem. In this process it is important to keep the problem label externalized, and the agenda feasible. The collaborators are only ready for the next stone when the client's agenda is clear and necessary adjustments have been made to the first stone.

### **Stone #3: Personification**

Personification is a hallmark of narrative therapy (Durrant & Kowalski, 1990; O'Hanlon, 1994; White & Epston, 1990). The process of personification of the problem began earlier in the arch construction with the use of externalizing language, and it continues in this stage with the primary focus on extricating the client from a shallow, limiting, or unhelpful story. The label of the problem established in the laying of the first stone will often be the metaphor used in personification. For example, if the complaint is SSA, the discussion will involve talking about SSA as if it holds a personality and a mind of its own. Personification of the problem reinforces the perception of the problem—not the client—as the problem.

A key to using metaphors in the process of personification is to avoid language that implies causation. The problem does not cause clients to think, feel, or behave—it only influences, coerces, convinces, tricks, and so on. Personal agency in relationship to SSA, gender identity, and sexual orientation is further enforced through the avoidance of deterministic language and a preference for language that allows hope and autonomy. Personification is a transitional step between stone #2, determining the agenda, and stone

#4, discovering the influence of the problem. Clear personification and externalization of the problem reduces the risk that the client will fear that she is losing a piece of herself rather than an unwanted visitor.

#### **Stone #4: Discovering the Impact of the Problem**

In the discovery of the impact of the problem, the therapist uses the label identified in the first step to ask questions about how the problem has influenced, coerced, haunted, tricked, or otherwise impacted the client. Landscape-of-action and landscape-of-consciousness questions (White, 1991) should be used in this phase as in the earlier process of discovering the agenda. For the same-sex-attracted woman, perhaps the problem has been labeled as ambivalence in regard to SSA. In that case, the therapist will want to ask questions like, “How long has Ambivalence been in your life?” “How has Ambivalence kept you from living fully, isolated you from others, maybe even isolated you from God?” “What are the lies that Ambivalence tells you?” “What does Ambivalence tell you about your relationship with God?” “How has Ambivalence wedged its way between you and your family?” “How has Ambivalence limited your choices?” The goal is for the client to continue to externalize the problem, recognize the *problem* as the problem, and further deconstruct the limiting narrative.

Laying stone #4 fosters a view of the problem as external to the client, sees the problem as having ill intent, and should ultimately incite a renewed desire to battle the problem. This desire to battle against the personified problem will allow the conversation to move to laying the next stone. Without the motivation that comes out of seeing the oppressive intentions of the problem—the limitations on the choices and identity of the client—the next stone will not fit with the previous ones. Waiting for evidence that the client sees the problem as separate from her identity and an indication that she is ready to do battle with the problem will facilitate a smooth fit with the next stone.

## **Stone #5: Exception-Seeking: Discovering Unique Outcomes**

Laying stone #5 is the pivotal point in the therapeutic process as it moves from deconstructing the old story to constructing a new story (Durrant & Kowalski, 1994). Prior to laying this stone, the problem has been identified, externalized, and personified. The negative influences of the problem have been documented, and now the therapist and client are ready to find exceptions to the problem. Reclaiming the lost story—wherein the preferred identity lives—is the goal of exception-seeking.

It may be important to pause here to clarify different ways of conceptualizing the “new” story. Since exception-seeking is about finding a history of exceptions to the problem, it presupposes that the new story isn’t really new at all, just lost. The alternative, parallel story has been hidden, and “events in the shadows should be revered” (White, personal communication, October 11, 1996). The very idea that there are exceptions to the dominant story reveals a core supposition of the narrative theory, that “stability is an illusion” (M. White, personal communication, October 11, 1996). The only thing that we can count on is change (S. de Shazer, personal communication, October 11, 1996).

This process of exception-seeking can be challenging. It is natural for individuals to notice the tyranny of the presenting problem. It gets their attention as it blocks them from experiencing a life of freedom and from experiencing themselves and others deeply. On the other hand, it is very difficult to pay attention to the exceptions to the problem. The insistence of a collaborator becomes crucial during this process. Questions should be crafted to point the client toward times when the problem was not a problem. For example, the therapist might ask, “Tell me about a time when you expected \_\_\_\_\_ to get in your way, but it didn’t.” “Tell me about a time when things were going a little better. What was different then?” “Has \_\_\_\_\_ ever taken a vacation? When have you felt free from its tyranny for even a brief period of time?” “What’s the longest time that you’ve stood up to \_\_\_\_\_?” In his discussion about narrative therapy (specifically applied to problems of sexual identity), Yarhouse (2008) offers this question:

“In what ways are you understanding your sexual identity differently than when you first thought of yourself?” (p. 206) The process of discovery of unique outcomes allows the reclaimed parallel story to emerge.

Since stories are created in community, it may be helpful to ask the client what others may have observed as she seemed to stand up to the problem. The client may choose to ask this question of significant others in her life in order to invite them as co-authors of this reclaimed story. During this time, the collaborators want to underscore, in particular, the times that the client’s agenda is supported. Yarhouse (2008) identifies these moments as “identity-congruent actions and attributions” (p. 207). The next stone, stone #6, can be fitted recursively with stone #5 as the exceptions are identified. Highlighting personal agency in the reclaimed story reinforces the reclaimed identity.

### **Stone #6: Finding Personal Agency in the Exceptions**

Since the client has now identified the exceptions, it is critical in this next phase to seek evidence of her personal agency in producing these exceptions (Durrant & Kowalski, 1990). This process will function to further diminish the influence of the old, dominant story in which the client is powerless. The therapist might ask, “How did you manage to maintain this part of your identity in spite of the Ambivalence?” “What made you decide to pursue your interests in spite of Fear?” “How did you stand up to Lesbianism’s stereotypes about you?” The therapist wants to know how the client did it and what this tells her about herself (Durrant & Kowalski, 1990). Questions are constructed to take the experiences out of the category of random events so the client can see them as choices she has made from the position of this recovered identity.

Epston’s therapeutic letters (White & Epston, 1990) may be introduced here, although they could be used throughout the therapeutic process to document the new story. In short, therapeutic letters are the therapist’s reflections and observations of the conversations with the client, written in a letter form, to the client. These letters serve to

punctuate this important part of the client's story now that she has identified a series of exceptions to the problem. These letters seek to highlight the personal agency of the client and capitalize on the personification of the problem. The use of direct quotes or summaries of what the client has communicated is often part of the letter. Inclusion of client-constructed metaphors is especially powerful. My experience has been that the client's own words serve as particularly effective agents of healing as they are reflected in the letters.

The therapeutic letter will often set the agenda for the next session, and it may be sent to the client with that in mind. Letters may also be read at the beginning of the next session as a way of connecting the conversation from one session to the next. On a practical note, the letter may also serve as a progress note for the client file. A rich resource of examples of therapeutic letters can be found in White and Epston's *Narrative Means to Therapeutic Ends* (1990), and a quickly accessible source of examples is found on Epston's website: [http://www.narrativeapproaches.com/antianorexia%20folder/anti\\_anorexia\\_index.htm](http://www.narrativeapproaches.com/antianorexia%20folder/anti_anorexia_index.htm) (n.d.).

### **Stone #7 The Keystone: Celebrating a New Story/Identity**

The seventh stone in the arch is the keystone, which is the apex of the arch. The keystone of an arch is often embellished—and it is fitting for the final metaphorical stone of this process to look special, because it *is* special. Stone #7 functions as the support for the six stones that were previously laid. Once the keystone is set in place, the supporting structure can be removed, and the arch becomes self-supporting (Lusted, 2009). During this phase the therapist asks questions that solidify the identity that has been pulled out of the clutches of the problem. These questions move the client into recovering a complex, rich history of her identity. The therapist encourages the client to reach back and find historical evidence of this new view of herself and to invite others to testify to her recovered story. It is important to be aware that the witnesses to the client's life have often been just as duped as the client in believing the limiting story. The selection of friends and family who will support the reclaimed story is essential.

Another task of this phase is looking to the future and considering how it may be different in light of the recovered story. A question might be, “In light of your ability to stand up to Fear of Femininity, what might be different about your future?” A question for her family might be, “What do you think your daughter’s life will be like now that Fear of Femininity is not pushing her around?” Just as the cocreation of the old problematic narrative influenced her story, the cocreation of the reconstructed narrative gives it power. It is not enough for the client and the therapist to have knowledge of this new story; the client must also have an audience. My typical experience has been that this audience has emerged over the course of the therapy and has been celebrating and enjoying the emerging story of the client all along. Nevertheless, this is an important element of keeping the arch together for the long haul. The client’s audience may be invited to a session for a celebration, or the client may want to plan a party at home to celebrate with her family and friends.

This is a good place to include another of Epston’s contributions to the narrative approach. Near the end of therapy, the client may be invited to co-construct a certificate that celebrates and acknowledges her accomplishments. In addition to serving as a celebratory tool, this process further emphasizes the personal agency in claiming the recovered story. These certificates will typically use the metaphor that was established during the laying of the first stone, emphasizing the client’s victory. As an example, the certificate might read, “This is to certify that Jasmine has been victorious over Fear of Femininity (FOF) and all the lies and shame that FOF contains. This will serve as a reminder to Jasmine, and all those who love her, that her identity is no longer controlled by FOF.” One of the best resources for this tool can be found in *Narrative Means to Therapeutic Ends* (White & Epston, 1990).

As in the previous arch construction, the keystone is dropped in place only after evidence of the new or recovered story has clearly emerged. An earlier attempt to obtain historical evidence of the reclaimed story might at worst threaten the client’s identity, and at best it might frustrate her as she is unable to see the evidence. It is at this point that

the “history of the alternative present has become more deeply rooted than the problem story” (M. White, personal communication, October 11, 1996).

### **The Therapist’s Narrative**

My work using narrative therapy has involved collaborating with clients to claim lost stories of power and hope in the midst of their dominant stories of defeat and hopelessness. From the foundation to the final keystone, the construction of the arch requires patient, insistent deconstruction of taken-for-granted discourses and the reclamation of forgotten stories hidden in the shadows. The arch is finally held together with this recovered story that reaches back to the past and extends forward into the future with a discourse that is identity-congruent. While we have taken the arch supports off with the laying of the keystone, the arch will need community to maintain the story, to tell the story, and to retell the story.

The tradition of narrative therapy requires rethinking standards of practice, terms, and worldviews, including psychological paradigms. This work has been for me as much about liberating myself from limiting practice narratives as it has been about collaborating with clients as they free themselves from the dominant discourses about SSA. This challenge is ongoing as I continue to be pressured by dominant understandings that the therapist owns the privileged discourse.

## References

- Durrant, M., & Kowalski, K. (1990). Exceptions, externalizing and self-perception—A clinical map. Paper presented at the Annual Conference of the American Association for Marriage and Family Therapy, Washington, DC.
- Epston, D. (n.d.). [http://www.narrativeapproaches.com/antianorexia%20folder/anti\\_anorexia\\_index.htm](http://www.narrativeapproaches.com/antianorexia%20folder/anti_anorexia_index.htm)
- Lusted, M. A. (2009). Life under the arches. *Appleseeds*, 12, 2.
- Morgan, A. (2000). *What is narrative therapy?* Adelaide, Australia: Dulwich Centre Publications.
- Nichols, M. P. (2010). *Essentials of family therapy* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- O'Hanlon, B. (1994). The third wave. *Family Therapy Networker*, 18, 6.
- White, M. (1991). Deconstruction and therapy. *Dulwich Centre Newsletter*, 3.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: W. W. Norton & Company.
- Yarhouse, M. A. (2008). Narrative sexual identity therapy. *The American Journal of Family Therapy*, 36, 196–210.

# **The Impact of Neurophysiologic Development on the Regulation and the Management of Homosexual Impulses<sup>2</sup>**

Lester G. Pretlow<sup>3</sup>

---

<sup>2</sup> This paper was originally presented at the annual conference of the National Association for Research and Therapy of Homosexuality (NARTH) in Philadelphia in November 2010.

<sup>3</sup> Lester G. Pretlow, PhD, is associate professor and department chairman of the Medical Laboratory, Imaging and Radiologic Sciences Department of the College of Allied Health Sciences at Georgia Regents University in Augusta, Georgia.

## **Abstract**

An understanding of central and autonomic nervous system (CNS/ANS) development is foundational for understanding many human behaviors. The purpose of this article is to explore challenges to the development of these systems and the impacts of these challenges on behavior, specifically on the development of gender identity and same-sex attraction. In situations of good-enough development, the CNS and ANS work in a coordinated effort to manage environmental input (audio and visual) to maintain a *steady-state*. When development of the CNS and ANS are inadequate, the individual can face challenges in managing auditory and visual input and experience an accompanying need to act in some way to restore balance. This article hypothesizes that the developed inability to manage visual, auditory, and other sensory input is a key factor in individuals suffering from unwanted same-sex attraction issues. Learning to modify or even avoid disruptive sensory inputs is helpful in overcoming some of the negative outcomes associated with the development of these—and any other—unwanted behaviors.

## **Introduction**

A bio-psycho-social model of development has been proposed as the best current explanation for understanding how persons come to experience SSA—homosexual (same-sex) attractions (American Psychological Association, 2008; Byrd, 2008). As a biomedical scientist who leads a support group for men dealing with unwanted SSA, I have found that there is a need to demystify the nature and origin of homosexual impulses. Group members have found it helpful to understand that same-sex impulses are in and of themselves morally neutral inputs to (stimulations of) the central nervous system (CNS) through the brain’s limbic structures and connections of the limbic structures with the autonomic nervous system (ANS).

### **Visual and Auditory Stimulation May Influence One’s Actions by Impacting the CNS**

The ANS is comprised of the sympathetic and parasympathetic nervous systems. These systems allow the body to regain its accustomed, familiar level of body tension or activation—in other words, its steady-state regulation. It does this either by revving up the body (the sympathetic branch causes the body to become more “aroused” and ready for possible reaction) or calming down the body (the parasympathetic branch causes the body to be less aroused and more comfortable with not reacting) (Guyton, 1991; Schore, 1994). Overall, these systems work to maintain the emotional and physiological balance of the body (Carroll, 2009). In other words, sensory inputs or arousals perceived as pleasant or unpleasant to the body are managed by the various nervous systems.

Stimulation and regulation of the CNS and ANS are in one sense influenced by, but in another sense independent of, the meaning—including the “moral” meaning—of any desire, impulse, thought, imagination, memory, or appetite, including sexual appetite. On the one hand, one cannot escape the physiology of the body. For example, in times of stress,

## *The Impact of Neurophysiologic Development*

strong stimulation of the sympathetic nervous system provides extra activation—mass or body-wide arousal and a need for discharge of energy—in order for the body to perform far more strenuous physical activity than would otherwise be possible (Guyton, 1991).

In and of themselves, physiological (neurologically reflexive) impulses have no moral significance, but they may lead a person to act in ways that are morally—consciously, cognitively, and volitionally—significant (Guyton, 1991; Schore, 1994).

As mentioned, the sympathetic nervous system revs the body up and the parasympathetic calms the body down (Carroll, 2009; Guyton, 1991). Inputs to these nervous systems come in many different forms. Visual and auditory stimulation have a profound impact on the immediate and long-term structure and function of the nervous system (Schore, 1994). Sights and sounds—as well as touches, smells, and tastes—are internalized as memory; however, they are also internalized as nervous system structure (Schore, 1994). Chronic activation of the limbic system may lead to structural changes in the circuitry of the nervous system—the growth and habitual, coordinated stimulation and functioning of relevant nerves. Such chronic activation is significant, especially if traumatic interactions occur during critical periods when the CNS is developing (Schore, 1994; Schore, 2003a).

Problems can arise when sympathetic and parasympathetic systems become imbalanced due to the chronic activation of the limbic system (Schore, 1994; Schore, 2003a; Schore, 2003b). In these instances, structural problems—for example, neuronal development and habits of arousal or the lack of arousal—may become part of the architecture of the brain (in other words, become “hard-wired”) and may inhibit or suppress future functional areas of the limbic and autonomic nervous systems (Schore, 1994; Schore, 2003a).

For example, the sympathetic nervous system may dominate the parasympathetic (or vice versa), leading the body to become chronically or typically over- (sympathetic) or under-(parasympathetic) stimulated. This would lead to a child’s

inability to maintain a physiological steady-state, which in turn leads to physical and/or emotional “discomfort” (Carroll, 2009; Schore, 2003a). In effect, the CNS cannot then function optimally because of its challenged architecture (in other words, the habitually over- or under-stimulated nerves); therefore, the child’s nervous system becomes inefficient at metabolizing visual and auditory input. In other words, the child becomes over- or under-aroused by what he or she sees and hears (Schore, 1994; Schore, 2003b).

### **Inhibited Structure-Function of the Nervous System**

Inhibited structure-function of the nervous system can begin to develop during infancy (Schore, 1994). This means that an infant who experiences too much or too little stimulation may develop chronic difficulties in how his or her brain and nervous system function. For example, when an infant’s excitement (sympathetic arousal) is met with indifference or disapproval by a parent, the child may respond with parasympathetic activation that is experienced as a downward fall into shame, grief, disappointment, and/or guilt (Carroll, 2009; Schore, 1994).

If this mode of communication is reinforced by continued perceived parental rejection, the child’s sympathetic structure-function—his or her ability to become excited—may become inhibited. If this happens, the child’s parasympathetic structure-function—his or her ability to reduce or avoid physiological/emotional arousal—may become the child’s dominant regulator or arousal (Carroll, 2009; Schore, 1994). As mentioned above, if a child’s physical and emotional arousal are subject to excessive, habitual parasympathetic control, then his or her emotional life will be dominated by feelings such as depression, shame, grief, disappointment, and/or guilt.

It is important to understand that structural changes in the ANS—such as habitual patterns of nervous arousal—originate in the limbic system (Schore, 2003a). The limbic system is the part of the brain that responds to all external stimuli, but especially to any stimulus—sight, sound, touch, and so on—that is perceived as a threat, such as the loss

### *The Impact of Neurophysiologic Development*

of a valued experience or the threat of an aversive experience (Guyton, 1991; Rothschild, 1998; Schore, 2003a). If the child is unable to escape a threat (for example, the separation from his or her mother as in cases of hospitalization), the limbic system may respond with the parasympathetic response of freezing or dissociation (Rothschild, 1998; Schore, 2003a). Bowlby (1960) described this type of behavior as a response in a child who was separated from his mother during hospitalization; the child went through a sequence of behaviors observed as protest, despair, and detachment.

The freezing or dissociated response is mediated by the secretion of hormones involved in the response to a perceived threat. The CNS stimulates hormone secretion from the endocrine system (Guyton, 1991; Morris, 2004; Schore, 1994). Endocrine regulation is a major function of the limbic system and has a long-lasting influence on CNS growth and development (Guyton, 1991; Nolte, 2002; Schore, 1994). If perceived threats persist, the absence of normal hormonal regulation during critical developmental periods causes permanent physical changes and profound structural anomalies in the limbic system and the ANS (Schore, 1994; Schore, 2003a). When a child's limbic system is using its resources to defend against threat, there may be too few resources left for his or her growth and development (Lee, Ogle, & Sapolsky, 2002; Sapolsky, 2003).

During times of extreme threat (for example, a prolonged or even brief stay in the hospital), the child's limbic system sacrifices the secretion of hormones that stimulate growth in exchange for the secretion of hormones that protect the individual against threat—such as those that help the child deal with the aversive arousal of separation from his or her mother (Bowlby, 1973; Sapolsky, 2003). If the infant otherwise survives the threat (for example, endures the separation from his or her mother), an overall negative consequence of this experience can be a lack of development of sufficient neuronal connections between the CNS and ANS that may appear as a parasympathetic over-activation (depression) as the child continues to develop and mature (Sapolsky, 2003; Schore, 1994; Schore, 2003a). In this scenario, the parasympathetic nervous system

becomes the dominant peripheral nervous system regulator. In layman's terms, the child develops an inordinate need for emotional "self-soothing" to ease the uncomfortable, parasympathetic overactivation.

### **A Compromised Ability to Differentiate One's Gender**

During critical developmental stages of the infant nervous system, other CNS structures and functions may be inhibited or suppressed. Since gender identity is also developing during infancy, the neurobiological structures that impart a sense of one's gender may also be inhibited by experiences such as separation anxiety between a child and his or her mother. Traumatic interactions during critical developmental periods may damage the developing structural links (neurobiological circuitry) between the brain (CNS/limbic system) and the body (ANS) so that a child's sense of his or her gendered body is challenged or even lost. In this situation, the primary and secondary characteristics of gender (in other words, male/female sex) are intact—biological males look like men, and biological females look like women. But what is challenged is the child's—and if it persists, the adolescent's and adult's—ability to differentiate gender (male/female) in his or her own ANS (in other words, in his or her body). In such situations, a neurological/physiological sensory deficit has developed. This may be caused by the suppression or death of neuronal circuitry between the limbic system and the ANS.

Another cause of such a neurological/physiological sensory deficit may be a compromised limbic system. In addition to functions described above, the limbic system controls reproductive behavior (Aggleton, 1992; Guyton, 1991; Sapolsky, 2000). Changes in the limbic structure due to traumatic stress may potentially leave the infant with an inability to differentiate his or her gendered body. Dissociation from one's body becomes a function of neuronal death or suppression due to traumatic interactions—for example, experiencing an inadequate attachment to one's caregivers—on the developing CNS and ANS (Schoore, 2003a). The infant is fundamentally left "body-less" with respect to gender

identity because of structural changes in the traumatized CNS and ANS. Bowlby (1969) hypothesized that some neurological impairments caused by separation anxiety may have varying functional consequences that range from total absence to dormancy, in which the underlying structures are partially or completely developed yet remain nonfunctional (Bowlby, 1969). If gender is in—and of—the body (ANS) and if one dissociates from one's body, then one's sense of gender identity can be irrevocably impaired.

### **How Immature and/or Nonheterosexual Arousal May Develop**

A potential arousal and behavioral consequence of this type of impairment of gender identity may be that the infant will learn or imitate gender characteristics from the closest body to it, usually the mother. This may account for the preponderance of cross-gender behavior seen in prehomosexual male children (Green, 1975; Zucker, 1992). As these children reach physiological sexual maturity, the capacity for reproductive behavior (copulation) remains intact, because reproduction is bound to survival behavior, which is also a major function of the limbic system (Sapolsky, 2003). However, the absence or inhibition of certain neuronal circuitry between the brain (CNS) and body (ANS) may leave these individuals with the inability to differentiate not only their own gendered bodies, but also other objects of reproductive significance—in other words, whether one is sexually attracted to a person with a body whose gender would allow reproductive copulation.

This confusion of reproductive objects may manifest itself as attempts to copulate with objects of the same sex, immature objects of the same or different sex, and even inanimate objects. This type of behavior has been demonstrated in animal models and is known as the Kluver-Bucy syndrome, a syndrome in which cell death in specific areas of the limbic system produces atypical copulation behaviors (Aggleton, 1992; Guyton, 1991). This type of confusion may likely be the foundation for homosexual feelings and behaviors in humans.

## *The Impact of Neurophysiologic Development*

One consequence of this type of CNS/ANS derailment is that individuals have difficulty processing visual and auditory cues of their gendered self. What he or she may interpret as sexual feelings is really a lack of synchrony between the CNS and ANS. For example, visual input—such as a picture of partially clad males—can lead men who experience SSA to experience “emotionally unbalanced” or overactivated parasympathetic arousal. Instead of perceiving the visual input and subsequent arousal as an indicator of CNS and ANS detachment, a man may interpret this stimulation—or himself—as intrinsically “homosexual.” Such an interpretation is unfortunate, because it confuses or mystifies the underlying causes of any subsequent same-sex “reproductive” behavior, as well as the person’s self-identification.

### **Understanding and “Neutralizing” Homosexual Feelings**

Some people who experience “homosexual” feelings (same-sex attraction) would rather not. Regardless of whether one wants to experience SSA, persons with SSA may find it helpful to understand such feelings as a challenge to—in other words, a need for—CNS/ANS steady-state regulation. Using the example above, when a man sees a picture of partially clad males and experiences homosexual arousal, it is possible for the man who is aroused to understand how this visual input has affected his nervous system. If and when he is able to see such input and subsequent arousal as a challenge to his steady-state regulation, he is able to neutralize—in other words, normalize or render understandable and commonplace—this visual “input” and the subsequent arousal. Put simply, he can see the same-sex arousal for what it really is—and isn’t.

This neutralization—or proper understanding—of visual, auditory, tactile, and other stimuli transforms the input from a “purely” sexual stimulus to an impulse that must be discarded and/or digested (processed) by the CNS/ANS. In this light, the input may come to be understood as not really a sexual cue but a “reflexive” indication of the asynchrony—functional imbalance—between the CNS and ANS. However, the power of

## *The Impact of Neurophysiologic Development*

the input (the external stimuli) cannot be underestimated because the processing of the input is bound to the survival behavior of reproduction.

It is important to emphasize that the homosexual “reflex” (SSA) is not about someone else’s body, but about one’s own—in other words, the CNS/ANS disconnection in one’s own body. This disconnection is part of the ever-present, ongoing functioning of the central and peripheral nervous systems and how these systems are accustomed to metabolizing (processing) input from the environment. Just as some foods may give a person a stomachache, some stimuli (such as visual nudity) may give someone’s nervous system an overwhelmingly uncomfortable physiological challenge, such as arousal in need of calming or other resolution.

A key ingredient to maintaining steady-state regulation, including reacquiring a measure of internal comfort or peace, is to discard stimuli that we have experienced that can negatively impact steady-state regulation—in other words, that can leave one tense or otherwise uncomfortable. Continued exposure to some stimuli reinforces the positive or negative physiological and emotional consequences on the CNS and ANS, maintaining and/or intensifying one’s physical and emotional arousal. Lessening the exposure to such stimuli has value in decreasing physiological discomfort. A teacher once said, “If the eye offends thee, cut it out and throw it away” (Matthew 5:29). Of course, it may be easier to just avoid (as much as possible) stimuli that have a powerful negative impact on one’s nervous system regulation than to stop attending to the stimuli. For example, it may be easier to never look at stimulating pictures than to stop looking or recalling what one looked at. But ceasing to look as well as never looking to begin with are both possible.

For persons who find homosexual feelings troublesome, the mere avoidance of stimuli (such as pornographic pictures or videos) that impact the CNS and ANS in a negative way can be extremely helpful to maintaining steady-state regulation. However, keeping oneself physiologically/emotionally calm may require further vigilance, such as

## *The Impact of Neurophysiologic Development*

learning to be more cautious about activities as simple as going to the grocery store or spending a day at the beach. Maintaining and restoring steady-state regulation is the goal.

My group members' overall goal is to lessen the impact of all challenges to their steady-state regulation—in other words, experiences of SSA resulting from visual and auditory stimulation—by reducing or limiting such stimulation. In doing so, they hope to learn how to return to a more physiologically and emotionally balanced (less tense and more comfortable) state.

Group members also have found it helpful to recognize the potential root causes of their SSA. Realizing, understanding, feeling, and dealing with emotional trauma that they experienced early or later in their development appears to have a profound influence on gender identity for some of the men. It appears that my group members' efforts to intentionally become aware of the consequences of these traumatic life experiences have enabled the CNS of some of these men to rebound from this trauma. In general, the men in my group have been helped by understanding their experience of SSA in this way.

## References

- Aggleton, J. P. (1992). *The amygdala*. New York: Wiley-Liss.
- American Psychological Association. (2008). *Answers to your questions: For a better understanding of sexual orientation and homosexuality*. Washington, DC: Author. Retrieved May 6, 2013, from [www.apa.org/topics/orientation.pdf](http://www.apa.org/topics/orientation.pdf)
- Bowlby, J. (1960). Separation anxiety. *The International Journal of Psycho-Analysis*, 41, 89–113.
- Bowlby, J. (1969). *Attachment and loss, volume 1—Attachment*. New York: Basic Books, Inc.
- Bowlby, J. (1973). *Attachment and loss, volume 2—Separation anxiety and anger*. New York: Basic Books, Inc.
- Byrd, A. D. (2008). *APA's new pamphlet on homosexuality de-emphasizes the biological argument, supports a client's right to self-determination*. Retrieved May 6, 2013, from <http://www.narth.com/docs/deemphasizes.html>
- Carroll, R. (2009, September 9). *The autonomic nervous system: Barometer of emotional intensity and internal conflict*. Retrieved July 2, 2007, from <http://www.thinkbody.co.uk/papers/autonomic-nervous-system.htm>
- Green, R. (1975). The significance of feminine behavior in boys. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 16, 341–344.
- Guyton, A. C. (1991). *Medical physiology* (8th ed.). Philadelphia: W. B. Saunders Company.
- Lee, A. L., Ogle, W. O., & Sapolsky, R. M. (2002). Stress and depression: Possible links to neuron death in the hippocampus. *Bipolar Disorders*, 4(2), 117–128.
- Morris, J., Jordan, C., & Breedlove, S. (2004). Sexual differentiation of the vertebrate nervous system. *Nature Neuroscience*, 7(10), 1034–1039.
- Nolte, J. (2002). *The human brain: An introduction to functional anatomy* (5th ed.). St. Louis, MO: Mosby, Inc.

*The Impact of Neurophysiologic Development*

- Rothschild, B. (1998). *Post-traumatic stress disorder: Identification and diagnosis*. Retrieved October 5, 2013, from <http://www.healing-arts.org/tir/n-r-rothschild.htm>
- Sapolsky, R. M. (2003). Stress and plasticity in the limbic system. *Neurochemical Research*, 28(11), 1735–1742.
- Sapolsky R. M., Romero L. M., & Munck A. U. (2000). How do glucocorticoids influence stress responses? Integrating permissive, suppressive, stimulatory, and preparative actions. *Endocrine Reviews*, 21(1), 55–89.
- Schore, A. N. (1994). *Affect regulation—Origin of self*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Schore, A. N. (2003a). *Affect dysregulation and disorders of the self*. New York: W. W. Norton and Company, Inc.
- Schore, A. N. (2003b). *Affect regulation—Repair of self*. New York: W. W. Norton & Company, Inc.
- Zucker K. J., & Green, R. (1992). Psychosexual disorders of children and adolescents. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 33(1), 107–151.

# **Is First Same-Sex Attraction a Developmental Milestone?**

Neil E. Whitehead<sup>4</sup>

## **Acknowledgment**

I greatly appreciate the hospitality extended during my stay at Hiroshima University, particularly by Professor Masaharu Hoshi, in the framework of the Visiting Professor Programme. I appreciate the contribution of the Levene test from an anonymous reviewer.

---

<sup>4</sup> Neil E. Whitehead, PhD, is a biochemist who presently works at Whitehead Associates in Lower Hutt, New Zealand. This manuscript was written while the author was working at the Institute of Radiation Biology and Medicine, Hiroshima University, Kasumi 1-2-3, Minami-ku, Hiroshima, Japan 734-8553.

## **Abstract**

This paper combines the well-known concept of developmental milestones with standard statistical analysis of their spread in time to gauge the milestone status/genetic influence on the timing of first same-sex attraction (SSA) by comparison with timing of puberty. SSA is not a developmental milestone, nor does its timing have high genetic influence. The relative standard deviation (RSD) of the average age of first SSA is 40%, which is very high compared with the approximately 7% for milestones with very high known genetic influence, such as puberty. As reported in many studies over a period of thirty years, first attraction occurs at a mean age of ten for both sexes, both orientations, and cross-culturally. While it is commonly claimed in the literature that first SSA is a genuine sexually related attraction and biologically preprogrammed, both of these claims are doubtful. First attraction is on average about two years before puberty; hence it is mostly not puberty-driven. The age of ten is possibly connected with peak awareness of social gender differences. Alternatively but much less probably, the age of first SSA is connected with adrenarche (maturing of the adrenal glands). Age of first attraction turns out to be a poor choice to illustrate alleged innateness. Very few individuals have SSA as their earliest memories, which is hence a false stereotype.

## **Introduction**

It is rather common to hear gay people say, “Oh, I’ve always been this way. My earliest memories are of feeling different, and attracted to males” (Hillier, Turner, & Mitchell, 2005). In context this usually means that their earliest memories are of SSA, and it implies that such individuals must have been born with those feelings. This is even claimed to be the case cross-culturally (McLelland, 2000). It is still possible to find academic statements implicitly or explicitly suggesting that one is born gay. For example, LeVay (2010) declares that “I am inclined to place most of the developmental control in the hands of prenatal hormones” (p. 279), and *Born Gay* is even the title of one book (Wilson & Rahman, 2005). By this, the authors mean that SSA is influenced predominantly by prenatal factors.

Clearly, people with SSA are not “born that way”—immediately after birth, such individuals cannot even differentiate between themselves and their mothers, let alone distinguish between the genders. The phrase “born that way” therefore means in this context *predestined*, or bound to develop SSA. If this were true, the development of SSA would be a milestone event, like puberty or gestation, which is biologically programmed to occur in a set developmental sequence. The term *milestone* has been applied to various stages in the “coming out” process of GLB people (Floyd & Bakeman, 2006), and first same-sex sexual attraction is one of the milestones included. As the balance of this paper shows, this term is applied inaccurately, since no evidence of biological programming for SSA has been documented.

## **Statistics of Developmental Milestones**

Developmental milestones are tabulated in the literature for things like fetal growth, motor skills development, social skills, teeth eruption, puberty, and menopause. Failure or delay in reaching a milestone may be an important indicator of an underlying medical problem. As typical with a biological system, there will be a range of ages for a particular milestone derived from surveys of normal individuals. There will be a mean, and then a measure of age-spread, normally confidence intervals or the standard deviation, finally tabulated and used by medical professionals. These are generally larger, the later the milestone.

For example, there is a 3.8y standard deviation on the timing of menopause, but only a 0.023y standard deviation on gestation length (Table 1). Clearly the two measures are not directly or usefully comparable. The standard mathematical measurement that avoids this problem uses the coefficient of variation, or the *relative* standard deviation (RSD). The RSD is the standard deviation divided by the mean—in this case, the mean age. If an RSD exceeds 50%, the event is not a milestone. The RSD is used extensively in this paper for comparisons, and it should be noted that some are close to the 50% cutoff.

RSDs for selected postnatal milestones are given in Table 1. The literature for first same-sex attraction is treated later (see Table 3). RSD is calculated using time since conception. *First heterosexual/homosexual* is first sexual experience/initiation.

**Table 1. Postnatal Milestones**

<i>Milestone</i>	<i>Reference</i>	<i>RSD%</i>
Gestation length	(Kieler, Axelsson, Nilsson, & Waldenström, 1995)	3.0
First crawling, walking	(Adolph, Vereijken, & Denny, 1998)	7.6
First word, sentence	(Neligan & Prudham, 1969)	5.5, 3.8 (M/F)
Teeth eruption	(Hägg & Taranger, 1985)	8
Puberty	(Kaltiala-Heino, Marttunen, Rantanen, & Rimpela, 2003)	8.6
First heterosex	(Laumann, Gagnon, Michael, & Michaels, 1994)	7.1
First homosex	(Savin-Williams & Diamond, 2000)	33, 27 (M/F)
Hetero-marriage	(Laumann et al., 1994)	6.2
First birth	(Martin et al., 2002)	25
Graying	(Keogh & Walsh, 1965)	26
Balding	(Paik, Yoon, Sim, Kim, & Kim, 2001)	28
Menopause	(de Bruin et al., 2001) (Hayakawa et al., 1992)	7.3
Lifespan	(CDC, 2008)	25 <sup>a</sup>

We notice that same-sex initiation seems to have a much larger RSD than opposite-sex initiation or other milestones. High milestone variability is the result of a combination of genetic influences, family/social influences, and random events. These act to increase

### *Is First Same-Sex Attraction a Developmental Milestone?*

the RSD, so it might be a natural interpretation to say that many other influences are involved. It is not very surprising that the RSD for age of first birth to a mother is large, because many more factors enter into this than marriage, including deliberate postponement, difficulties conceiving, and so on. It is no surprise that lifespan has a larger RSD because many factors, such as accidents and lifestyle choices, are involved.

However, things might not be so simple. Sometimes a societal stricture or legal requirement may actually decrease the RSD; for example, all Swedish children must start school at age seven, and the RSD of the exact age is only about 4%. Similarly, it might be thought rather strange that age of marriage is so tightly constrained, but there are many social factors that reduce the spread and tend to produce similarity. If all of one's friends are getting married, there is pressure to get married at a similar time. Because graduation from tertiary education is a normal transition point, age at first marriage might also converge then, and the RSD might be small.

The rule of thumb is that most environmental influences act to increase differences and enlarge the RSD, and that probably also applies to first SSA attraction. Since the degree of environmental influence increases a great deal after birth; one of the clearest illustrations of minimum milestone variability (i.e., relatively small RSD) is prenatal development. Such data is available and can be calculated now from MRI scans and ultrasounds, as shown in Table 2.

**Table 2. Prenatal Milestones**

<i>Milestone</i>	<i>Reference</i>	<i>Mean Years</i>	<i>RSD%</i>
Size of 10 mm fetal sac	(Creighton University Medical Center, 2006)	0.115	4.1
First head rotation	(Creighton University Medical Center, 2006)	0.200	4.6
Singular sulcus development	(Garel et al., 2001)	0.433	2.2
First arm movement	(Kurjak et al., 2006)	0.538	3.8

RSD expressed as time since conception.

The mean of these relative standard deviations (RSDs) is 3.7%, which is less than the lowest *postnatal* milestones in Table 1.

For purely genetic influence, there is evidence from colonies of laboratory mice that the degree of timing-spread might be even lower (Murray et al., 2010). For laboratory mice, with environmental conditions held very constant by researchers, the timing of gestation has a relative standard deviation of about 1.9%. This varies a little depending on the particular mouse strain. This is lower than the prenatal RSDs for humans in Table 2, but for a fuller comparison with humans, more research is needed.

### **First Attraction Conceptual Difficulties**

The concept of first sexual attraction is now discussed in light of the above background. The concept of attraction is more fundamental than sexual identity, because the latter will have a significant social input; similarly, a behavioral criterion is possibly unreliable. The first attraction data under consideration, although apparently more fundamental, do not necessarily involve genuine erotic arousal and may be less clear-cut than one might imagine. The answers obtained to questionnaires designed to gather data

on first attraction depend on how the questions are framed (Rich Savin-William, personal communication, June 2009). The first attraction may consist of admiration, fascination, or hero worship, and may only later become sexualized. It is assumed here that any reported first attraction has at least a sexualized tinge (Herdt, McClintock, Henderson, Lehavot, & Simoni, 2000).

Another criticism of the attraction data is that adult memories of age of first attraction may be imprecise and unreliable. However, it is reassuring that the test-retest reliability of first attraction age is good (Schrimshaw et al., 2006) and little different from those for sexual identity realization and first same-sex encounter, which are likely to be better remembered.

### **First Attraction Literature Data**

Kinsey, Pomeroy, and Martin (1948) and Kinsey, Pomeroy, Martin, and Gebhard (1953)—the first to investigate sexuality on a really large scale—give lots of sexual data with age, but ironically none on first attraction. They accumulated data on first arousal instead, and by this they explicitly meant physiological arousal, not just attraction. In a review of the literature, Herdt and colleagues (2000) cite the first published calculation of a first-attraction age (ten years) as a long time after the work of Kinsey et al. (Saghir & Robins, 1973).

Since Saghir and Robins (1973), there have been many subsequent studies that measured first attraction (see Table 3). Some studies give only an estimate of the age, while others also give the standard deviation of the age, or enough information so that a standard deviation may be calculated.

**Table 3. Mean Ages for First Same-Sex Attraction**

<i>Reference</i>	<i>Mean First Attraction</i>	<i>Comment</i>
Remafedi, Farrow, & Deisher (1991)	10	Both sexes combined
Savin-Williams (1995)	9.6±3.6, 10.1±3.7	Male/female
Bailey & Oberschneider (1997)	10.4	
D'Augelli, Hershberger, & Pilkington (1998)	10±4	Both sexes combined
Savin-Williams (1998)	7.5±3 10.5±6	Male/female
D'Augelli et al.(2005)	10±3.4	Both sexes combined
Schrimshaw et al. (2006)	10.9±3.8	Both sexes combined
Floyd & Bakeman (2006)	11.4±4.8 15.3±6.9	Male/Female
McCabe, Hughes, Bostwick, Morales, & Boyd (2012); McCabe et al. (2012)	10	
Grossman (2008)	12.9± ca. 7, and 9.8±3.5	Two estimates: men only
Corliss, Cochran, Mays, Greenland, & Seeman, (2009)	16±8	Women only. May include attractions other than first.

The mean and standard deviation of the measurements for age at first same-sex attraction for the twelve studies listed in Table 3 is 10.0±4.0 years for both sexes.

The Whitam and Mathy (1986) study of males and the Whitam, Daskalos, Sobolewski, and Padilla (1998) study of females give cross-cultural data that is consistent

*Is First Same-Sex Attraction a Developmental Milestone?*

with the studies cited in Table 3. In the Witam et al. studies (see Tables 4 and 5), standard deviations for first same-sex attraction were calculated from age ranges provided rather than from year-by-year data. Note that the measured ages of first opposite-sex attraction (OSA) also is included. Comments about the comparison between age of first SSA and OSA are offered in the technical appendix.

**Table 4. Age for First SSA for Males**

	<i>Brazil</i>	<i>Guatemala</i>	<i>Philippines</i>	<i>USA</i>
SSA	10.6±5.5	8.2±4.9	11.4±3.4	10.9±4.5
OSA	11.6±2.9	9.1±4.2	11.8±3.3	10.3±4.8

(Whitam & Mathy, 1986) Values are years, and errors are one standard deviation

**Table 5. Age for First SSA for Females**

	<i>Brazil</i>	<i>Peru</i>	<i>Philippines</i>	<i>USA</i>
SSA	14.8±6.9	14.7±7.2	15.2±6.1	13.7±7.3
OSA	12.5±2.8	12.4±3.7	15.1±3.2	9.9±3.6

(Whitam et al., 1998) Values are years and errors are one standard deviation.

Overall, the RSDs are similar to the data in Table 3—that is, the standard deviations are a large fraction of the ages rather than a small fraction.

In their review of the literature, Herdt et al. (2000) describe data from various primitive and sophisticated cultures and estimate that the first attraction (for both SSA and OSA) occurs at age ten. This is interpreted as evidence of a biological origin for first

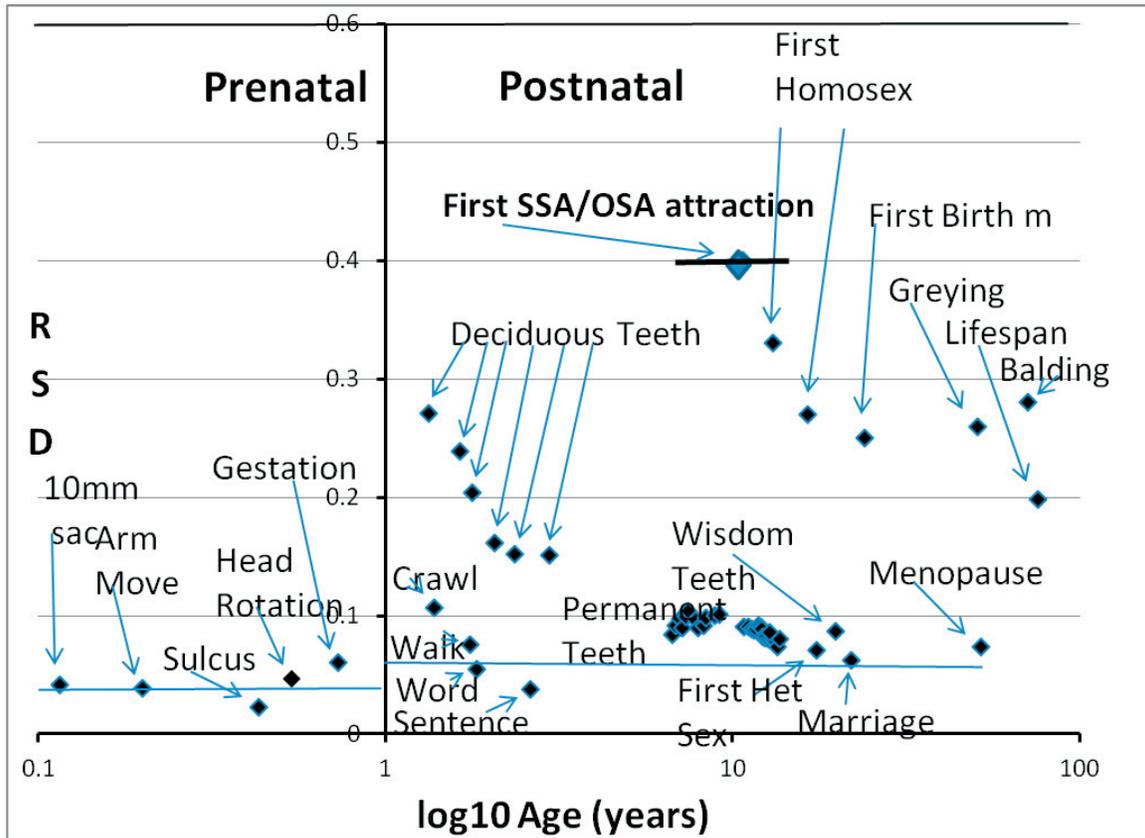
## *Is First Same-Sex Attraction a Developmental Milestone?*

attraction. The title of their paper is the memorable phrase: “The Magical Age of 10.” Significantly, the age tabulated in their work does not correlate with the measured age of puberty. This is problematic as evidence for the biological origin of first attraction. At least in the United States, in more than thirty years of studies—from Saghir and Robins (1973) to Corliss et al. (2009)—measured age of first attraction has changed little. While the age of puberty in the West has decreased considerably over several decades (Katiala-Heino et al., 2003; Kinsey et al., 1948, 1953), in some of the primitive cultures, normal puberty occurs as late as age 19. Herdt et al. (2000) claim that since the age of first attraction is not changing, this must mean that first SSA (and OSA) are biologically programmed and occur independent of puberty and culture. In effect, they assert that age of first attraction is much more tightly biologically constrained than the age of puberty itself, which is very unlikely. The data in the present paper refute this interpretation because the spread in the timing of first attraction is much too large when compared with the age of puberty.

### **Comparison of Developmental Milestones with First SSA and OSA and First SS and OS Sexual Initiation**

The RSD for all of the previously tabulated data on developmental milestones and first SSA (see Tables 1–5) are compared below in Figure 1. The larger the RSD, the wider the spread in the data.

**Figure 1. Developmental Milestone RSDs Combined with RSD for First SSA**



In the figure, *First Homosex* and *First Het Sex* are data points for first intercourse/initiation for homosexual and heterosexual respectively.

The highest horizontal thick line for *First SSA/OSA Attraction* emphasizes the 40% relative standard deviation, compared with other lesser relative standard deviations elsewhere in Figure 1; the enlarged diamond is merely for emphasis. This figure shows visually the point in this paper that most biological events are more tightly clustered in age than first attraction. For example, menopause occurs over a restricted age range, but graying of hair is much more variable in age. Lines indicating approximate lowest RSDs for prenatal and postnatal developmental events are included. The OSA first attraction RSD point, which is the same as for SSA, was derived from Tables 4 and 5.

### *Is First Same-Sex Attraction a Developmental Milestone?*

In Figure 1 the values for the relative standard deviation statistic are much higher for deciduous (baby) teeth than for permanent teeth. This is reasonable, because it is less important that deciduous teeth erupt at fixed times.

It is interesting that even walking and first verbal production seem restricted in time to a surprising extent. In contrast, events like balding and lifespan are much more heavily influenced by the environment. Any genetic heterogeneity is included in the table/figure data and could increase some RSD results.

The same-sex milestones have much larger RSDs than the heterosexual ones. It would be tempting to say that this is the result of societal pressures interfering with SSA, and making the ages at which milestones occur more variable, but this is not correct because the OSA first attraction RSD is similar to the SSA first attraction RSD (and very different from the other OSA milestones). This means either that the concept of “first attraction” is quite unsuitable as a measure of sexual orientation, or similar influences are impacting both.

### **Comparison of Relative Genetic Influence of Specific Developmental Milestones**

Table 6 shows the genetic influence on milestone timing, where known.

**Table 6. Percentage Genetic Influence from Twin Studies**

<i>Milestone</i>	<i>Reference</i>	<i>% Genetic Influence</i>
Gestation length	(Clausson, Lichtenstein, & Cnattingius, 2000)	31 <sup>a</sup>
First crawling, walking	Not found	
First word, sentence	Not found	
Teeth eruption timing	(Townsend, Hughes, Luciano, Bockmann, & Brook, 2009)	94
Puberty timing	(Silventoinen, Haukka, Dunkel, Tynelius, & Rasmussen, 2008)	91
First heterosex	(Dunne et al., 1997)	72, 49 (M/F)
Marriage	(Trumbetta, Markowitz, & Gottesman, 2007)	27 <sup>d</sup>
Graying	Not found	
Balding	(Rexbye et al., 2005)	79 <sup>b</sup>
Menopause timing	(de Bruin et al., 2001)	86
Lifespan	(Hjelmborg et al., 2006)	26 <sup>c</sup>

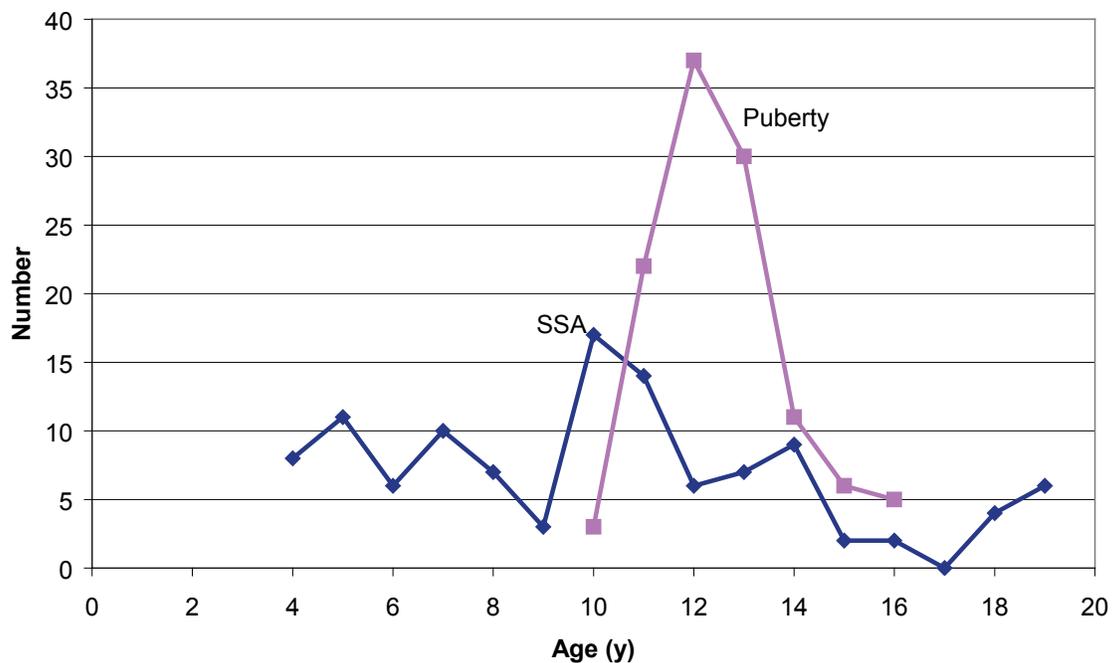
(a) Mother gene influence only—there is also a contribution from the fetus. (b) To a mean baldness criterion rather than age. (c) For 96-year-olds. (Similar results for 2 individual decades previous.) (d). Maximum from ages 20–40, but is RSD on marital status, not RSD on age.

*Is First Same-Sex Attraction a Developmental Milestone?*

We now compare the RSD on points with a known high genetic influence (more than 50%) from Table 6, such as teeth eruption, puberty, first heterosexual intercourse, balding, and menopause. The mean and standard error of the mean for RSD of these selected milestones are  $0.120 \pm 0.031$ . This is very statistically different from the 0.40 for RSD of first attraction ( $P < 0.001$ ) so presumably both SSA and OSA first attraction do not have a predominant genetic component.

For a more specific example, the data for first SSA and puberty for males—derived and redrawn from Hamer, Hu, Magnuson, Hu, and Pattatucci, (1993)—are particularly clear, because they are given separately for each year of age rather than as summary statistics. In Figure 2, note that the data for first SSA are very spread out, compared with the data for puberty.

**Figure 2. Male First SSA Attraction (Hamer et al, 1993) The numbers are per year.**



### *Is First Same-Sex Attraction a Developmental Milestone?*

From Figure 2, SSA age-occurrence is not like the genetically influenced shape of puberty. The two means and standard deviations are respectively  $10.0 \pm 4.1$  years, and  $12.5 \pm 1.4$  years; very different at the  $p < 0.001$  level by either a t-test or the Levene test for homogeneity of variance.

Using the known very strong genetic influence on puberty timing, the likely genetic influence on first SSA is calculated in the technical appendix. However, the conclusion from the comparison as seen in the figures is that the genetic influence is low and other influences predominate. There is no support for the idea that first attraction is an innate, or inevitable, developmental milestone.

### **The Possible Involvement of Adrenarche (Full Adrenal Maturity)**

Herdt et al. (2000) speculate that the “magical age of 10” may be due to adrenarche, which is a biological milestone. Adrenarche is the first achievement of full adrenal maturity, the point at which androgenic hormones are produced to mature levels and which has been observed to occur also at age ten (Auchus, 2011). Adrenal maturity occurs independent of puberty. It is possible to have puberty without adrenarche (as in the case of adrenal failure), and adrenarche without puberty (as in Turner’s syndrome), and sexual attraction will still develop in either case (this example is for OSA). Auchus mentions that adrenarche is not an abrupt and signaled process occurring in mid childhood but rather a continuous process since birth. It therefore is not only independent of puberty but a different type of process and very spread out over time.

One possibility is that first attraction might be due to some prolonged genetic influence connected with hormones from the adrenal gland, which theoretically might explain the spread-out nature of first attraction. However, this seems very unlikely, given the example of girls with congenital adrenal hyperplasia and OSA (Meyer-Bahlburg, Dolezal, Baker, Ehrhardt, & New, 2006). Such girls have grossly excessive androgen production from well before birth, but not excessive attraction to the opposite sex; in

fact, they have less attraction to the opposite sex. A small but increased proportion of girls with this condition is attracted to the same sex. These girls are not born precociously attracted to the opposite sex; rather they become attracted to the opposite sex in a way similar to those exposed to normal hormone levels. This suggests adrenarche is likely to be a quite minor influence on first attraction.

## **A Social Hypothesis**

An alternative hypothesis is that social environmental factors strongly influence the development of first same- (and opposite-) sex attraction. As described (Whitehead & Whitehead, 2010), the age of ten also coincides with an approximate peak in the differential social gender-development of each sex. For several years after birth, boys and girls have been following the diverging psychological trajectories appropriate to their sex (or for SSA children, often not following them). Having developed social gender characteristics that differ from the opposite sex, boys and girls commonly begin to be interested in those differences, and even attracted to those who are different. This is essentially the “exotic becomes erotic” idea of Bem for OSA, as well as SSA (Bem, 1996). Some of the spread in age at first attraction could simply derive from the variability in time required for encountering a person who is perceived as attractive. Twin studies have shown that romantic opposite-sex attraction has zero genetic influence for adults (Zietsch, Verweij, Heath, & Martin, 2011). Work using a quite large sample of adolescent twins found the same for same-sex attraction in teenagers, i.e., no genetic influence (Bearman & Brueckner, 2002). There seems little doubt that a similar survey for first attraction prepuberty would have a similar result.

A strength of the current paper is that the standard combination of the concept of genetically influenced developmental milestones and the variation of their age-spread has a large and well-established literature but has never before been applied to SSA. This is a fresh approach to the problem of genetic influence that is normally tackled by twin

studies or family studies. First SSA has such a wide relative standard deviation compared to other clearly genetically influenced milestones that it seems clear the appearance of first SSA is only weakly influenced by genetics. This means that the common belief that people with SSA are “born that way” is not supported by the literature on first attraction.

A possible limitation to this conclusion is that measuring first attraction is commonly done by asking only one question in a retrospective, self-report survey. Also, since the concept of “attraction” is so multifaceted, more research is needed to allow for a fuller exploration of this topic. For the present comparison, puberty was not too different in age from first attraction, but other comparisons with wider age disparities may introduce extra mathematical uncertainty.

## **Conclusions**

Although it is common to hear that first same-sex attraction coincides with earliest memories, numerous surveys show this is a very misleading generalization—half of all reported first attractions are later than age ten. It is doubtful whether this attraction is more than a possible harbinger of possible future sexualized attraction, particularly for SSA. Its very spread-out occurrence in time (about 40% relative standard deviation) makes it nearly impossible that it is predominantly biologically influenced. Human post-natal events that are known to be biologically preprogrammed have a much smaller relative standard deviation of about 7% and prenatal events of about 4%. It is also doubtful that adrenarche—adrenal maturity—is an adequate explanation for this “magical age of 10.” A social explanation based on the development of psychosexual gender differences is more plausible.

## References

- Adolph, K. E., Vereijken, B., & Denny, M. A. (1998). Learning to crawl. *Child Development, 69*(5), 1299–1312.
- Auchus, R. J. (2011). The physiology and biochemistry of adrenarche. *Endocrine Development, 20*, 20–27.
- Bailey, J. M., & Oberschneider, M. (1997). Sexual orientation and professional dance. *Archives of Sexual Behavior, 26*, 433–444.
- Bearman, P. S., & Brueckner, H. (2002). Opposite-sex twins and adolescent same-sex attraction. *American Journal of Sociology, 107*, 1179–1205.
- Bem, D. J. (1996). Exotic becomes erotic: A developmental theory of sexual orientation. *Psychological Review, 103*, 320–335.
- CDC. (2008). Table 3. Numbers of deaths. <http://www.disastercenter.com/cdc/Death%20rates%202005.html>
- Clausson, B., Lichtenstein, P., & Cnattingius, S. (2000). Genetic influence on birthweight and gestational length determined by studies in offspring of twins. *BJOG, 107*(3), 375–381.
- Corliss, H. L., Cochran, S. D., Mays, V. M., Greenland, S., & Seeman, T. E. (2009). Age of minority sexual orientation development and risk of childhood maltreatment and suicide attempts in women. *American Journal of Orthopsychiatry, 79*(4), 511–521.
- Creighton University Medical Center. (2006). Ultrasound of early pregnancy. Retrieved December 2006 from <http://radiology.creighton.edu/pregnancy.htm>
- D’Augelli, A. R., Grossman, A. H., Salter, N. P., Vasey, J. J., Starks, M. T., & Sinclair, K. O. (2005). Predicting the suicide attempts of lesbian, gay and bisexual youth. *Suicide and Life-Threatening Behavior, 35*(6), 646–660.

*Is First Same-Sex Attraction a Developmental Milestone?*

- D'Augelli, A. R., Hershberger, S. L., & Pilkington, N. W. (1998). Lesbian, gay, and bisexual youths and their families: disclosure of sexual orientation and its consequences. *American Journal of Orthopsychiatry*, *68*, 361–371.
- de Bruin, J. P., Bovenhuis, H., van Noord, P. A. H., Pearson, P. L., Arendonk, J. A. M., . . . & Dorland, M. (2001). The role of genetic factors in age at natural menopause. *Human Reproduction*, *16*, 2014–2018.
- Dunne, M. P., Martin, N. G., Statham, D. J., Slutske, W. S., Dinwiddie, S. H., Bucholz, K. K., . . . & Heath, A. C. (1997). Genetic and environmental contributions to variance in age at first sexual intercourse. *Psychological Science*, *8*(3), 211–216.
- Floyd, F. J., & Bakeman, R. (2006). Coming-out across the life course: Implications of age and historical context. *Archives of Sexual Behavior*, *35*(3), 287–296.
- Garel, C., Chantrel, E., Brisse, H., Elmaleh, M., Luton, D., Oury, J. F., . . . & Hassan, M. (2001). Fetal cerebral cortex: Normal gestational landmarks identified using prenatal MR imaging. *AJNR American Journal of Neuroradiology*, *22*, 183–189.
- Grossman, A. H. (2008). The unique experiences of older gay and bisexual men: Associations with health and well-being. In R. J. Wolitski, R. Stall, & R. O. Valdiserri (Eds.), *Unequal opportunity: Health disparities affecting gay and bisexual men in the United States* (pp. 303–326). New York: Oxford University Press.
- Hamer, D. H., Hu, S., Magnuson, V. L., Hu, N., & Pattatucci, A. M. L. (1993). A linkage between DNA markers on the x-chromosome and male sexual orientation. *Science*, *261*, 321–327.
- Hayakawa, K., Shimizu, T., Ohba, Y., Tomioka, S., Takahasi, S., Amano, K., . . . & Hayakata, Y. (1992). Intrapair differences of physical aging and longevity in identical twins. *Acta Geneticae Medicae Et Gemellologiae*, *41*, 177–185.
- Herd, G., McClintock, M., Henderson, A. W., Lehavot, K., & Simoni, J. M. (2000). The magical age of 10. *Archives of Sexual Behavior*, *29* (6), 587–606.

*Is First Same-Sex Attraction a Developmental Milestone?*

- Hershberger, S. L. (1997). A twin registry study of male and female sexual orientation. *Journal of Sex Research, 34*, 212–222.
- Hillier, L., Turner, A., & Mitchell, A. (2005). *Writing themselves in again: 6 years on*. Melbourne: La Trobe University.
- Hjelmborg, B. J., Iachine, I., Skytthe, A., Vaupel, J. W., McGue, M., Koskenvuo, M., . . . & Christensen, K. (2006). Genetic influence on human lifespan and longevity. *Human Genetics, 119*(3), 312–321.
- Hägg, U., & Taranger, J. (1985). Dental development, dental age and tooth counts. *Angle Orthodontist, 55*, 93–107.
- Kaltiala-Heino, R., Marttunen, M., Rantanen, P., & Rimpela, M. (2003). Early puberty is associated with mental health problems in middle adolescence. *Social Science and Medicine, 57*, 1055–1064.
- Keogh, E. V., & Walsh, R. J. (1965). Rate of greying of human hair. *Nature, 207*, 877–878.
- Kieler, H., Axelsson, O., Nilsson, S., & Waldenström, U. (1995). The length of human pregnancy as calculated by ultrasonographic measurement of the fetal biparietal diameter. *Ultrasound in Obstetrics & Gynecology, 6*(5), 353–357.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W. B. Saunders.
- Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). *Sexual behavior in the human female*. Philadelphia: W. B. Saunders.
- Kurjak, A., Andonotopo, W., Hafner, T., Salihagic, A., Standojevic, M., Azumendi, G., . . . & Troyano, J. M. (2006). Normal standards for fetal neurobehavioral developments—longitudinal quantification by four-dimensional sonography. *Journal of Perinatal Medicine, 34*, 56–65.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality*. Chicago: University of Chicago Press.

*Is First Same-Sex Attraction a Developmental Milestone?*

- LeVay, S. (2010). *Gay, straight and the reason why*. New York: Oxford University Press.
- Martin, J. A., Hamilton B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: final data for 2001. *National Vital Statistics Reports*, 51(2), 1–104.
- McCabe, S. E., Hughes, T. L., Bostwick, W., Morales, M., & Boyd, C. J. (2012). Measurement of sexual identity in surveys: Implications for substance abuse research. *Archives of Sexual Behavior*, 41(3), 649–657.
- McLelland, M. J. (2000). *Male homosexuality in modern Japan: cultural myths and social realities*. Richmond, Surrey, UK: Curzon Press.
- Meyer-Bahlburg, H., Dolezal, C., Baker, S., Ehrhardt, A., & New, M. (2006). Gender development in women with congenital adrenal hyperplasia as a function of disorder severity. *Archives of Sexual Behavior*, 35(6), 667–684.
- Murray, S. A., Morgan, J. L., Kane, C., Sharma, Y., Heffner, C. S., Lake, J., & Donahue, L. R. (2010). Mouse gestation length is genetically determined. *PLoS One*, 5(8), e12418.
- Neligan, G., & Prudham, D. (1969). Norms for standard developmental milestones by sex, social class and place in family. *Developments in Medical Child Neurology*, 11, 413–422.
- Paik, J. H., Yoon, J. B., Sim, W. Y., Kim, B. S., & Kim, N. I. (2001). The prevalence and types of androgenetic alopecia in Korean men and women. *British Journal of Dermatology*, 145, 95–99.
- Remafedi, G., Farrow, J. A., & Deisher, R. W. (1991). Risk factors for attempted suicide in gay and bisexual youth. *Pediatrics*, 87, 869–875.
- Rexbye, H., Petersen, I., Iachina, M., Mortensen, J., McGue, M., Vaupel, J. W., & Christensen, K. (2005). Hair loss among elderly men: Etiology and impact on perceived age. *Journal of Gerontology: A Biological Sciences and Medical Science*, 60(8), 1077–1082.
- Saghir, M. T., & Robins, E. (1973). *Male and female homosexuality, a comprehensive investigation*. Baltimore, MD: Williams and Wilkins.

*Is First Same-Sex Attraction a Developmental Milestone?*

- Savin-Williams, R. C. (1995). Lesbian, gay male, and bisexual adolescents. In A. R. D'Augelli & C. J. Patterson (Eds.). *Lesbian, gay, and bisexual identities over the lifespan* (pp. 166–189). New York: Oxford University Press.
- Savin-Williams, R. C. (1998). The disclosure to families of same sex attractions by lesbian, gay, and bisexual youths. *Journal of Research on Adolescence, 8*, 149–168.
- Savin-Williams, R. C., & Diamond, L. M. (2000). Sexual identity trajectories among sexual-minority youths: Gender comparisons. *Archives of Sexual Behavior, 29*, 607–627.
- Schrimshaw, E., Rosario, M., Meyer-Bahlburg, H., Scharf-Matlick, A., Langstrom, N., & Hanson, R. K. (2006). Test-retest reliability of self-reported sexual behavior, sexual orientation and psychosexual milestones among gay, lesbian and bisexual youths: High rates of sexual behavior in the general population: correlates and predictors. *Archives of Sexual Behavior, 35*, 225–234.
- Silventoinen, K., Haukka, J., Dunkel, L., Tynelius, P., & Rasmussen, F. (2008). Genetics of pubertal timing and its associations with relative weight in childhood and adult height: The Swedish young male twins study. *Pediatrics, 121*(4), e885-891.
- Townsend, G., Hughes, T., Luciano, M., Bockmann, M., & Brook, A. (2009). Genetic and environmental influences on human dental variation: A critical evaluation of studies involving twins. *Archives of Oral Biology, 54* (Suppl. 1), s45–s51.
- Trumbetta, S. L., Markowitz, E. M., & Gottesman, I. I. (2007). Marriage and genetic variation across the lifespan: Not a steady relationship? *Behavior Genetics, 37*(2), 362–375.
- Whitam, F. L., Daskalos, C., Sobolewski, C. G., & Padilla, P. (1998). The emergence of lesbian sexuality and identity cross-culturally: Brazil, Peru, the Philippines, and the United States. *Archives of Sexual Behavior, 27*, 31–56.
- Whitam, F. L., & Mathy, R. M. (1986). *Male homosexuality in four societies. Brazil, Guatemala, the Philippines, and the United States*. New York: Praeger.

*Is First Same-Sex Attraction a Developmental Milestone?*

- Whitehead, N. E. (2011). Neither genes nor choice: Same-sex attraction is mostly a unique reaction to environmental factors. *Journal of Human Sexuality*, 3, 81–114.
- Whitehead, N. E., & Whitehead, B. K. (2010). *My genes made me do it!* (2nd ed.). Lower Hutt, New Zealand: Whitehead Associates. See also [www.mygenes.co.nz](http://www.mygenes.co.nz)
- Wilson, G., & Rahman, Q. (2005). *Born gay: The psychobiology of sex orientation*. London: Peter Owen.
- Zietsch, B. P., Verweij, K. J., Heath, A. C., & Martin, N. G. (2011). Variation in human mate choice: Simultaneously investigating heritability, parental influence, sexual imprinting, and assortative mating. *American Naturalist*, 177(5), 605–616.

## Technical Appendix

In this appendix, data from tables in the body of the paper are used to estimate the genetic and other influences on timing of first attraction. This method is a minor novelty in the literature, but follows from the mathematics used. Comparison of variances is universally employed, but rarely applied to milestones.

The data for timing derived from Figure 2 are  $10.0 \pm 4.1$  years, and  $12.5 \pm 1.4$  years for first SSA and puberty respectively. The variance of these measures, which is the square of the standard deviation of each mean, is used. Therefore, variances of  $4.1^2$  and  $1.4^2$  or 16.81 and 1.96, were compared. The genetic contribution to the timing of puberty from Table 6 is 0.91 or  $1.96 * 0.91$  or 1.78 (because the genetic contribution to puberty is only 91% instead of 100%). Other things being equal, we compare 1.78 units of variance contribution for timing of puberty with 16.81 units of variance for first SSA. This means that the genetic contribution to first SSA is about 10%. It could possibly be somewhat less, because the mean age of 10 for first SSA is less than the mean age of 12.5 for puberty (see Figure 2). For a general conclusion, it is enough to know that the genetic contribution to the variance of first same-sex attraction timing is weak rather than overwhelming. The result is similar to a previous estimation from twin studies by a quite different method (Whitehead, 2011).

Figure 2 does not give information we could use to repeat the calculation for OSA. Some first attraction ages (standard deviation in parentheses) can be used from Tables 4 and 5, though they are less precise than the Figure 2 data, i.e., OSA(m) 10.3 (47%) OSA(f) 9.9 (36%).

These two results for OSA again indicate a weak effect of genetics, for both males and females and in the order of 10%.

It may surprise readers that the genetic contribution to OSA timing is apparently so low. While it is quite widely assumed that one is “born OSA,” there has been only

*Is First Same-Sex Attraction a Developmental Milestone?*

one other quantitative test of this hypothesis (Hershberger, 1997). Hershberger tested the existence—not the timing of first appearance—of OSA contrasted with other sexual orientations and found that the genetic contribution to OSA was 18 to 26%. This is a weak to modest influence and puzzling in light of the general assumption that heterosexual orientation is genetically inherited. But this finding apparently has received no subsequent comment. The present finding is reasonably consistent with Hershberger's work, though for the measurement of the timing of appearance rather than the perceived existence of the orientation itself. This implies that nongenetic factors, such as the role of family and society in developing OSA, are much greater than usually thought and the role of genetics much less (Whitehead & Whitehead, 2010). An alternative interpretation is that “first attraction” is not a reflection of adult sexual orientation and either should not be used, or should be used only with caution.

**What *Did* Make Me Do It? A Review and Summary of  
Neil Whitehead and Briar Whitehead's *My Genes Made Me  
Do It!—Homosexuality and the Scientific Evidence***

Philip M. Sutton<sup>5</sup> and Robert L. Vazzo<sup>6</sup>

---

<sup>5</sup> Philip M. Sutton, PhD, is licensed as a psychologist (in Michigan and Ohio), marriage and family therapist, and clinical social worker (in Indiana) and practices full-time. Dr. Sutton is the editor of NARTH's *Journal of Human Sexuality*.

<sup>6</sup> Robert L. Vazzo is licensed as a marriage and family therapist in California, Florida, and Ohio, and currently practices in Encino, California. Mr. Vazzo also holds an advanced degree in linguistics and periodically writes and edits articles for NARTH's *Journal of Human Sexuality*.

## *What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

*My Genes Made Me Do It!—Homosexuality and the Scientific Evidence*, authored by Neil Whitehead, biochemist and science researcher/consultant, and edited by Briar Whitehead, journalist and author of *Craving for Love* (2003)—is a facetious title for a book whose main point is that *our genes don't and can't make us do anything!* That includes feeling or acting on homosexual or same-sex attractions (SSA).

The 2010 version of *My Genes* is a thorough revision of the original 1999 edition. For more than twenty years, Neil Whitehead has personally dedicated himself to reviewing the historical and current professional and scholarly papers relevant to the development and enactment of SSA. By his conservative estimate, he has reviewed more than “10,000 scientific papers” (back cover). The updated 2010 version alone involves the citation of more than 460 scientific and professional papers and publications, almost 200 more than the 1999 edition. These additional citations include the most up-to-date literature from the past decade that is relevant to understanding the origins and outcomes of homosexuality (SSA).

### **Where to Start Reading**

While we agree that the book is a reasonably “comprehensive and accessible” book (back cover), we submit that the Whiteheads cover so many topics and cite so many studies and reports that at times the writing may be daunting for nonscientists. We strongly encourage readers to *begin at the end* with the book’s summary (pp. 264–273). This final chapter lists all of the major conclusions of the preceding twelve, including sound-bite conclusions about the evidence for the changeability of SSA and evidence from the twin studies that SSA is *not* genetically determined. In addition to summaries at the end of each chapter, particular bullet-point summaries throughout the text are worth reading before tackling the chapters themselves (see, for example, pp. 36–37, 80–81, 144, and 159–160).

In the following ten sections, the reader will find further commentary on the idea that *our genes can't and don't make us do anything* and on other major ideas specifically concerning homosexuality.

## **Section 1. Our genes do *not* make us *do anything!***

In spite of a cultural bias that human beings are genetically determined to behave in certain ways, the Whiteheads' review of the biogenetic literature leads them to assert otherwise. In Chapter 1 ("Can genes create sexual preferences?"), they offer a brief review of introductory genetics and conclude that *while genes have an influence in and on all human behavior*—making it possible to live and act in and through our bodies—*genes themselves do not make or compel any behavior*.

The Whiteheads explain that while the concept of genetic influence is a valid scientific phenomenon, genetic effects are indirect. In other words, genes create an individual who can grow, adapt, and evolve in his environment; however, genes do not dictate behavior. In fact, they represent no more than 10 to 15% of the factors that *do* influence human sexual behavior, whether toward a person of the same or the opposite gender.

The summary at the end of Chapter 1 (pp. 36–37; cf. pp. 265–267) offers not only a clear and simple presentation of the authors' comprehensive review of the scientific literature on genetics, but also a good introduction to the breadth and depth of the research evidence and the scientific logic that they employ throughout the book.

## **Section 2. While genetic factors are not irrelevant, *neither* heterosexuals *nor* homosexuals are "born that way."**

The major part of Chapter 3 ("Are heterosexuals 'born that way'?") reviews research on the development of heterosexuality. The Whiteheads finally conclude that genes do not determine heterosexuality, just as they do not determine homosexuality. Rather, they conclude that heterosexuality also develops in response to environmental stimuli.

To further support the assertion that no one is born with any specific sexual preference, the Whiteheads review in Chapter 9 the reported evidence that claimed a

scientist had found a gay gene. Beginning in 1993, the public was inundated with news reports from the Western media that “a gene determining homosexuality” had been found, even though scientists responsible for the study (Hamer et al., 1993) had reported otherwise.

Attempts to replicate these and other studies to confirm findings of a gay gene have largely failed to show the same results (pp. 164–171). The Whiteheads note that with “the availability now of thorough ‘whole genome’ scans, gene linkage studies are now becoming rather passé” (p. 164). Also, as the authors discuss in Chapters 1 and 8, we now know that literally thousands of genes may be involved in a single trait. In addition, scientists have observed and believe that the environment may influence the expression of these genes. In other words, *genes provide the blueprints for the formation of the human body, but they seldom dictate particular characteristics of human behavior.*<sup>7</sup>

The study of how genes may influence the behavior of a person—“the way in which the expression of heritable traits is modified by environmental influences or other mechanisms without a change to the DNA sequence”—is called *epigenetics* by biologists (Dictionary.com). Behavioral, social, and developmental psychologists, and other researchers commonly use interaction theory (Magnusson, 1985) to explain the ways that genetic and biological factors affect and are affected by environmental and nonbiological factors (i.e., how “nature” affects and is affected by “nurture”). The Whiteheads’ use of *epigenetics* to explain the real but limited influence of genes on sexual behavior may be also—and to professionals in the arts and sciences, perhaps better—explained using interaction theory.

---

<sup>7</sup> An example of how to understand this comes from understanding how people develop oral language. Persons with normal, healthy genes and otherwise benign pre- and post-natal physical and psychosocial influences will learn to speak and hear language. The language(s) they learn will be the one(s) used by those with whom they interact while growing up. In this sense, the genes themselves do not determine whether a person learns a language, or which language he or she learns. But the genes are necessary—even if not sufficient—for a particular language to be learned.

However, *the fact that both heterosexuality and homosexuality are not genetically determined does not mean that genetic factors are irrelevant to their development.*

The Whiteheads describe such influences as “indirect random genetic factors” (p. 12).

Throughout the book, the authors maintain that “in any human behavior . . . any genetic influence is weak and indirect” (p. 10). Consistent with their estimate in the summary of the first edition of *My Genes*, the Whiteheads conclude that genetic factors represent no more than 10% of the total influence on sexuality and emphasize that everyone has about that amount for all kinds of behaviors.

### **Section 3. Nongenetic (epigenetic) biological factors also do not *make us* develop or act on SSA.**

#### *Epigenetic Factors*

A number of nongenetic, biological factors (such as fetal developmental disorder, instincts, pre-/postnatal hormones, sex-atypical brain structures) have been either speculated or reported as contributing to the development of SSA, but a careful review and consideration of relevant research shows such claims are unsupported and unlikely, if not implausible. Such factors generally are called *epigenetic*, meaning nongenetic (see above). Figure 5 (p. 32) shows a graphic comparison of the frequency of occurrence of SSA compared with the frequency of actual developmental (epigenetic) disorders. This comparison reveals that “the occurrence of SSA is [five times or more] higher than any [other] single occurrence of epigenetic abnormality, and hence is very unlikely to arise from some random developmental disorder before birth” (pp. 32–33). In brief, SSA occurs too frequently compared with such nongenetic, biological disorders that occur much less frequently.

#### *Hormonal Factors*

Chapter 7 (“Prenatal hormones? Stress? Immune attack?”) discusses whether homosexuality might be attributable to abnormal prenatal hormonal levels in the mother. Studies of various factors such as exposure to diethylstilbestrol, adrenogenital syndrome,

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

finger length ratios, other prenatal hormone effects, adult exposure to sex hormones, maternal stress, and the maternal immune hypothesis have shown that the evidence to support this hypothesis is weak.

*“Gay” Brains?*

In Chapter 8 (“Are brains gay?”), the Whiteheads review older as well as recent research and scientific thinking about how homo- or heterosexuality might in some manner be hardwired in the internal structures of the brain. In addition to older and recent research—which in general has failed to find consistent, innate anatomical/structural differences between male and female brains at birth and beyond (pp. 143–148)—the authors consider the studies undertaken in the nineties, including the LeVay (1991) hypothalamus study.

A consistent pattern exists: when one study claims to have found anatomical brain differences between the brains of persons *presumed* to be homosexual and heterosexual, subsequent studies have failed to replicate the findings. Also, even well-conducted studies have failed to rule out that any differences in brain structure among people who clearly practice homosexual behavior are not the result of “learning.” In other words, such differences, if they exist, could be the result—and not the cause—of homosexual behavior. This point is consistent with recent research concerning brain *neuroplasticity*—how the brain can physically change over the lifespan, and the way in which repeated new behaviors can cause predictable changes (e.g., Doidge, 2007).

*What if SSA Is an Instinct or a Reflex?*

In Chapter 4 (“How strong are instincts?”), the Whiteheads respond to the argument that homosexuality may be “like a powerful instinct” or reflex, meaning that it is so much a part of a person that it is instinctual. Those who support that argument believe that SSA behavior is so deeply rooted in the personality that it is difficult, if not impossible, to change. The Whiteheads consider this speculation in light of what is known about other instincts.

Among the “strong instincts” or “reflexes” humans have are the fight/flight response, a mother’s concern for an infant, the need to eat and sleep, yawning, sneezing, pulling a hand away from a flame, and digestion, to name just a few. As powerful as any and all of these instincts or reflexes are, none is so powerful that it cannot be “trained”—in other words, brought under some degree of conscious control.

Considering what this means for the desire to engage in heterosexual behavior, the authors write that even though the desire to reproduce is instinctual, it can be trained and brought under control. Considering homosexuality in this light, the Whiteheads point out that unlike heterosexuality, homosexuality is certainly not connected to reproduction of the human species. Yet even if SSA deserved to be called an “instinct” of any kind, “it is no less malleable than any other of the powerful instincts that man experiences, which, we have seen, are subject to a huge degree to man’s will and other environmental influences” (p. 102).

**Section 4. Environmental (family and social) factors *are* influential, but they do *not*, in and of themselves, determine SSA.** (This section reviews only what *My Genes* reports about the environmental and social factors that may influence the development of a given person’s SSA and behavior. Neil Whitehead has written two articles that address these topics at greater length, both of which are cited in the reference section of this review.)

As discussed above in Section 2, studies of identical twins reveal that postbirth environmental factors contribute to one twin being homosexual while the other is usually not. These factors include the individual’s family and social environment, as well as his or her personal psychology.

#### *Developmental Struggles*

In Chapter 3 (“Are heterosexuals ‘born that way?’”), the Whiteheads review the stages of development that result in heterosexuality and conclude that those who have a

homosexual orientation often have had struggles with different stages of psychosexual development. These stages include a lack of attachment and weak identification with the same-sex parent and lack of bonding with same-sex peers. Such developmental “breakdown(s)” lead “to needs for same-sex affection and affirmation that become eroticized” (p. 90; cf. pp. 82–85). Sexual abuse, which can cause trauma, can also play a role. The Whiteheads note that “rates of male sexual abuse are higher in homosexuals and lesbians than in heterosexuals” (p. 90; cf. pp. 85–86). While such factors are significant for *some* persons who develop SSA, the Whiteheads emphasize that *not all* persons with SSA report these experiences.

As previously mentioned, studies of identical twins in which one twin is homosexual reveal that the identical co-twin is usually *not* homosexual. Therefore, we can conclude that the predominant things that create homosexuality in one identical twin (and not in the other) have to be *postbirth* factors (p. 174; cf. Whitehead, 2011a). As the authors point out, most people indicate that multiple factors led to the development of their SSA, and that no one factor can be considered primary.

*Path analysis studies do not identify unique or individual pathways into SSA<sup>8</sup>*

In Chapter 11 (“Path Analysis: Social factors do lead to homosexuality”), the Whiteheads review studies by Bell, Weinberg, and Hammersmith (1981); Van Wyk and Geist (1984); and Bem (2000). All of those studies used the statistical tool called *path analysis* to try to identify the most common path(s) leading to SSA. Notably, the results of these path analyses—especially in the Bell et al. (1981) study—have been interpreted as failing to support social causes for SSA. The path analysis approach works by statistically minimizing or eliminating “those factors that do not apply to everyone in

---

<sup>8</sup> For a more extensive explanation and discussion of the results of the studies of homosexuality that have used path analysis, see Whitehead (2011b) elsewhere in this volume.

the sample in the simple attempt to find common factors” (p. 218). Unfortunately, this means that “unique experiences” or individualistic pathways to developing SSA are not identified in the process (p. 218).

The Whiteheads maintain that a proper interpretation of Bell et al. (1981) and other path analyses actually provides evidence that social factors do influence the development of SSA (cf. Whitehead, 2011b). The Whiteheads explain that while path analysis is not the preferred tool for studying homosexuality, it has proven useful when accurately interpreted. While it’s true that the development of homosexuality cannot be attributed to a few common causes, multiple identifiable causes have been observed in many different clients, with gender nonconformity being the predominant one. According to the Whiteheads, Bell et al. actually found that social factors are significant; however, no one social factor can be identified as the sole or primary influence in the development or practice of homosexuality. Again, this is consistent with the modern understanding of interaction theory.

In the Van Wyk and Geist (1984) study, the strongest precursors of SSA were found to be “intense sexual experiences and feelings of arousal and pleasure or discomfort associated with those experiences” (p. 219). In particular, males with SSA reported having had childhoods characterized by poor relationships with their fathers during the teenage years, more female companions at age ten, fewer male friends at ages ten and sixteen, avoidance of sports activities, and predominant sexual experiences with males. The exact opposite has been found for females with SSA (pp. 219–220).

Finally, the path analysis done by Bem (2000) also found that childhood gender nonconformity was an important factor in the later development of SSA, a finding that confirmed Bell et al.’s (1981) finding. Bem also concluded that compared to childhood gender nonconformity, “genetic influence is near zero” (p. 221).

**Section 5. Idiosyncratic responses to “chance” or “random” life experiences have the greatest influence on who does—and doesn’t—develop SSA.**

It must be acknowledged that postbirth factors include not only influences that come from a person’s family and social environment, but also the psychological and behavioral responses that he or she has in response to these influences. One goal of psychology as a science is to investigate such individual differences in response to the experiences of one’s environment. The importance of individual, unique, or idiosyncratic perceptions of and responses to common factors—for example, circumstantially similar family or social events to and with which a person interacts—are discussed in this section.

Those who accept that SSA develops primarily through *psychogenesis*—the interaction of psychological factors and processes, notably psychopathological—may find this section, if not the entire book, disappointing. While the Whiteheads do examine some of the historical issues surrounding this understanding of SSA as the result of a personal interactive process—including some of the work of current clinicians and theoreticians who have championed primarily or exclusively psychological theories of causation—the authors do not attempt to present these professionals’ views comprehensively. It is not that understanding the evidence from psychotherapeutic experience is unimportant; the authors specifically criticize the American Psychiatric Association and the American Psychological Association for ignoring these reports (see Section 10). Rather, it was simply not the intent or scope of the book to discuss them (see Section 7).

Concerning the material discussed in Section 4, the authors emphasize that what is of paramount importance in the development of SSA are the idiosyncratic cognitive and emotional reactions to particular environmental events, many of which have been identified as pathways to the development of SSA. Whether it happens within

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

or outside the family, an experience proves influential if it both catches and keeps a person's attention. The influence increases if the person also responds behaviorally to the experience and his or her response becomes a *habit* (see Section 6).

*Chance, Random, One-off Experiences*

Along with the consistent conclusion that a person's genes didn't and couldn't make him or her feel or act on SSA, the most significant idea of the Whiteheads is their repeated mention that idiosyncratic responses to chance, random, or one-off (British-English synonym for the preceding terms) events are *the* most significant factor in the development of SSA. The use of terms like *chance* and *random* warrants further explanation.

The Whiteheads define *chance* as "an individual's reaction to random life events" (p. 16). Their definition includes two assumptions. 1. Everyone in a given age group does *not* have the same objective experience or event. 2. Everyone who *does* share an objective experience does not have the same personal, idiosyncratic, subjective experience and/or will not respond to the experience in the same way. (See Section 6 for a further discussion of subjective, individualistic responses.)

As seen in Section 4, twin studies research (Chapter 10) offers good illustrations of chance or random experiences. For example, research shows that perceptions among even identical twins can be erratic even though both twins witnessed or participated in the same objective experience of their parent(s). Furthermore, individual chance events can affect one child in unique ways. For example, a child who stumbles across pornography during adolescence may react in a way that his brother does not. It is not unlikely that an initial experience of pornography or sexual arousal by another means *may* lead to repeated similar experiences and, eventually, a tenacious habit.

Though not primarily related to SSA, another example helps illustrate this. All persons of a certain age have not experienced and will not ever experience sexual abuse.

Of those who have experienced sexual abuse, some will be more distressed than others, and their distress will last for a longer time. Some, but not all, of those abused will abuse others or might develop SSA. In statistical terms, this may be called an *interaction effect*—the combination of one or more unusual, attention-getting, nonuniversal (chance, random, one-off) experiences with certain personal, internal, and external responses. The main effect—the experience of sexual abuse—alone does not determine how the person is affected by the event (having been sexually abused).

## **Section 6. Early sexual experience that becomes habituated appears to significantly influence the persistence of SSA into adulthood.**

### *Sexual Habits*

Along with the message that same-sex and opposite-sex attractions are *not* genetically determined, the Whiteheads emphasize throughout their book that patterns of sexual feelings and behaviors—heterosexual as well as homosexual—are learned habits of thinking, feeling, fantasizing, and behaving. They state, “According to Gebhard (1965) of the Kinsey Institute, unusual behaviors and preferences can often be traced back to *one-off incidents* of this nature” (i.e., “*chance incidents—random circumstances* unique to the individual that are in some way associated with sexual arousal”) (p. 79; emphasis added). As discussed in Section 3, the authors report that sexual behaviors are developed by episodes of training or habit.

It is not the random experience itself but the person’s “random reaction” to the experience that matters most. Random reaction, if it structures itself into self-image, can become a significant contributor to homosexuality, as twin studies show. The overriding outcome is a homo-emotional focus on people of the same sex that, at puberty, gets confused or melded with genital sex. This begins to find expression in sexual acts with others of the same sex that become habitual and often (particularly in males) addictive (p. 272, emphasis added).

**Section 7. SSA (or homosexual orientation) is *not* immutable. People *can* and many *have* changed, some spontaneously and others with assistance.**

Based on their review of the literature, the Whiteheads summarize: “There is nothing fixed or final about the homosexual orientation and its natural expression—homosexual behavior” (p. 10). In fact, numerous reports in the scientific literature over many decades reveal that a significant amount of orientation change occurs during the lifespan, some of it spontaneously and some of it through the medium of counseling. Many persons who once felt same-sex attractions and/or acted to gratify them have diminished or ceased doing so, and some of these have developed opposite-sex attractions and behaviors. A similar number of persons who once categorized themselves as OSA (opposite-sex attracted) develop SSA, but this number constitutes only one-seventeenth of heterosexuals (instead of half of all homosexuals). This change illustrates that homosexuality is not hard-wired in the brain nor is it the result of predetermined genetic factors.

In Chapter 12 (“Can sexual orientation change?”), the Whiteheads review the clinical and research literature on both *assisted* (professionally or pastorally aided) and *unassisted* (spontaneous) change in sexual orientation. They note that research shows that change occurs in both directions—from homosexual to heterosexual and from heterosexual to homosexual (pp. 224–231).

In answer to the question posed by the heading of Chapter 12 (“Can sexual orientation change?”), the Whiteheads summarize:

There is abundant documentation that people with SSA do move toward a heterosexual orientation, often with therapeutic assistance, but mostly without it. Some achieve great change, some less, but it is clear that sexual orientation is fluid, not fixed. (p. 259)

The Whiteheads make special mention of the fact that if we can find even one person whose sexual orientation has changed, that alone will disprove the theory that sexual orientation is immutable.

#### *Areas for Future Research*

At times, the Whiteheads mention findings or offer impressions about changes in SSA and behavior that warrant further research. For example, the authors advocate more thorough study of how those who change without assistance do so and under what conditions professional assistance is necessary or warranted. Another important area for further research is clarifying which factors are most helpful for those who do seek assistance.

### **Section 8. Science provides a basis for encouragement and hope for those who experience unwanted SSA and for those who care about and for them.**

Section 7 documents that many persons who once experienced unwanted SSA no longer do so, to various degrees. Such persons have reported—or it has been reported by others—that they have changed in satisfying ways, either through their own efforts alone or with professional or other assistance. Although the primary purpose of *My Genes* is to review what the scientific evidence does—and does not—show about what may influence the small minority of persons who do experience SSA, the Whiteheads offer more. At times, they write more as humanitarians, offering words of compassionate encouragement, hope, and challenge to those who experience SSA and their parents.

### **Section 9. It is unrealistic to expect that future research will change any of the preceding conclusions.**

Many ask the question: Is it possible for science to find some biological link to SSA that resolves its etiology once and for all? The Whiteheads answer: “No!”

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

The Whiteheads offer the current body of empirical knowledge and scientific logic as a basis for asserting that future research will *not* someday prove that people with SSA *were* “born that way” and that their genes *did* make them do it after all. The authors mention several reasons for their confidence. First, most of these scientific findings have been clearly established from facts that will not change (p. 271).

Second, the strongest reason for confidence that the conclusions in *My Genes* will not be contradicted by future research comes from the studies of identical twins. As already discussed in Sections 2 and 4, MZ twins have identical genes—but in most cases, if one is homosexual, the identical brother or sister usually isn’t. There is only an 11 to 14% chance that an identical twin is also homosexual. Involved in this are all the influences we know about now as well as those we have yet to discover. Added together, all those influences have only a rather weak effect on what leads a given person to feel and experience SSA (p. 271). We can reasonably conclude that future research will enter new fields and come up with new links, but none of them will be definitive (p. 271).

Even if scientists one day *were* to discover a gene that all persons who experience SSA have and that persons who do *not* experience SSA lack, it would not mean that such a gene *makes* those who have it feel and behave accordingly. The point of Chapter 1 (and Section 1 of this review) is that genes simply don’t work that way in human beings. In all but the most primitive living organisms, including humans, single or multiple genes may influence but do not dictate behavior. Such influence may be cooperated with or transcended. The Whiteheads offer an insightful challenge:

DNA *is* a measure of what you are . . . but depending on what you *do*, and the *choices* you make, you may end up merely letting your genes *define* you, or totally *transcending* them. The staircase upwards only *starts* at the genetic level. (p. 37, emphasis added)

While future research will undoubtedly further clarify the relationship between genetic and biological factors and the development of SSA and behaviors, it is *not* realistic to expect future research to change the truth that the feelings, thoughts, fantasies, and behaviors of SSA are not determined wholly or primarily by one's genes or biology.

**Section 10. Current professional, political, and social cultures make it difficult to research, educate about, and provide professional care for unwanted SSA.**

Along with reviewing relevant scientific research, the Whiteheads at times engage in professional and social criticism and advocacy. Along with their humanitarian comments, which are reviewed in Section 8, their attempts at social commentary and advocacy may be seen primarily in the introduction and toward the end of Chapter 12 (pp. 241–254). At the outset, they assert that for the last two to three decades, the West has been bombarded with propaganda and misinformation about SSA. This misinformation has affected everything from public institutions, such as legislatures and courts, to churches to mental health institutions.

In writing the book, the Whiteheads were both mindful that political correctness and fashion have allowed misinformation and disinformation about SSA to trump scientific accuracy and determined to clearly and responsibly state what scientists can and cannot say about these matters. They voice particular concerns about the politically—instead of scientifically—grounded positions and activities of the mental health professions about matters related to SSA (cf. pp. 5–6, 241–246).

The current gay-activist climate within the mental health professions makes the responsible conduct of research and therapy difficult. For example, mental health professionals in many jurisdictions in the West are prohibited by law from offering therapies that assist individuals in changing their sexual orientation.

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

The Whiteheads criticize particular pronouncements and other activities by both the American Psychiatric Association (2000) and the American Psychological Association (2009) (pp. 241–246). Both organizations have demanded “a level of proof” that is not required of therapies for other problems that efforts to change SSA works (p. 243).

*Why Persons with SSA May Attempt to Make It More Difficult for Others to Change*

Of particular interest are the Whiteheads’ speculations about why gay activists resist change (pp. 248–250). For example, among gay activists are those who attempt to discredit others who claim that they have changed and actually become enraged when mental health professionals claim that change is possible. The Whiteheads speculate that many may have tried alone for years to change but have failed.

Others feel that by admitting to the possibility of change, they may end up surrendering political gains made in the area of human rights. Still others may not want to give up the gratification of their sexual activities now that such activities have become mainstream. Finally, some gay activists believe that those who desire change have been pressured by others and are acting out of shame or guilt for having same-sex attractions.

The Whiteheads take issue with the hypothesis that societal attitudes have made gays and lesbians commit suicide more than heterosexuals. Research doesn’t support this notion. The authors note that Bell and Weinberg (1978) found that “gay suicide attempts, when they are directly related to homosexuality, are often over the break-up of a [SSA] relationship” (p. 257). Likewise, more current studies that have tried to establish a link between societal oppression and discrimination have failed to do so (p. 257).

### **Concluding Comments**

As a fitting conclusion to this review of the 2010 edition of *My Genes*, two important ideas from the last chapter of the book suffice. First, the Whiteheads inform us that our genes can’t and don’t make us do anything. Next, they tell us that SSA is

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

*multifactorial*—that is, the causes of SSA cannot be reduced to one or two variables. In the end, a person who develops SSA does so for a variety of reasons, none of which are determinative but all of which are influential as he or she interacts with these factors in individual—even if at times commonly shared—ways as a unique human being.

Professionals, scholars, parents, pastors, legislators, and especially those who experience SSA—or who are concerned that they do or will—will find it well worth the time to read the scientific data and reasoning that allow the Whiteheads to form their conclusions.

Finally, the reader of this review is encouraged to visit the Whiteheads' website (<http://www.mygenes.co.nz/>). In addition to a copy of their 2010 book that is available for download, additional reviews of reports of studies concerning “homosexuality and the scientific evidence” that were published after *My Genes* may also be found.

## References

- Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981). *Sexual preference: Its development in men and women*. Bloomington, IN: Indiana University Press.
- Bem, D. J. (1996). Exotic becomes erotic: A developmental theory of sexual orientation. *Psychological Review*, *103*, 320–335.
- Dictionary.com*. Retrieved September 2, 2013 from <http://dictionary.reference.com/browse/epigenetics>
- Doidge, N. (2007). *The brain that changes itself*. London: Penguin.
- Gebhard, P. H. (1965). Situational factors affecting human sexual behavior. In F. A. Beach (Ed.), *Sex and behavior*, pp. 483–495. New York: John Wiley & Sons.
- Hamer, D., Hu, S., Magnuson, V., Hu, N., & Pattatucci, A. (1993). A linkage between DNA markers on the X-chromosome and male sexual orientation. *Science*, *261*, 321–327.
- LeVay, S. (1991). A difference in hypothalamus structure between heterosexual and homosexual men. *Science*, *253*, 1034–1037.
- LeVay, S. (2011). *Gay, straight, and the reason why: The science of sexual orientation*. New York: Oxford University Press.
- LeVay, S., & Baldwin, J. I. (2008). *Human sexuality* (3rd ed.). Sunderland, MA: Sinauer Associates.
- Magnusson, D. (1985). Implications of an interactional paradigm for research on human development. *International Journal of Behavioral Development*, *8*(2), 115–137.
- Van Wyk, P. H., & Geist, C. S. (1984). Psychosocial development of heterosexual, bisexual and homosexual behavior. *Archives of Sexual Behavior*, *13*(6), 505–544.
- Whitehead, B. (2003). *Craving for love: Relationship addiction, homosexuality, and the God who heals*. London: Monarch Books.

*What Did Make Me Do It? A Review and Summary of My Genes Made Me Do It!*

Whitehead, N. (2011a). Neither genes nor choice: Same-sex attraction is mostly a unique reaction to environmental factors. *Journal of Human Sexuality*, 3, 81–114.

Download at <http://www.scribd.com/doc/115507954/Journal-of-Human-Sexuality-Vol-3>.

Whitehead, N. (2011b). Sociological studies show social factors produce adult SSA.

*Journal of Human Sexuality*, 3, 115–136. Download at <http://www.scribd.com/doc/115507954/Journal-of-Human-Sexuality-Vol-3>

Whitehead, N., & Whitehead, B. (1999). *My genes made me do it!: A scientific look at sexual orientation*. Lafayette, LA: Huntington House.

Whitehead, N., & Whitehead, B. (2010). *My genes made me do it: Homosexuality and the scientific evidence*. Lower Hutt, New Zealand: Whitehead Associates. Download at <http://www.mygenes.co.nz/MGMMDIInfo.htm>

**California Senate Bill 1172: A Scientific and Legislative Travesty—  
A Look at the Bill's Misuse of Science<sup>9</sup>**

**May 7, 2012**

Christopher H. Rosik, PhD

---

<sup>9</sup> Editor's note: This document was a response to an early version of SB 1172 that included language prohibiting mental health professionals from engaging in SOCE with adults as well as minors.

*California Senate Bill 1172: A Scientific and Legislative Travesty*

California Senate Bill 1172 is a first-of-its-kind legislative effort to usurp the role of professional mental health associations and ban change-oriented psychological care to minors. This legislation assumes that sexual-orientation change efforts (SOCE) constitute a form of family rejection that will likely result in harm.

In reality, however, there is virtually no evidence to support this claim. In fact, the SOCE literature reporting harm among youth is extremely scarce and conducted only with nonrepresentative samples. A single study was used by the bill's supporters to support their claim—and it is remarkable that the authors of SB 1172 could even conceive that this particular study had any relevance to their legislative aims.

Furthermore, National Association for Research and Therapy of Homosexuality (NARTH) clinicians have long advocated that parents with traditional values need not “reject” their child. Parents can be encouraged to love and accept their children, even when they disapprove of their child's sexual lifestyle choices.

Secondarily, SB 1172 will also dictate the content of consent forms in SOCE therapy with adults and will create the threat of legal action against therapists. Despite the existence of a substantial body of research evidence that some clients can change, and the lack of any research showing that harm is likely, clinicians will be required to tell their clients that the therapy they offer has no scientific validity and often results in harm.

While NARTH opposes this bill on many counts (see <http://narth.com/2012/04/narth-statement-on-california-sb-1172-sexual-orientation-change-efforts/>), this legislation is particularly worrisome in its use of scientific research. The bill cites only one study to support its claims—a study that is presumably the most scientifically important research from the perspective of the sponsors of the bill (a group called “California Equity”). The use of a single study as justification to create new civil law can serve to clarify how activist agendas and politicians who are ignorant of research methods can work together to distort science and dictate a particular partisan outcome.

In the case of SB 1172, the specific aspect of the bill suited for this analysis regards the effects of SOCE on minors.

### **Claims of SB 1172**

In Section 1, following a laundry list of quotes from professional organizations handpicked to directly or indirectly discourage SOCE, the bill states in item (i):

Minors who experience family rejection based on their sexual orientation face especially serious health risks. In one study, lesbian, gay, and bisexual young adults who reported high levels of family rejection during adolescence were 8.4 times more likely to report having attempted suicide, 5.9 times more likely to report high levels of depression, 3.4 times more likely to use illegal drugs, and 3.4 times more likely to report having engaged in unprotected sexual intercourse compared with peers from families that reported no or low levels of family rejection. This is documented by Caitlin Ryan, et al., in their article entitled Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults (2009), 123, *Pediatrics*, 346.

This is followed by item (j):

California has a compelling interest in protecting the lives and health of lesbian, gay, and bisexual people.

NARTH is clearly on record in its *Practice Guidelines* (<http://narth.com/2011/12/narth-practice-guidelines/>) as being very concerned that minors who engage in SOCE and

the parents who bring them to treatment are provided with a high level of professional care. Such care extensively evaluates the clinical and motivational context of all parties to minimize any risk of harm.

In my own clinical work, I have told several parents upon initial evaluation that their teenage child was not invested in change at that time, and therefore their best path forward was to love their child and keep the lines of communication as open as possible. Yet SB 1172 appears to be engaging in a guilt-by-association argument, whereby SOCE with minors is *by definition a marker of family rejection* that endangers the lives and well-being of these youth.

The rhetoric coming from the office of Senator Ted W. Lieu, who introduced this bill, certainly seems to confirm this assertion (see <http://sd28.senate.ca.gov/news/2012-04-23-senate-panel-cracks-down-deceptive-sexual-orientation-conversion-%E2%80%98therapies>). It asserts, among other things, that:

- “[SOCE] . . . has resulted in much harm, including a number of lesbian, gay, bisexual and transgender youth committing suicide.”
- “Some individuals perceived that they had benefited from sexual orientation change therapy, but the *vast majority* of participants perceived that they had been harmed.”
- “Sexual orientation change therapies . . . are the types of sham therapies that California law does not protect against for minors.”
- “These bogus [SOCE] efforts have led in some cases to patients later committing suicide, as well as severe mental and physical anguish. This is junk science and it must stop.”

These quotes, not to mention the greater content of the bill, make it painfully obvious that the sponsors of this legislation believe that licensed clinicians who engage

in SOCE are placing significant numbers of their minor clients in serious physical and psychological danger.

To bolster their case with research, the sponsors cite a study by Ryan, Huebner, Diaz, and Sanchez (2009) in the respected journal *Pediatrics* that provides the genuinely sobering statistics noted above. But does this study really support the bill's implication that SOCE constitutes a form of family rejection that results in increased risk of negative health outcomes for minors? To answer this question, it's imperative to take a closer look at the actual research.

### **Methodological Analysis of Ryan et al. (2009)**

In order to provide a certain degree of objectivity to this analysis, I will refer to the standards for conducting research outlined in the *Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation* (2009). Keep in mind that these are the standards that the APA used in its report to justify the nearly complete dismissal of the vast body of research literature supporting the effectiveness of SOCE. Thus, it is appropriate and highly relevant to examine the Ryan et al. (2009) study through the APA's own analytical lens, since in this instance research is being cited not to support, but rather to ban, SOCE.

*Sampling issues.* The Ryan et al. (2009) study described its sample procedure as one of "participatory research" whereby the researchers "advised at all stages . . . the population of interest (LGB adolescents, young adults, and family members), as well as health care providers, teachers, and advocates" (p. 347). However, as the APA report (2009) noted, "Knowing that one is being studied and what the experimenter hopes to find can heighten people's tendencies to self-report in socially desirable ways and in ways that please the experimenter" (p. 32).

This same standard of avoiding potential demand characteristics was clearly violated in the Ryan et al. (2009) study, where "providers, youth, and family members

met regularly with the research team to provide guidance on all aspects of the research, including methods, recruitment, instrumentation, analysis, coding, materials development, and dissemination and application of findings” (p. 347).

*Recruitment issues.* Ryan et al. (2009) described their procedure for recruitment of participants as follows:

Participants were recruited conveniently from 249 LGB venues within 100 miles from our office. Half of the sites were community and social organizations that serve LGB young adults, and half were from clubs and bars serving this group. Bilingual recruiters conducted venue-based recruitment from bars and clubs and contacted each agency to access all young adults who use their services. (p. 347)

A main methodological critique of the SOCE literature offered by the APA report (2009) concerned the limitations of convenience sampling. The task force that authored the report (2009) warned that “additionally, study respondents are often invited to participate in these studies by [therapists] who are proponents of SOCE, introducing unknown selection biases into the recruitment process” (p. 34). Furthermore, the APA observed that since “study recruiters were open proponents of the techniques under scrutiny, it cannot be assumed that the recruiters sought to encourage the participation of those individuals whose experiences ran counter to their own view of the value of these approaches” (p. 34).

Although the Ryan et al. (2009) study had an admittedly different focus than the APA report (family rejection of LGB young adults versus outcomes of SOCE), the APA’s warnings are relevant here: selection bias in recruitment is certainly a plausible risk. While it no doubt appears probable that LGB youth face higher risks of family rejection that can contribute to negative health consequences, Ryan et. al.’s recruitment methods make their findings unreliable for generalization to LGB youth as a whole and provide

no scientifically relevant information for assessing perceptions of family rejection among SOCE minor clients. In fact, SOCE-related family rejection experiences were not even assessed in Ryan et al.'s study.

Generalization difficulties are also created by the sample composition of Ryan et al. (2009). The sample is limited to young adult non-Latino and Latino LGB persons. The APA report (2009) noted that research on SOCE has “limited applicability to non-Whites, youth, or women” (p. 33), further stating, “No investigations are of children and adolescents exclusively, although adolescents are included in a very few samples” (p. 33). This means that even had Ryan and colleagues assessed for SOCE backgrounds among participants, it would be inappropriate to generalize their findings in a manner that would cast aspersions on all SOCE experiences of minors—which, again, is precisely what SB 1172 is determined to do.

The SOCE literature pertaining to harm among youth is extremely scarce and is conducted only with nonrepresentative samples. I am unaware of any studies assessing specifically for family rejection among SOCE with minors. This may be why the authors of SB 1172 had to set aside all pretensions of scientific restraint in their citation of Ryan et al. (2009).

*Measurement issues.* Finally, the inapplicability of Ryan et al. (2009) as demonstrable support for SB 1172 can be questioned on measurement grounds as well. The APA task force (2009) severely critiqued the SOCE research on measurement grounds, observing that “overreliance on self-report measures and/or measures of unknown validity and reliability is common” (p. 31). Even more to the point, “people find it difficult to recall and report accurately on feelings, behaviors, and occurrences from long ago, and with the passage of time, will often distort the frequency, intensity, and salience of things they are asked to recall” (p. 29).

It appears that these cautions could equally apply to the Ryan et al. (2009) study, since participants averaged just under twenty-three years of age—in other words,

they were recalling experiences that occurred on average three to ten years earlier. Furthermore, psychometric information on reliability and validity was not provided by Ryan et al. for some of the measures they developed (for example, substance use and abuse and sexually risky behavior).

In addition, Ryan et al. (2009) acknowledge that “given the cross-sectional nature of this study, we caution against making cause-effect interpretations from these findings” (p. 351). Presumably, this caution alone should have been enough to prevent the authors of SB 1172 from employing the Ryan study. Even had the study findings been generalizable, they would have not been able to indicate whether SOCE caused the negative health outcomes or if youth with negative health markers disproportionately sought SOCE.

Other problematic aspects of Ryan et al.’s (2009) construct development include the dangers of losing important interpretive information by dichotomizing continuous variables, the limitations of using perceptions of family rejection (such as being blamed by a parent) versus objectively verifiable variables (such as registration at a homeless shelter), and the lack of a measure of impression management.

The question is not why the designers of SB 1172 failed to report such limitations of the Ryan study. Rather, it is how the authors could even conceive that this research had relevance to their legislative aims.

### **SB 1172: A Legislative Solution in Search of a Clinical Problem**

This analysis of the science behind SB 1172’s intention to ban SOCE to minors should in no way be construed to imply that psychological injury does not occur from family rejection for some GLB youth. NARTH clinicians share a concern for the welfare of GLB youth and therefore take great care to determine if coercive influences are implicated when minors present for SOCE. While some opponents no doubt view SOCE with minors *by definition* as reflecting family rejection, there is no data to back up this

claim, and the experience of NARTH professionals is that parents can be assisted to love and accept their child without having to sacrifice their traditional values regarding sexual expression.

My intent in this brief investigation of the Ryan et al. (2009) study through the lens of the methodological standards of the APA report (2009) is simply to demonstrate how science appears to have been hijacked in the service of concocting an authoritative-sounding link between SOCE, family rejection, and negative health outcomes.

Based on this analysis, there appears to be no scientific grounds for referencing the Ryan et al. (2009) study as justification for a ban on SOCE to minors. The study's findings, while likely reflecting some underlying connection between family rejection and mental health outcomes, are not reliable and have no scientific justification for being generalized to minors who engage in SOCE with licensed therapists. It is troubling that SB 1172 would utilize Ryan et al.'s work when the internal and external validity limitations of the study make such claims profoundly misguided, as underscored by the APA task force that authored the report (2009). SB 1172 therefore supports its attempt to ban SOCE for minors with a study that cannot be generalized. Additionally, its authors cherry-picked citations from several mental health associations, *none of which* have banned SOCE with minors.

By way of conclusion, it needs to be pointed out that an unmistakable implication of SB 1172 is that the California licensing agencies and mental health associations are so derelict in their protection of GLB youth that politicians must step in and do their work for them. How else should we understand the complete absence of licensure revocations or membership suspensions among California therapists who provide SOCE when suicides and severe mental and physical anguish are so presumably widespread among GLB youth and attributable to this form of psychological care? Either these agencies and professional associations are incredibly negligent and inept, or SB 1172 is an ideological agenda masquerading as a legislative solution to a clinical problem that

*California Senate Bill 1172: A Scientific and Legislative Travesty*

simply does not exist. Citing research that cannot be generalized and making professional pronouncements in the absence of censorious actions against SOCE professionals cannot, by any reasonable measure, provide sufficient justification for the ban on SOCE with minors that SB 1172 sponsors seek.

## **References**

- American Psychological Association (2009). *Report of the APA task force on appropriate therapeutic response to sexual orientation*. Retrieved from <http://www.apa.org/pi/lgbt/resources/therapeutic-response.pdf>
- Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, *123*, 346–352.

**Fact-Checking California Senate Bill 1172<sup>1</sup>—  
Serious Inaccuracies and Distortions Abound:  
Are Politicians Willing to Listen?**

**May 18, 2012**

Christopher H. Rosik, PhD

## *Fact-Checking California Senate Bill 1172*

The same week California governor Jerry Brown announced that the state was now \$16 billion over budget, with the implication that more social-welfare cutbacks affecting thousands of children would be necessary, SB 1172 was passed by the California Senate Judiciary Committee. It will now enter deliberation by the full California Senate with a stated purpose to protect an unknown number of minors and others from the “dangers” of sexual orientation change efforts (SOCE).

Even the *L.A. Times*, not known to be a voice of conservatism, has come out against this legislation, saying it constitutes unnecessary government intrusion into what should be mental health association policy matters. (On matters of science, however, the *Times* naively accepted the picture spun by the sponsors of SB 1172; see <http://articles.latimes.com/2012/may/11/opinion/la-ed-0511-therapy-2012051>).

But will this legislation really do much to protect minors and adults who might otherwise avail themselves of SOCE? When we examine some of the contentions SB 1172 touts as “facts,” greater clarity can be obtained regarding the partisan nature of this bill.

**SB 1172:** States that SOCE practitioners use aversive treatments such as electric shock or nausea-inducing drugs.

**Fact:** Aversive treatments were common for a wide variety of psychological conditions in the 1960s and 1970s, including sexual orientation (see <http://narth.com/2011/05/facts-and-myths-on-early-aversion-techniques-in-the-treatment-of-unwanted-homosexual-attractions/>). However, aversive treatments were eventually determined to be ineffective in addressing sexual orientation and have not been utilized for decades. In fact, in a quick analysis of the psychological and medical databases, I could find no published new research on aversive treatments and homosexuality after 1981. Similarly, the APA’s (2009) *Task Force Report on Appropriate Therapeutic Responses to Sexual Orientation* did not identify any such studies after 1981. Even the bill’s authors had to

rely on a 1994 report from the American Medical Association, a nearly twenty-year-old document.

The linking of SOCE practitioners with aversive and shock treatments is a favorite smear tactic of SOCE opponents, but it has not had any basis in fact for more than thirty years. Moreover, NARTH is on record as *not* recommending these practices due to ethical and efficacy concerns (NARTH, 2010). The fact that this inaccuracy is highlighted so prominently in SB 1172 certainly lends credence to the suspicion that the primary aim of the bill's sponsors is to demonize SOCE and the clinicians who engage in this practice.

**SB 1172:** Claims that SOCE can be harmful or carry some risk of harm and that this is something SOCE practitioners deny.

**Fact:** SOCE, as is the case with all forms of psychological care, carries some risk of harm. No professional therapist engaged in SOCE would deny this. The question is whether SOCE carries an exceptionally greater risk than all other forms of psychological intervention—and the answer is that no studies exist that can truly speak to this issue. The studies cited by the APA task force (2009) concerning harm are unable to be generalized beyond their specific samples, and the task force report concluded, “Thus, we cannot conclude how likely it is that harm will occur from SOCE” (p. 42). For the sponsors of SB 1172 to use this literature as a means of casting aspersions on all SOCE is an act of scientific dishonesty.

The most popularly cited study regarding harm from SOCE (Shidlo & Schroeder, 2002) *specifically warns* readers about generalizing from their research, which did not distinguish licensed professionals and religiously based providers of SOCE in their reports of harm. Furthermore, the authors of the study advertised for respondents with this notice: “Help Us Document the Harm.” To be able to know the exact prevalence

of harm in SOCE and the significance of this prevalence rate, we would need to see prospective, longitudinal studies using representative samples, *not* personal anecdotes or samples that were advertised as being sought to “help” the researchers achieve a desired outcome. Such studies would need to track harm in other forms of psychological intervention (such as marital therapy) for interpretive comparison. The fact that an intervention might be harmful in the absence of any scientific data that speak to the prevalence and significance of this harm is not a sufficient justification for banning or marginalizing an intervention. An ideologically based political activism rather than an objective scientific outlook appears to again be lurking in the background of SB 1172.

**SB 1172:** Claims that the bill will protect minors from the potential, harmful effects associated with SOCE, including severe mental or emotional problems such as suicide.

**Fact:** Notwithstanding the considerations regarding claims of harm noted above, there is reason to believe that *this bill* will likely *increase* harm to minors through its unintended consequences.

Here’s how I come to this very plausible conclusion. It would appear quite likely that the majority of parents who bring their children to therapists for SOCE are conservatively religious. SB 1172 sponsors assume that if SOCE is prohibited among licensed mental health professionals, these parents would then bring their children to clinicians who would provide only that care aimed at encouraging their children to embrace their GLB identity and behavior.

I think the more likely scenario is that these parents, many of whom are already suspicious of the mental health professions, will simply pursue SOCE for their children from unlicensed, unregulated, and unaccountable religious counselors who do not fall under the jurisdiction of this bill. The vast majority of anecdotal accounts of harm to minors from SOCE seem attributable to these types of counselors and to religiously

oriented programs. Parents who receive professional care by SOCE clinicians whom they sense are understanding of and sympathetic to their worldview will be receptive to their guidance, especially when their child is not interested in SOCE. It is highly unlikely that the average unlicensed conservatively religious counselor will be as sensitive to the contextual and motivational considerations licensed therapists must assess when determining if change-oriented intervention is appropriate for a minor client. This is a prescription for an increased risk of harm. It would indeed be a tragic but foreseeable irony if the sponsor's zeal to ban SOCE for minors via SB 1172 ends up actually increasing the harm these youth experience.

SB 1172 makes it clear that SOCE includes “psychotherapy aimed at altering the sexual or romantic desires, attractions, or *conduct* of a person toward people of the same sex so that the desire, attraction, or *conduct* is eliminated or *reduced* or might instead be directed toward people of a different sex” (Article 15. 865 [d]; emphases added). This language seems to imply that psychotherapeutic intervention to reduce same-sex behaviors among minors is to be prohibited. It is worth asking whether such broad language will have a chilling effect on even non-SOCE therapists who are asked to help minors reduce or manage their addictive or compulsive same-sex behaviors. It seems quite conceivable that a minor at some later point could feel retrospectively slighted by this treatment and therefore be enticed by SB 1172 to file legal action against the therapist to the tune of up to \$5,000.

So again, another unintended consequence of this bill could be to reduce the pool of non-SOCE therapists willing to wade into the incredibly murky clinical waters that SB 1172 would create, thus increasing harm by reducing the availability of any psychological services to LGB youth in California.

One last observation that can provide further perspective: One wonders what the sponsors of SB 1172 would say about a widespread intervention for minors that carries the following warning: “[*This intervention*] increased the risk of suicidal thinking and

*behavior (suicidality) in short-term studies in children, adolescents, and young adults with major depressive disorder (MDD) and other psychiatric disorders.”* This is, in fact, the warning for the antidepressant Prozac. You can check out the potential side effects for other medications at [www.pdf.net](http://www.pdf.net). It seems to me that if we are going to begin to ban certain types of psychological interventions on the basis of real (as opposed to uncertain) harms to minors, the sponsors of SB 1172 should be spending a lot more time focusing on the millions of youth (including GLB youth) currently being prescribed these powerful psychoactive medications (I say this as a therapist who thinks medications can have a place in treatment but are currently being overprescribed).

**SB 1172:** Defines informed consent for adult clients as having to include four statements from mental health organizations about SOCE.

**Fact:** The statements used in SB 1172 are actual pronouncements, but the lack of context is clearly meant to depict SOCE in deceptively unflattering terms. The degree to which these four statements have been cherry-picked to provide an unduly negative picture of SOCE can be seen in their publication dates. Three of the four were published between 1993 and 1997, which makes me wonder if these associations have in nearly twenty years said nothing that the sponsors of SB 1172 found sufficient for their purposes. Only the APA's (2009) task force report was recent in origin. Unfortunately, the task force consisted only of psychologists who were against SOCE from the start and excluded several excellent scholars sympathetic to SOCE (Jones, Rosik, Williams, & Byrd, 2010).

This fact raises the curtain on the sociopolitical culture within the major professional mental health associations. While they do good work on many fronts, when it comes to social issues being debated in the culture, the APA and other associations are reliably left of center in their outlook. One example suffices: In 2011, the APA council of representatives voted **157-0** to support gay marriage. This is not a typographical

error. *Not a single vote* in favor of the keeping the male-female definition as the social ideal. This is a statistically impossible lack of diversity. Whatever one believes about this issue, it stretches incredulity to contend that such a vote does not reflect a mix of political activism and political correctness. In a similar fashion, I believe that many of the pronouncements concerning SOCE cited in SB 1172 represent what occurs in professional mental health organizations when science is allowed to stagnate in the absence of support for viewpoint diversity.

Former APA president Dr. Nicholas Cummings observed that while unsuccessful attempts have been made in the APA to ban SOCE, the APA refused to take a stand on “rebirthing therapy,” which resulted in the suffocation death of one child when the birth process was simulated with tight blankets (Cummings, 2008). Cummings then concluded, “If the APA rushes to judgment in the matter of sexual reorientation therapy while remaining derelict in its silence toward proven harmful techniques, therapists will be intimidated and patients will lose their right to choose their own treatment objectives. The APA, not the consumer, will become the de facto determiner of therapeutic goals” (p. 208). This sentiment is equally valid for SB 1172—only in this case California politicians, not the California consumer, will dictate which goals for psychological care are acceptable.

**SB 1172:** Says that SOCE assumes that homosexual orientation is both pathological and freely chosen.

**Fact:** SB 1172 provides no documentation to support this claim. In fact, NARTH represents many professional SOCE providers and is on the record as taking the position that same-sex attractions are usually *not* something people choose in some volitional manner (NARTH, 2010). Though historically many SOCE providers (not to mention most mental health professionals in general) viewed homosexuality as psychopathological, this

is typically not the case today. NARTH's position is rather that same-sex attractions and behavior may reflect a developmental adaptation to certain biological and/or psychosocial environments, possibly in conjunction with a weak and indirect genetic predisposition. And while this adaptation may not constitute psychopathology per se, it does appear to place these individuals at greater risk for mental illness and physical disease, not all of which is likely to be attributable to social stigmatization.

In conclusion, this quick tour through some of the factual claims made by the sponsors of SB 1172 makes it clear that this legislation is playing fast and loose with its assertions about SOCE. It would be a travesty of immense proportions if the California legislature allows these falsehoods and inaccuracies to be enshrined into California law. It would also constitute a corruption of the political process by activists who would certainly invite a legal challenge.

## References

- American Psychological Association. (2009). *Report of the APA task force on appropriate therapeutic response to sexual orientation*. Retrieved from <http://www.apa.org/pi/lgbt/resources/therapeutic-response.pdf>
- Cummings, N. A., & Donohue, W. T. (2008). *Eleven blunders that cripple psychotherapy in America: A remedial unblundering*. New York: Taylor & Francis Group.
- Jones, S. L., Rosik, Christopher H., Williams, R. N., & Byrd, A. D. (2010). A scientific, conceptual, and ethical critique of the Report of the APA Task Force on Sexual Orientation. *The General Psychologist*, 45(2), 7–18. Retrieved May 31, 2011, from <http://www.apa.org/divisions/div1/news/fall2010/Fall%202010%20TGP.pdf>
- NARTH Task Force on Practice Guidelines for the Treatment of Unwanted Same-Sex Attractions and Behavior. (2010). Practice guidelines for the treatment of unwanted same-sex attractions and behavior. *Journal of Human Sexuality*, 2, 5–65. Retrieved from <http://narth.com/2011/03/practice-guidelines-for-the-treatment-of-unwanted-same-sex-attractions-and-behaviors/>
- Shidlo, A., & Schroeder, M. (2002). Changing sexual orientation: A consumer's report. *Professional Psychology: Research and Practice*, 33(3), 249–259.

**The (Complete) Lack of a Scientific Basis for Banning Sexual-Orientation Change Efforts (SOCE) with Minors<sup>10</sup>**

**Claims by Sen. Lieu and SB 1172 of Widespread Harm to Minors from SOCE Represent Rhetoric, Not Research**

**August 15, 2012**

Christopher H. Rosik, PhD

*“The attack on parental rights is exactly the whole point of the bill because we don’t want to let parents harm their children,” he said. “For example, the government will not allow parents to let their kids smoke cigarettes. We also won’t have parents let their children consume alcohol at a bar or restaurant.”*

—California State senator Ted Lieu, as quoted by the *Orange County Register*,  
August 2, 2012

---

<sup>10</sup> Editor’s note: This document was a response to the final version of SB 1172, which no longer included language prohibiting mental health professionals from engaging in SOCE with adults.

## **Introduction**

Sponsored by California State senator Ted W. Lieu (D-Torrance), California Senate Bill 1172, which will prohibit mental health professionals from engaging in sexual orientation change efforts (SOCE) with minors under any conditions, appears on its way to the desk of Governor Jerry Brown and could very well become state law. The most important revision to the bill reads as follows:

865.2—Any sexual orientation change efforts attempted on a patient under 18 years of age by a mental health provider shall be considered unprofessional conduct and shall subject a mental health provider to discipline by the licensing entity for that mental health provider.

As is plainly evident, should SB 1172 become law, licensed therapists in California who would otherwise be willing to assist minor clients in modifying their unwanted same-sex attractions and behaviors will be seriously jeopardizing their professional livelihoods. In defense of this bill's clear intent to intimidate therapists and supplant the rights of parents, Sen. Lieu has publicly compared the harm of SOCE to minors with the harm of alcohol and cigarettes. This comparison certainly sounds like a compelling analogy and clearly implies there is a conclusive body of scientific evidence behind the legislation.

But like so many claims of SB 1172 supporters, this analogy seems to have been accepted at face value without the appropriate scientific research to support it. Since Sen. Lieu's claim can be subjected to empirical verification by searching relevant databases, I decided to conduct such a search. Assuming the scientific basis for banning SOCE with minors is similar to that of banning cigarettes and alcohol, we should expect that the number of articles in the scientific literature for each of these health concerns would be roughly equivalent.

## **Procedure and Results**

To test this hypothesis, I conducted a search of the PsycARTICLES and MEDLINE databases. PsycARTICLES is a definitive source of full-text, peer-reviewed, scholarly and scientific articles in psychology, including articles appearing in the nearly 80 journals published by the American Psychological Association. MEDLINE provides authoritative medical information on medicine, nursing, and other related fields and covers articles published in more than 1,470 journals. I searched all abstracts from these databases using combinations of key words best suited to identify studies related to the question of interest.

Below are the totals for articles on cigarettes and alcohol. Words preceding an asterisk indicate that the search included all words with that stem, so that a search for *minor\** would include both *minor* and *minors*.

<u>Key Words</u>	<u>Total Articles</u>	<u>Earliest Article</u>
Children & Alcohol	4465	1917
Children & Cigarettes	883	1970
Adolescent* & Alcohol	6180	1917
Adolescent* & Cigarettes	1252	1971
Minor* & Alcohol	2670	1944
Minor* & Cigarettes	356	1973

As is clear from these totals, the literature regarding alcohol and cigarettes as related to youth is extensive, with studies numbering in the thousands. With such a sizeable database, one could reasonably expect that observations relative to the harms of cigarettes and alcohol among youth reflect reliable scientific information that has been replicated in numerous ways. These results, then, form the standard by which we can evaluate the volume of scientific literature from which any claims about SOCE and youth are based.

*The (Complete) Lack of a Scientific Basis for Banning SOCE with Minors*

Since *SOCE* is a relatively new term in the literature, I also conducted searches utilizing the terms *reparative therapy*, *conversion therapy*, and *sexual reorientation therapy*, terms that were in use long before *SOCE* was coined. My extensive search of the databases to identify scientific literature supportive of Sen. Lieu's comparison yielded the following findings:

<u>Key Words</u>	<u>Total Articles</u>	<u>Earliest Article</u>
<i>Children &amp; Sexual Orientation</i>		
Change Efforts	0	—
Children & Reparative Therapy	0	—
Children & Conversion Therapy	0	—
Children & Sexual Reorientation Therapy	0	—
<i>Adolescent* &amp; Sexual Orientation</i>		
Change Efforts	0	—
Adolescent* & Reparative Therapy	1	2010
Adolescent* & Conversion Therapy	0	—
Adolescent* & Sexual Reorientation Therapy	0	—
<i>Minor* &amp; Sexual Orientation</i>		
Change Efforts	0	—
Minor* & Reparative Therapy	0	—
Minor* & Conversion Therapy	0	—
Minor* & Sexual Reorientation Therapy	0	—
Sexual Orientation Change Efforts & Harm	0	—
Reparative Therapy & Harm	1	2010
Conversion Therapy & Harm	1	2002
Sexual Reorientation Therapy & Harm	0	—
Homosexual* & Psychotherapy & Harm	1	1977

*The (Complete) Lack of a Scientific Basis for Banning SOCE with Minors*

Gay & Psychotherapy & Harm	1	1996
Lesbian & Psychotherapy & Harm	0	—
Bisexual & Psychotherapy & Harm	0	—

In stark contrast to the thousands of articles related to alcohol and cigarette usage by youth, my search of the scientific literature for references that would back up Sen. Lieu's claims yielded a total of four articles. Interestingly, three of these articles were not research-oriented. Hein and Matthews (2010) discussed the potential harms of reparative therapy for adolescents but cited no direct research on SOCE with adolescents to support their concerns. They relied instead primarily on adult anecdotal accounts and did not distinguish between the provision of SOCE by licensed clinicians and unlicensed religious practitioners.

Jones (1996) described a case of self-harm by a young gay man in response to "profound" and "thematic" relationship difficulties. The author reported that psychodynamic therapy was beneficial in helping the patient deal with relational conflict without making any mention of internalized homophobia or stigmatization.

Hochberg (1977) discussed her treatment of a suicidal adolescent male who finally disclosed his homosexual experience as termination neared. After this disclosure, Hochberg reported, "Therapy subsequently exposed long-standing inhibitions in masculine assertiveness, longing for a love object that would increase his masculinity, (and allay his homosexual anxiety) and intense fear of physical harm" (p. 428). This article, then, would in some respects appear to provide anecdotal support *for* SOCE, not surprisingly coming in an era before reports of harm gained favored status over reports of benefit within the psychological disciplines.

The only article my database search identified that could be considered quantitative research was Shidlo and Schroeder's (2002) well-known study on reported harms from SOCE. The Shidlo and Schroeder study suffered from many methodological

limitations, including recruiting specifically for participants who had felt harmed by their SOCE, obtaining recollections of harm that occurred decades prior to the study, and failing to distinguish between SOCE provided by licensed mental health professionals and unlicensed religious counselors. As the authors correctly acknowledged, the findings of this study cannot be generalized beyond their specific sample of consumers. This research can therefore tell us nothing about the prevalence of harm from SOCE provided by licensed therapists.

## **Discussion**

In an effort to corroborate the scientific accuracy of Sen. Lieu's comparison between the harm to minors of cigarettes, alcohol, and SOCE, I conducted a search of one major medical database and one main mental health database associated with the American Psychological Association. Results from this analysis revealed that the literature related to youth and cigarettes or youth and alcohol numbered in the thousands, while studies relating directly to SOCE and minors appeared to be nonexistent. While the utilization of different sets of related key words might yield slightly different totals with additional database searches, it seems highly unlikely the results would differ substantively. Consequently, I have to conclude from this investigation that Sen. Lieu's comparison lacks scientific merit, and that SB 1172's prohibition of SOCE on the basis of harm to minors lacks a clear scientific justification.

Some additional observations from this investigation seem worth noting. First, the case against SOCE with minors is typically based on four sets of data: anecdotal accounts of harm (mostly from adults), a very few quantitative studies (compilations of anecdotal accounts from adults with severe methodological limitations), inferences from other research domains of questionable relatedness to SOCE (such as harm from family rejection of gay youth), and citations of the pronouncements on SOCE from professional mental health and medical associations. These various sources tend to cite one another

*The (Complete) Lack of a Scientific Basis for Banning SOCE with Minors*

in an almost symbiotic manner that provides little if any new information relevant to answering important questions about SOCE.

It seems the science pertaining to SOCE is stuck in neutral, and the professional associations and critics of SOCE do not appear interested in doing any cooperative research with proponents of SOCE that might actually move our understanding forward. With SOCE on the defensive, those in government and public university settings in a position to make large-scale scientific contributions to this literature appear content to speak out of both sides of their mouths. On the one hand, they demand rigorous empirical support for SOCE; on the other hand, they display no interest in facilitating bipartisan research that could potentially address their demands. One could make the case that this is hardly a shining moment in the history of social scientific integrity.

Additionally, the lack of a clear and direct grounding in the scientific literature for the claims of harm to youth from SOCE lend credence to the suspicion that political rather than scientific motivations are the driving force behind SB 1172. Reasonable clinicians and mental health association representatives should agree that anecdotal accounts of harm constitute no basis upon which to prohibit a form of psychological care. If this were not the case, the practice of any form of psychotherapy could place the practitioner at risk of regulatory discipline, as research indicates that 5 to 10% of all psychotherapy clients report deterioration and as many as 50% experience no reliable change during treatment (Hansen, Lambert, & Forman, 2002; Lambert & Ogles, 2004).

What may be at play among supporters of SB 1172 is a dislike for how many SOCE therapists view same-sex attractions—as a developmental adaptation. It would certainly be a new and sobering development if approaches to psychological care can now be prohibited on the basis of disputed aspects of its theory rather than on a scientifically established prevalence of harm that significantly exceeds those of other therapeutic approaches.

*The (Complete) Lack of a Scientific Basis for Banning SOCE with Minors*

Without a basis in the scientific literature, the claims by Sen. Lieu and SB 1172 of widespread harm to minors from SOCE represent rhetoric, not research. My database search suggests this is a superfluous piece of legislation from the perspective of harm. Any harm that might occur from the unprofessional practice of SOCE by licensed therapists can and should be handled within the existing regulatory structures on a case-by-case basis. But rather than take such a rational approach, SB 1172 supporters have politicized the issues in the form of this legislative overreach (*Los Angeles Times*, May 11, 2012), declaring SOCE with minors *ipso facto* unprofessional conduct. They have thrown their anti-SOCE wish list against the proverbial wall in order to see what politicians and mental health associations would let stick. Sadly, the blanket prohibition of SOCE with minors appears to be sticking and may become law in California. If this occurs, the present analysis indicates it will be in the absence of scientific literature and not because of it.

## References

- Hansen, N. B., Lambert, M. J., & Forman, E. M. (2002). The psychotherapy dose-response effect and its implications for treatment delivery services. *Clinical Psychology: Science and Practice, 9*, 329–343. doi:10.1093/clipsy.9.3.329
- Hein, L. C., & Matthews, A. K. (2010). Reparative therapy: The adolescent, the psych nurse, and the issues. *Journal of Child and Adolescent Psychiatric Nursing, 23*(1), 29–35. doi:10.1111/j.1744-6171.2009.00214.x
- Hochberg, R. (1977). Psychotherapy of a suicidal boy: Dynamics and interventions. *Psychotherapy: Theory, Research, and Practice, 14*(4), 428–433.
- Jones, A. (1996). An equal struggle (psychodynamic assessment following repeated episodes of deliberate self-harm). *Journal of Psychiatric and Mental Health Nursing, 3*(3), 173–180.
- Lambert, M. J., & Ogles, B. M. (2004). *The efficacy and effectiveness of psychotherapy*. New York, NY: Wiley.
- Los Angeles Times* (May 11, 2012). Bill overkill in Sacramento. Retrieved from <http://articles.latimes.com/2012/may/11/opinion/la-ed-0511-therapy-20120511>
- Shidlo, A., & Schroeder, M. (2002). Changing sexual orientation: A consumers' report. *Professional Psychology: Research and Practice, 33*(3), 249–259.

**International Federation for Therapeutic Choice**  
**IFTC Intervention at OSCE/ODIHR 2012 Human Dimension**  
**Implementation Meeting—Warsaw, Poland**  
**October 1, 2012**

To: The Organization for Security and Cooperation in Europe (OSCE) Office  
of Democratic Institutions and Human Rights (ODIHR) Human  
Dimension Implementation Meeting (HDIM)

From: Dr. Philip M. Sutton, PhD, International Federation for Therapeutic  
Choice (IFTC), USA

Date: October 1, 2012: *Working Session 10*

Re: Freedom of Thought, Conscience, Religion, or Belief

Intolerance and Discrimination against Medical and Mental Health Professionals  
and Researchers Threaten the Freedom of Professionals to Serve the Health Care  
Needs of Their Clients; the Right of Clients to Self-Determination in Choosing Wanted  
Education, Guidance, and Therapy; and the Right of Researchers to Scientific and  
Academic Freedom

This intervention is being given on behalf of the International Federation for Therapeutic Choice (IFTC), which supports the rights of sexual minorities who have unwanted attractions, orientation, behavioral tendencies, behavior, and/or identity to receive competent professional guidance and therapeutic care. The IFTC also supports the rights of medical and mental health professionals to offer that care ([www.therapeutic-choice.org](http://www.therapeutic-choice.org)).

*Central Recommendation to Participating States of the OSCE:*

To draft legislation to safeguard the freedom of medical and mental health practitioners, educators, and researchers:

1. to offer professional guidance and therapeutic expertise to persons whose sexual minority behaviors, orientations, and/or identities are unwanted and who freely choose help in order to overcome or diminish their unwanted sexual attractions and behaviors; and
2. to study, publish, and educate other professionals and the public about the possible causes, consequences, and amelioration of sexual minority attractions, behaviors, orientations, and identities.

*Some* sexual minorities find their attractions, orientation, behavioral tendencies, behavior, and/or identity unwanted. Some of these people *freely choose* or have *freely chosen* to seek professional guidance and therapeutic assistance to avoid basing their relational and sexual lives on their unwanted sexual minority attractions, behaviors, orientations, and/or identifications. More than one hundred years of clinical reports and other research literature document that some persons *have* been successful in achieving this goal *without* undue harm. For detailed information, see the first volume of the *Journal of Human Sexuality*, which reviews the clinical and scientific literature on this

issue (<http://www.scribd.com/doc/115507777/Journal-of-Human-Sexuality-Vol-1>), or the summary of this volume (<http://www.scribd.com/doc/125145105/Summary-of-Journal-of-Human-Sexuality-Volume-1>).

Medical and mental health professionals who research, educate, and offer guidance and therapeutic services to people with unwanted sexual minority concerns are experiencing increasing intolerance and discrimination. Those who attempt to train for and conduct their work are often labeled as “homophobic” and are even accused of “hate crimes.” This intolerance and discrimination not only impedes the ability of these professionals to do their work but also hinders the freedom of people who want to receive health care, guidance, and education from these professionals.

I offer two recent examples:

- First, on September 29, 2012, Governor Jerry Brown of the state of California in the United States signed SB 1172, a law that had passed both houses of the California Legislature a month earlier. The law declares it illegal for “mental health provider(s)” to engage “in sexual orientation change efforts with a patient under 18 years of age.” For the purpose of this law, “sexual orientation change efforts” are defined as any “efforts to change behaviors or gender expressions, or to eliminate or reduce sexual or romantic attractions or feelings toward individuals of the same sex.”
- If allowed to become effective on January 1, 2013, this law formally declares any “sexual orientation change efforts” (SOCE)—even if freely sought by the minor and his or her parents—as “unprofessional conduct” that subjects the “mental health provider to discipline by the licensing entity for that mental health provider.”

- This law subjects every “mental health provider” who engages in SOCE in the state of California to disciplinary action—including the potential loss of the state-regulated license to practice one’s profession—by the relevant California professional licensing board. (In the United States, each state licenses health care professionals and determines how their practice will be monitored and controlled; such licensing and monitoring is not done by the federal government.) Professionals affected include *anyone* “designated as a mental health professional under California law or regulation,” including—but not limited to—all licensed or certified physicians and surgeons specializing in psychiatry, clinical practitioners, counselors, educational and school psychologists, marriage and family therapists, clinical social workers, professional clinical counselors, and all of the assistants, interns, and trainees under their supervision.
- Thus, if enforced, SB 1172 subjects to “disciplinary action” any medical or mental health professional who provides education, guidance, counseling, and/or therapy to minors who themselves *freely* seek *and* whose parents *freely* seek services to resolve unwanted same-sex attractions and/or behaviors. Such professionals face discipline for having engaged in SOCE, which now is considered unprofessional conduct by the state of California.
- This law not only usurps the rights and authority of parents and minors to make decisions about the minor’s welfare but also usurps the rights of mental health licensing and certification boards to regulate their professions.
- As its primary rationale, the law cites the 2009 *Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation*, which concluded “that sexual orientation change efforts

- can pose critical health risks to lesbian, gay, and bisexual people.” In reality, the task force report actually concluded: “There are no scientifically rigorous studies of recent SOCE that would enable us to make a definitive statement about whether recent SOCE is safe or harmful and for whom” (*Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation*, [www.apa.org/pi/lgbcc/publications/](http://www.apa.org/pi/lgbcc/publications/), p. 83; cf. <http://narth.com/2012/08/the-complete-lack-of-a-scientific-basis-for-banning/>; <http://narth.com/2012/05/california-senate-bill-1172-a-scientific-and-legislative-travesty/>).
- A second example involves the study on same-sex parenting by University of Texas sociology professor Mark Regnerus, who found that young-adult children of parents who had same-sex relationships had negative outcomes when compared to children raised in intact biological families. (See Regnerus, M. (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(4), 752–777.) Following a rigorous peer review process prior to publication of the study, Regnerus’s person and work were subject to unjustified and unacceptable criticism and harassment. Public and professional critiques of his work did point out the unavoidable limitations of his research methods but failed to report that his research design and methods were superior to those of prior studies on this contentious topic that have supported the GLBT ideological and political agenda (cf., <http://www.citizenlink.com/2012/07/13/sociologist-comes-under-fire-from-activists-for-gay-parenting-study/>; <http://chronicle.com/article/Son-of-a-Lesbian-Mother-Backs/133992/>).
  - Regnerus’s employer, the University of Texas, investigated whether the accusations of “scientific misconduct” made by a self-identified “gay blogger”

had merit. The preliminary investigation involved the sequestering of Regnerus's computers, including his e-mails and documents, and the acquisition of all of his grant proposal, correspondence, and IRB protocols. Regnerus was required to respond in writing to the written and oral allegations of his accuser. In addition, an in-depth interview was conducted in which Regnerus was questioned about his responses to his accuser's allegations, and his answers were recorded and transcribed by a court reporter.

- On August 29, it was reported that the university had decided that the accusations did not have merit and that the case was closed (cf., <http://blog.heritage.org/2012/08/31/case-closed-at-ut-austin-regnerus-exonerated/> and the links to primary documents).

These examples illustrate just a few of many recent instances of harassment, intolerance, and discrimination toward medical and mental health professionals, researchers, and educators who attempt to study or serve persons with sexual minority attractions, behavioral tendencies, behaviors, and/or identities.

Such intolerant behavior by people who themselves claim to be victims of intolerance violates a number of rights upheld by the Convention on the Rights of the Child (CRD) (<http://www2.ohchr.org/english/law/crc.htm>) and the Universal Declaration of Human Rights (UDHR) (<http://www.un.org/en/documents/udhr/index.shtml#a11>). These include the right:

- and responsibility that when adults make decisions that affect children, the best interests of children must be the primary concern (CRD, Article 3)
- of families to be allowed to direct and guide their children so they can grow and

- reach their potential and the responsibility of governments to support them in doing so (UCDHR, Articles 4 and 5)
- of children to procure and share information, form and express their opinions, and otherwise be involved in decision-making appropriate to their level of maturity, especially when adults are making decisions that affect the children's welfare (UCDHR, Articles 12 and 13)
  - of children to think and believe what they want and to practice their religion, and of parents to provide religious and moral guidance to their children (UCDHR, Article 14)
  - of children to have access to information that is important to their health and well-being and the responsibility of governments to encourage mass media—radio, television, newspapers and Internet content sources—to provide information that children can understand and to not promote materials that could harm children (UCDHR, Article 17)
  - of parents to provide appropriate guidance to their children and the responsibility of governments to provide support services to parents on doing so (UCDHR, Article 18)
  - of children to an education that would develop their personality, talents, and abilities to the fullest (UCDHR, Article 18)
  - to freedom for the full development of one's human personality (UDHR, Article 26)
  - to medical care and necessary social services (UDHR, Article 25)
  - to freedom of thought, conscience, and religion (UDHR, Article 18)
  - to freedom of opinion and expression, which includes the freedom to hold opinions without interference, and to seek, receive, and impart information and ideas through any media (UDHR, Article 19)
  - to the protection of the law against arbitrary interference with one's privacy or family and attacks on one's honor and reputation (UDHR, Article 12)

In light the aforementioned fundamental rights upheld by the Convention on the Rights of the Child and the Universal Declaration of Human Rights, we therefore recommend to OSCE participating states:

1. to recognize and condemn intolerance and discrimination against sexual minorities who freely choose to receive help in order to overcome or diminish their unwanted sexual attractions, orientation, behaviors, and/or identity.
2. to draft legislation to safeguard the freedom of medical and mental health practitioners, educators, and researchers 1) to study, publish, and educate other professionals and the public about the possible causes, consequences, and amelioration of sexual minority attractions, orientations, behaviors, and identities; and 2) to offer their professional guidance and therapeutic expertise to people whose sexual minority concerns are *unwanted* and who *freely* choose help in order to overcome or diminish their unwanted sexual attractions, orientation, behaviors, and/or identity.

We recommend to OSCE/ODIHR and OSCE Missions:

1. to be aware of and condemn intolerance and discrimination against sexual minorities who freely choose help in order to overcome or diminish their unwanted sexual attractions, orientation, behaviors, and/or identity.
2. to assist OSCE participating states in monitoring and drafting legislation, with special attention to safeguarding the above-mentioned rights upheld by the CRC and the UDHR.

**Countering a One-Sided Representation of Science: NARTH  
Provides the “Rest of the Story” for Legal Efforts to Challenge  
Antisexual Orientation Change Efforts (SOCE) Legislation<sup>11</sup>  
July 26, 2013**

Christopher H. Rosik, PhD, President

National Association for Research and Therapy of Homosexuality

Salt Lake City, UT

---

<sup>11</sup> In response to state-sponsored legislation to prohibit the provision of sexual orientation change efforts (SOCE) to minors by licensed therapists, NARTH submitted this document to our attorneys at Liberty Counsel. This document was crafted in particular as preparation for possible legal action against New Jersey’s anti-SOCE legislation (AB 3371), and it reflects a similar, but less extensive compilation of the information that was entered into the legal record in NARTH’s lawsuit against SB 1172 in California. This document was unanimously approved by the NARTH board of directors on July 26, 2013.

## **Abstract**

NARTH compiled science-based information in this document in response to the proposal, passage, and subsequent adjudication of legislation in California (SB 1171) in 2012 and in New Jersey (AB 3371) in 2013 to prohibit the provision of sexual orientation change efforts (SOCE) to minors by licensed therapists. The information in this document is intended for use in various formats to counter the sometimes faulty and often incomplete presentation of science used to defend such anti-SOCE legislation. The information is presented in four sections under the following themes: I. The objectivity of the *Report of the APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation* (hereafter referred to as the *Report*) is demonstrably suspect; therefore, the *Report's* representation of the relevant literature concerning the efficacy of and harm from SOCE is neither complete nor definitive. II. Nonheterosexual identities, attractions, and behaviors are subject to change for many people, particularly youth. III. There is no scientific basis for blaming SOCE for the harmful stigma and discrimination reportedly experienced by persons with a nonheterosexual sexual orientation. IV. Spitzer's reassessment of his *interpretation* of the results of his 2003 study on SOCE does *not* invalidate the results he reported. Licensed mental health professionals (LMHP) who practice some form of SOCE care deeply about the well-being of sexual minority youth and see SOCE as a valid option for professional care, an option that deserves to be protected by state legislatures. LMHPs who do offer SOCE support the right of *all* clients to self-determination.

## **Statement of Purpose**

Five main objectives animate NARTH's submission of this information to the court:

- (1) to counterbalance the one-sided presentation of the science related to harm and efficacy of SOCE by proponents of California SB 1172 and New Jersey AB 3371—a presentation that we will demonstrate is a byproduct of an absence of sociopolitical diversity within professional mental health organizations concerning sexual orientation;
- (2) to show thereby that claims of the blanket ineffectiveness and intrinsic harmfulness of SOCE are not ultimately grounded in science but rather advocacy, as evidenced strikingly in the differing rigor utilized by these professional organizations to evaluate efficacy and harm;
- (3) to underscore from research that minority sexual orientation, particularly among youth, cannot be considered immutable but instead is fluid and subject to change for many, though not all, persons;
- (4) to demonstrate that the realities of stigma and discrimination form a highly incomplete understanding of negative health outcomes among nonheterosexual identities, and applying this literature uncritically to SOCE is scientifically and ethically dubious; and
- (5) to argue for the propriety of a scientific and research-based response to the questions that remain regarding SOCE instead of a politically inspired legal prohibition that curtails science, of which California SB 1172 and New Jersey AB 3371 are a quintessential expression.

**I. The Objectivity of the *Report of the APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation* is Demonstrably Suspect; Therefore the *Report's* Representation of the Relevant Literature Concerning Efficacy of and Harm from SOCE is neither Complete nor Definitive**

**Bias in Task Force Selection**

Although many qualified conservative psychologists were nominated to serve on the APA Task Force (hereafter referred to as the Task Force), all of them were rejected. This fact was noted in a book coedited by a past president of the APA (Yarhouse, 2009). Clinton Anderson—director of the APA’s Lesbian, Gay, and Bisexual Concerns Office—offered the following defense: “We cannot take into account what are fundamentally negative religious perceptions of homosexuality—they don’t fit into our world view” (Carey, 2007).

It appears that the APA operated with a litmus test when considering Task Force membership—the only views of homosexuality that were tolerated were those that uniformly endorsed same-sex behavior as morally good. From the outset of the Task Force, then, it was predetermined that conservative or religious viewpoints would only be acceptable when they fit within the preexisting worldview of the Task Force. One example of this is the *Report's* failure to recommend any religious resources that adopt a traditional or conservative approach to addressing conflicts between religious beliefs and sexual orientation. This bias can hardly be said to respect religious diversity and had predictable consequences for how the Task Force addressed its work.

**Bias Regarding Statements of SOCE Harm and Efficacy**

This bias was particularly evident in the Task Force’s highly uneven implementation of standards of scientific rigor in the utilization and evaluation of published findings pertaining to SOCE (Jones, Rosik, Williams, & Byrd, 2010). Of

particular note is the contrast between the exceptionally rigorous methodological standards applied to SOCE outcomes and the considerably less rigorous and uneven standards applied to the question of harm.

With regard to SOCE outcomes, the *Report* dismisses most of the relevant research because of methodological limitations that are outlined in great detail (APA, 2009, pp. 26–34). Studies pertaining to SOCE outcomes that fall short of the Task Force’s rigorous standards are deemed unworthy of examination and are dismissed as containing no evidence of value to the questions at hand.

Meanwhile, the *Report* appears to adopt very different evidentiary standards for making statements about harms attributed to SOCE. The standard regarding efficacy is to rule out substandard studies as irrelevant; however, no such standards are employed in considering studies purporting to document harm. In addition, the *Report* uses the absence of evidence to argue that SOCE is unlikely to produce change and thus strongly questions the validity of SOCE, but shows no parallel reticence to endorse affirmative therapy despite acknowledging that “it has not been evaluated for safety and efficacy” (APA, 2009, p. 91).

The six studies deemed by the Task Force to be sufficiently methodologically sound to merit the focus of the *Report* targeted samples that would bear little resemblance to those seeking SOCE today; the studies also used long-outdated methods that no current practitioner of SOCE employs. This brings into question the *Report*’s willingness to move beyond scientific agnosticism (in other words, to admit that we do not know the prevalence of success or failure in SOCE) to argue affirmatively that sexual orientation change is uncommon or unlikely. The *Report* seems to affirm two incompatible assertions: a) we do not have credible evidence on which to judge the likelihood of sexual orientation change, and b) we know with scientific certainty that sexual orientation change is unlikely. However, the absence of conclusive evidence of effectiveness is not logically equivalent to positive evidence of ineffectiveness (Altman & Bland, 1995).

There are places in the *Report* that do seem to acknowledge that, given their methodological standards, we really cannot know anything scientifically definitive about the efficacy of, or harms attributable to SOCE. For example, the *Report* states, “Thus, we cannot conclude how likely it is that harm will occur from SOCE” (APA, 2009, p. 42). Similarly, the *Report* observes, “Given the limited amount of methodologically sound research, we cannot draw a conclusion regarding whether recent forms of SOCE are or are not effective” (APA, 2009, p. 43). Similarly, “[T]here are no scientifically rigorous studies of recent SOCE that would enable us to make a definitive statement about whether recent SOCE is safe or harmful and for whom” (APA, 2009, p. 83; cf. p. 67, 120).

These expressions of agnosticism are justified by the Task Force but then are not adhered to in the *Report’s* conclusions. Instead, the *Report* argues at length that only the most rigorous methodological designs can clearly establish a causal relationship between SOCE methods and subsequent change, but the *Report* does not hesitate to make such causal attributions consistently regarding harm while repudiating any such claims for efficacy. From this highly uneven application of literature review methodology, the *Report* goes on to assert confidently that the success of SOCE is unlikely and that SOCE has the potential to be harmful. It is also telling that in subsequent references to the *Report*, the potential for harm has morphed into “the potential to cause harm to *many* clients” (APA, 2012, p. 14; emphasis added). The harms from SOCE appear to grow greater the further one gets from the original *Report*.

### **Bias in Favor of Preferred Conclusions**

A few examples adequately illustrate that the Task Force utilized a far lower methodological standard in assessing harm and other aspects of the science than it did in assessing SOCE outcomes. The *Report* references the many varieties of methodological problems deemed sufficient to render useless most of the SOCE research. Yet the *Report* is ready to overlook such limitations when the literature addresses preferred conclusions.

First, consider the work of Hooker (1957), which is routinely touted as groundbreaking in the field; the *Report* and other APA publications affirmed Hooker's work as evidence indicating there are no differences in the mental health of heterosexual and gay men. However, this research contains such serious methodological flaws that it is inconceivable that an evenhanded methodological evaluation by the Task Force would have not have mentioned these problems. Among the many methodological problems noted by Schumm (2012), the control group was told the purpose of the study in advance, and clinical experts were not blind to the objectives of the study. There were other serious problems, including an imperfect matching of participants, low scale reliability, the use of a small and recruited control group rather than existent national standardized norms, the post hoc removal of tests that actually displayed differences, and the screening out of men from the study if they appeared to have preexisting psychological problems. Hooker (1993) herself wrote many years later, "I knew the men for whom the ratings were made, and I was certain as a clinician that they were relatively free of psychopathology."

Despite these serious methodological problems, which would never be tolerated by the Task Force were this SOCE-supportive research, APA experts such as Gregory Herek described Hooker's study as part of the "overwhelming empirical evidence" that there is no association of sexual orientation with psychopathology (Herek, 1991, p. 143; see also Herek, 2010). The point here is not to argue for such an association but to underscore that a consistent application of the methodological standards affirmed in the *Report* should have led to the dismissal of the Hooker study as supportive of the no-differences hypothesis.

### **Bias Regarding Treatment of the Primary Study on Harm**

Perhaps the most egregious example of the Task Force's methodological double standard is evidenced in its heavy reliance on the Shidlo and Schroeder (2002) and Schroeder and Shidlo (2003) research regarding harm from SOCE. Several

methodological problems cited to dismiss the SOCE outcome literature complicate these studies:

- These studies were conducted in association with the National Gay and Lesbian Task Force, and researchers were given the explicit mandate to find clients who had been harmed and to document ethical violations by practitioners. This was abundantly clear in the study's original title: "Homophobic Therapies: Documenting the Damage" (see Exhibit A).
- More than 50% of the 202 sample participants were recruited through the GLB media, hardly a random or generalizable sampling procedure.
- Only 20 participants in this study were women, creating significant skew toward accounts and experiences of gay men.
- Twenty-five percent of study participants had already attempted suicide *before* starting therapy, making very dubious the claim that suicide attempts were actually caused by the therapy.
- Finally, these subjects reported their experiences came from a mix of licensed therapists, nonlicensed peer counselors, and religious counselors, leaving open the reasonable suspicion that negative therapeutic experiences might differ significantly by level of training.

The Shidlo and Schroeder (2002) and Schroeder and Shidlo (2003) results thus are based on a nonrepresentative sample likely to be heavily biased in the direction of retrospectively reporting negative therapy experiences, some of which occurred decades

ago. The Task Force appears to have ignored the warnings from the study's authors: "*The data presented in this study do not provide information on the incidence and prevalence of failure, success, harm, help, or ethical violations in conversion therapy*" (Shidlo & Schroeder, 2002, p. 250; emphases in the original). It is difficult to understand how this research can be cited without qualification or context as demonstrating likely harm from SOCE conducted by licensed medical and mental health professionals. What we *can* say with confidence is that some SOCE clients report harm and others report benefit—and the literature does not specify how often either outcome occurs. While harm may occur with any form of psychological care, the "evidence" provided in this study is essentially nothing more than unverifiable "hearsay." This is hardly a legitimate ground for legal prohibition.

### **Bias Regarding the Lack of Context Concerning Harm in Psychotherapy**

The APA and other professional bodies that utilize the *Report* are negligent if not fraudulent in giving a technically true warning that SOCE may potentially cause harm but failing to do so within a broader context: This warning certainly applies to all forms of psychological care for any and all problems or concerns. For example, regardless of theoretical orientation or treatment modality, some psychological or interpersonal deterioration or other negative consequences appear to be unavoidable for a small percentage of clients, especially those who begin therapy with a severe "initial level of disturbance" (Lambert & Ogles, 2004, p. 117). Clients who experience significant negative counter-transference or whose clinicians may lack empathy or may underestimate the severity of their problem may also be at greater risk for deterioration (Mohr, 1995).

Furthermore, it must be remembered that, on average, persons with same-sex attraction already experience and/or are at greater risk for experiencing a number of

medical and mental health difficulties *prior* to participating in any SOCE (Whitehead & Whitehead, 2010). This makes it extremely difficult to disentangle psychological distress directly attributable to SOCE from that which preceded commencement of SOCE. And since SOCE commonly involves helping clients become more aware of the stress and distress in their lives in order to manage or alleviate it, as do many approaches to mental health care, persons who leave therapy prematurely may have an increased awareness or experience of their (pre)existing stress and distress. In other words, they may “feel worse” as a consequence of not having allowed sufficient time for therapy to help resolve the difficulties. Anecdotal personal stories of harm certainly cannot scientifically establish the proportion of distress derived directly from SOCE, and high-quality research that might be able to distinguish such causation simply does not exist.

### **Bias in the Omission of Medical Outcomes Associated with Same-Sex Behavior**

It should also be mentioned in the discussions of harm and benefit from SOCE that the *Report* makes no mention of the well-documented medical outcomes associated with homosexual and bisexual behavior. For example, men having sex with men (MSM) comprise 48% of all individuals with HIV/AIDS in the United States, but make up only an estimated 2–4% of men in the population (Newcomb & Mustanski, 2011). Despite increasing cultural acceptance, MSM are reporting higher rates of sexual risk behaviors in recent years. Similarly, the prevalence of suicidal ideation and attempts for bisexual and lesbian girls has steadily increased since the mid-1990s (Savin-Williams & Ream, 2007).

Certainly whatever unclear risk of harm that might occur to an individual SOCE minor client must be weighed against the clear medical risks that arise from enacting homosexual behavior, particularly salient among adolescents. Yet a therapist’s efforts to change or otherwise discourage even homosexual behavior among minors, if construed

by the client later as SOCE, could jeopardize the license of the therapist under California SB 1172 and New Jersey AB 3371.

### **Bias Regarding Research on the Origins of Same-Sex Attractions**

Another example of the Task Force's uneven application of methodological standards concerns the *Report's* conclusion that "studies failed to support theories that regarded family dynamics, gender identity, or trauma as factors in the development of sexual orientation" (APA, 2009, p. 23). Of the ten studies cited in support of this conclusion, three were not readily accessible on databases; another was a review article that was an interpretation, not an empirical study. An examination of the remaining six studies (Bell, Weinberg, & Hammersmith, 1981; Freund & Blanchard, 1983; McCord, McCord, & Thurber, 1962; Peters & Cantrell, 1991; Siegelman, 1981; Townes, Ferguson, & Gillam, 1976) revealed many of the same methodological flaws cited in the Task Force critique of SOCE (Rosik, 2012). For example, the Freud and Blanchard study is cited as evidence against any role of family dynamics or trauma in the origin of same-sex attractions but contains many serious methodological problems, including unclear scale reliability, participants being known to the researchers as patients, the use of a convenience sample, and a narrow and therefore nongeneralizable sample composed of psychiatric patients. All of these problems were considered to be fatal flaws in the Task Force's appraisal of the SOCE outcome literature for documenting evidence of change.

Given that many of the methodological limitations used by the Task Force to assail the SOCE research exist in the literature exploring the possible causal influences for sexual orientation, questions have to be raised as to why the Task Force members chose to definitively dismiss this literature as "failing to support" developmental theories. It appears, based on the same criteria they used to dismiss SOCE, that their own conclusions have little support in the literature. A fairer rendering of the literature they reference in this regard would appear to be that this research is so methodologically

flawed that one cannot make any conclusive statements concerning the applicability of developmental factors in the origin of homosexuality. Thus by the Task Force's own methodological standards, the literature they cite fails to support *or rule out* a role for these potential developmental influences in the genesis of sexual orientation.

If such ambiguity exists in the SOCE literature on methodological grounds, then by the Task Force's own criteria, this ambiguity is also present in the referenced etiological research. It appears that the Task Force has been inconsistent in the application of its methodological critique to the broader literature on homosexuality, and it has been willing to offer more definitive conclusions about theories it wishes to dismiss than is warranted by its own standards. In a word, there is again the appearance of substantial bias.

Contrary to the repeated claims of the *Report* that it is an established "scientific fact" that "no empirical studies or peer-reviewed research supports theories attributing same-sex sexual orientation to family dysfunction or trauma" (APA, 2009, p. 86), there currently exists recent, high-quality, and large-scale studies that provide empirical evidence consistent with the theory that familial or traumatic factors potentially contribute to the development of sexual orientation (Bearman & Bruckner, 2002; Francis, 2008; Frisch & Hviid, 2006; Roberts, Glymour, & Koenen, 2013; Wilson & Widom, 2010). Despite their significant relevance for scientific discussions on the etiology of same-sex attractions, these studies were ignored by the Task Force. It is perfectly reasonable to believe that *not* offering professional SOCE to some minors with unwanted same-sex attractions and behaviors who seek such care *may actually harm* them by *not* helping them deal with what is one of the possible consequences of sexual molestation and abuse.

### **Bias Regarding Use of the "Gray Literature"**

The uneven methodological implementation of standards is again seen in the *Report's* treatment of the "gray literature," which is dismissed in favor of only peer-reviewed scientific journal articles in the assessment of SOCE. No developed rationale

is offered for this choice. Consequently, a highly scholarly study on SOCE supportive of change for some individuals is dismissed in a footnote (Jones & Yarhouse, 2007; the footnote is found on p. 90 of the *Report*). Yet the Task Force appears to have no compunction in citing the “gray literature” on other subjects, such as the demographics relating to sexual orientation (Laumann, Gagnon, Michael, & Michaels, 1994) or the issue of psychological and familial factors in the development of sexual orientation (Bell et al., 1981), even though the latter book utilizes a sample of questionable representativeness.

### **Bias in the APA’s Broader Treatment of Sexual Orientation**

A sixth example of differential application of methodological critique highlights the systemic nature of this problem within the broader literature pertaining to homosexuality. A recent analysis of the fifty-nine research studies cited in the APA’s brief supporting same-sex parenting (Marks, 2012) in essence applied methodological standards of similar rigor to those the Task Force applied to the SOCE literature. The Marks study concluded that

some same-sex parenting researchers seem to have contended for an “exceptionally clear” verdict of “no difference” between same-sex and heterosexual parents since 1992. However, a closer examination leads to the conclusion that strong, generalized assertions, including those made by the APA Brief, were not empirically warranted. As noted by Shiller (2007) in *American Psychologist*, “the line between science and advocacy appears blurred.” (p. 748)

While Marks’s analysis does not focus on SOCE, it is relevant in that it underscores that the APA’s worldview regarding homosexuality appears to result in public policy

conclusions (whether right or wrong) that go beyond what the data can reasonably support. This is precisely what appears to be occurring in linking the *Report* with the banning of professional SOCE as represented in California SB 1172 and New Jersey AB 3371.

### **Bias Regarding the Use of the Ryan et al. Study in SB 1172 and AB 3371**

A final example of the problem of differential rigor in methodological critique can in fact be found in AB 3371 itself. The bill cites a study by Ryan, Huebner, Diaz, and Sanchez (2009) in the respected journal *Pediatrics*, presumably as its best support for claims that SOCE with minors results in serious harm. It is evident that this study also contains many of the methodological limitations cited by the Task Force to invalidate the SOCE literature, including participants not being blind to the study purposes, apparent biases in the participant recruitment process, and the reliance on self-report measures that had participants recalling experiences from the distant past.

Generalization difficulties are also created by the sample composition of Ryan et al. (2009). The sample is limited to young-adult non-Latino and Latino LGB persons. The APA Task Force (2009) noted that research on SOCE has “limited applicability to non-Whites, youth, or women” (p. 33) and “no investigations are of children and adolescents exclusively, although adolescents are included in a very few samples” (p. 33). This means that even had Ryan and colleagues assessed for SOCE backgrounds among participants, it would be inappropriate to generalize their findings in a manner that would cast aspersions on all SOCE experiences of minors, which again is precisely what AB 3371 is determined to do. In addition, Ryan et al. (2009) acknowledge that “given the cross-sectional nature of this study, we caution against making cause-effect interpretations from these findings” (p. 351).

Presumably, this caution alone should have been enough to prevent the authors of AB 3371 from employing the Ryan et al. study. Even had the study findings been applicable to SOCE consumers, they would not have been able to indicate whether SOCE caused

the negative health outcomes or if youth with negative health markers disproportionately sought SOCE. Based on this analysis, there appear to be no scientific grounds for referencing the Ryan study as justification for a ban on SOCE to minors. The study's findings, while likely reflecting some underlying connection between family rejection and mental health outcomes, are not reliable and have no scientific justification for being generalized to minors who engage in SOCE with licensed therapists. It is troubling that AB 3371 utilizes Ryan et al.'s work when the internal and external validity limitations of the study make such claims profoundly misguided, as underscored by the APA Task Force.

The Task Force concludes that “none of the recent research (1999–2007) meets methodological standards that permit conclusions regarding efficacy or safety” (APA, 2009, p. 2). Taking this statement at face value—which is arguable, as noted above—nevertheless only serves to underscore the enduring validity of comments from Zucker (2003), longtime editor of the *Archives of Sexual Behavior*, who observed:

From a scientific standpoint, however, the empirical database remains rather primitive and **any decisive claim about benefits or harms really must be taken with a grain of salt and without such data it is difficult to understand how professional societies can issue any clear statement that is not contaminated by rhetorical fervor.** Sexual science should encourage the establishment of a methodologically sound database from which more reasoned and nuanced conclusions might be drawn. (p. 400; emphasis added)

A scientific response as opposed to a response based largely on advocacy would encourage research that will allow for more nuanced conclusions about SOCE, not create a new law that sets the precedent of placing a blanket prohibition on an entire category of psychological care.

## **II. Nonheterosexual Identities, Attractions, and Behaviors Are Subject to Change for Many People, Particularly among Youth**

Central to the notion that some individuals can and do report change on a continuum in their sexual orientation is the issue of *immutability*. Were all same-sex attractions and behaviors fixed and not subject to change, then sexual orientation would indeed be an enduring trait and SOCE would be a futile exercise, including among minors. However, there is solid data to suggest that same-sex attractions and behaviors are not fixed and are subject to varying degrees of change. As summarized by Ott et al. (2013), “Reported sexual identity, attraction, and behavior have been shown to change substantially across adolescence and young adulthood” (p. 466). This viewpoint has long been maintained within scientific circles. Klein, Sepekoff, and Wolf (1985) decades earlier affirmed “the importance of viewing sexual orientation as a process which often changes over time” and noted “the simplicity and inadequacy of the labels heterosexual, bisexual, and homosexual in describing a person’s sexual orientation” (p. 43).

### **Nonheterosexuality Is Not a Fixed Trait**

The definitive study by Laumann, Michael, and Gagnon (1994), cited by the Task Force, involved several thousand American adults between the ages of eighteen and sixty. This report contains the most careful and extensive database ever obtained on the childhood experiences of matched homosexual and heterosexual populations. One of the major findings of the study that surprised even the authors was that homosexuality as a fixed trait scarcely seemed to exist (Laumann et al., 1994). Sexual identity is not fixed at adolescence but continues to change over the course of life. For example, the authors report:

This implies that almost 4 percent of the men have sex with another male before turning eighteen but not after. These men, who report same-gender sex only before they turned eighteen, not afterward, constitute 42

percent of the total number of men who report ever having a same-gender experience. (Laumann et al., p. 296)

They also note that their findings comport well with other large-scale studies:

Overall we find our results remarkably similar to those from other surveys of sexual behavior that have been conducted on national populations using probability sample methods. In particular two very large-scale surveys . . . one in France [20,055 adults] and one in Britain [18,876 persons]. (p. 297)

This data seem to suggest that heterosexuality is normative even for those who at one point in the past reported a nonheterosexual sexual orientation. Sexual orientation stability appears to be greatest among those who identify as heterosexual (Savin-Williams, Joyner, & Rieger, 2012): “This limited empirical evidence based on four large-scale or nationally representative populations indicates that self-reports of sexual orientation are stable among heterosexual men and women, but less so among nonheterosexual individuals” (p. 104).

Heterosexuality likely exerts a constant, normative pull throughout the life cycle upon everyone. While admittedly Laumann attributes this reality to American society, the same findings have been found in other societies where it has been studied. A simpler explanation might look to human physiology, including the physiology of the nervous system, which is overwhelmingly sexually dimorphic—in other words, heterosexual. Therefore it is not surprising that the brain would self-organize behavior in large measure in harmony with its own physiological ecology, even if not in a completely deterministic fashion.

Whether measured by action, feeling, or identity, Laumann and colleagues’ (1994) data concerning the prevalence of homosexuality before and after age eighteen reveal that

its instability over the course of life occurred in one direction toward heterosexuality and reflected significant decline in nonheterosexual identities. This evidence of spontaneous change with the progression of time among both males and females is hardly the picture of sexual orientation stasis in adolescence assumed by California SB 1172 and New Jersey AB 3371. To be fair, we cannot tell from this data how many, if any, of those reporting change pursued SOCE. However, the data do provide a developmental context for the plausibility that SOCE could aid some individuals (including minors) in modifying same-sex attractions and behavior. It appears that the most common natural course for a young person who develops a nonheterosexual sexual identity is for it to spontaneously disappear unless such is discouraged or interfered with by extraneous factors. Conceivably, non-SOCE therapies that obstruct this process (in other words, those that are “gay-affirmative”) could be interfering with normal sexual development.

Diamond’s longitudinal studies of women with nonheterosexual identities revealed that 67% reported changing their identities over a ten-year period of time (Diamond, 2005, 2008). Diamond noted that, “hence, identity *change* is more common than identity *stability*, directly contrary to conventional wisdom” (p. 13; emphasis in original). While changes in same-sex physical and emotional attractions among these women were admittedly more modest, they nevertheless occurred to the point where the findings “demonstrate considerable fluidity in bisexual, unlabeled, and lesbian women’s attractions, behaviors, and identities and contribute to researcher’s understanding of the complexity of sexual-minority development over the life span” (Diamond, 2008, p. 12). Clearly, change in sexual attractions and behaviors on a continuum of change would appear possible for many women and adolescent girls, leaving no rational reason to preclude professionally conducted SOCE as one option for minor girls experiencing unwanted same-sex attractions and behaviors, provided parental and informed consent. Finally, echoing the earlier observation by Laumann et al. (1994), Diamond (2005) concluded that “in light of such findings, one might argue for an end to sexual categorization altogether, at least within the realm of social scientific research” (p. 125).

### **Change Not Limited to Sexual Behavior**

A New Zealand study by Dickson, Paul, and Herbison (2003) further questions the claim that change might affect same-sex *behavior* but *not* same-sex *attraction*. This study found large and dramatic drops in homosexual attraction that occurred spontaneously for both sexes, a finding underscored even more by its occurrence in a country with a relatively accepting attitude toward homosexuality. Interestingly, the results also indicated a slight but statistically significant net movement toward homosexuality and away from heterosexuality between the ages of twenty-one and twenty-six, which suggests the influence of environment on sexual orientation, particularly for women. Specifically, it appears likely that the content of higher education in a politically liberal environment contributed to the upswing in homosexuality in this educated sample of twenty-somethings. This notion is further supported by the fact that this increase in homosexuality follows a much larger decrease that would have to have taken place in the years prior to twenty-one in order to account for the above findings. Additionally, once the educational effect wears off, the expected decline in homosexual identification resumed. The authors conclude that their findings are consistent with a significant (but by no means exclusive) role for the social environment in the development and expression of sexual orientation.

### **Change Particularly Evident for Youth and Bisexuals**

A large longitudinal study by Savin-Williams and Ream (2007) is also noteworthy, as it focused on the stability of sexual orientation components for adolescents and young adults. Three waves of assessment began when participants were on average just under sixteen years of age and concluded when participants were nearly twenty-two years old. The authors observed a similar decline in nonheterosexuality over the time of the study, specifying that “all attraction categories other than opposite-sex were associated with a lower likelihood of stability over time” (p. 389). For example, sixteen-year-olds

### *Countering a One-Sided Representation of Science*

who reported exclusive same-sex attractions or a bisexual pattern of attractions are approximately twenty-five times more likely to change toward heterosexuality at the age of seventeen than those with exclusively opposite-sex attractions are likely to move toward bisexual or exclusively same-sex attractions (Whitehead & Whitehead, 2010). Over the course of the study, 98% of sixteen- to seventeen-year-olds moved from homosexuality or bisexuality toward heterosexuality.

To be fair, such changes were more pronounced among bisexuals and women. But keep in mind that California SB 1172 and New Jersey AB 3371 do not discriminate in their prohibition between SOCE provided for exclusively same-sex-attracted minors and those whose unwanted same-sex attractions are part of a bisexual attraction pattern. Nor does the bill's ban distinguish between boys and girls. Savin-Williams and Ream observed that "the instability of same-sex attraction and behavior (plus sexual identity in previous investigations) presents a dilemma for sex researchers who portray non-heterosexuality as a stable trait of individuals" (p. 393). They acknowledged that developmental processes are involved even as they focused mostly on problems with measurement. The reality of such spontaneous changes in sexual orientation among teenagers is not in accord with a bill whose defenders contend sexual orientation is a universally enduring trait. In fact, these data suggest it is irresponsible to legally prevent access to SOCE and allow only affirmation of same-sex feelings in adolescence on the grounds that the feelings are intrinsic, unchangeable, and therefore the individual can be only homosexual.

The intent of SB 1172 and AB 3371 for a blanket prohibition on SOCE for all minors with unwanted same-sex attractions and behaviors is akin to doing heart surgery with a chainsaw: it is unable to address the complex realities of sexual orientation. For example, a study by Herek, Norton, Allen, and Sims (2010) reported that "only" 7% of gay men reported experiencing a small amount of choice about their sexual orientation and slightly more than 5% reported having a fair amount or great deal of choice. Lesbian

women reported rates of choice at 15% and 16%, respectively. It is worth noting that these statistics, which are not inconsequentially small, do suggest that sexual orientation is not immutable for all people and again suggest the plausibility that modification of same-sex attractions and behaviors could occur in SOCE for some individuals.

Even more important, however, are the findings for bisexuals: 40% of bisexual males and 44% of bisexual females reported having a fair amount or great deal of choice in the development of their sexual orientation. This is in addition to 22% of male bisexuals and 15% of female bisexuals who reported having at least a small amount of choice about their sexual orientation. Other studies confirm the particular instability of a bisexual sexual orientation (Savin-Williams et al., 2012). These numbers create a significantly different impression about the enduring nature of sexual orientation than the picture often painted by proponents of SB 1172 and AB 3371. At a minimum, such data suggest that proponents of this legislation would have done better to exclude bisexuality from the scope of this bill. If such a large minority of individuals (albeit mostly bisexuals) experience a self-determinative choice as being involved in the development of their sexual orientation, why would it not be conceivable that SOCE might augment this process for some individuals with unwanted same-sex attractions and behaviors?

### **Identification of the Mostly Heterosexual Orientation**

Further evidence that SB 1172 and AB 3371 ignore distinctions in sexual orientation relevant to SOCE is the recent identification of the “mostly heterosexual” orientation. This orientation has been reported by 2 to 3% men and 10 to 16% of women over time, and constituted a sexual orientation larger than all other nonheterosexual identities combined (Savin-Williams et al., 2012). Moreover, it appears to be a highly unstable sexual orientation in comparison to other nonheterosexual identities. The reality of the “mostly heterosexual” orientation category has been additionally supported by recent physiological evidence in a sample of men (Savin-Williams et al., 2013). This

apparently viable and unique group of nonheterosexuals raises serious questions for the scope of AB 3371—for example, are “mostly heterosexual” minors exempt from the law’s ban on SOCE? The fact that SB 1172 and AB 3371 appear to have been outdated even before they were signed into law highlights the folly of politicians attempting to adjudicate the complex scientific matters surrounding SOCE at the behest of activists within and outside of professional organizations.

All of the above evidence of fluidity and change in sexual orientation strongly suggests that change in the dimensions of sexual orientation does take place for some people (and likely more so for youth). It also suggests that this change is best conceptualized as occurring on a continuum and not as an all-or-nothing experience. The experience of NARTH clinicians is that while some clients report complete change and some indicate no change, many clients report achieving sustained, satisfying, and meaningful shifts in the direction and intensity of their sexual attractions, fantasy, and arousal as well as behavior and sexual orientation identity.

Descriptions of licensed SOCE therapists as trying to “cure” their clients of homosexuality are either ignorant or willfully slanderous of how these therapists conceptualize their care (National Association for Research and Therapy of Homosexuality, 2010). Professional SOCE practitioners recognize that change of sexual orientation typically occurs on a continuum, and this is consistent with how change is understood to occur for most, if not all, other psychological and behavioral conditions addressed in psychotherapy.

### **Genetics and Biology Are at Best Partial Explanations for Same-Sex Attractions**

Moreover, such fluidity and change makes clear that simple causative genetic or biological explanations are inappropriate. The later development of same-sex attractions and behaviors is not determined at birth, and there is no convincing evidence that biology is

decisive for many, if not most, individuals. The American Psychiatric Association has observed that “to date there are no replicated scientific studies supporting any specific biological etiology for homosexuality” (American Psychiatric Association, 2013). Peplau, Spalding, Conley, and Veniegas (1999) earlier summarized, “To recap, more than 50 years of research has failed to demonstrate that biological factors are a major influence in the development of women’s sexual orientation. . . . Contrary to popular belief, scientists have not convincingly demonstrated that biology determines women’s sexual orientation” (p. 78).

It is important to note in this regard that the APA’s own stance on the biological origin of homosexuality has softened in recent years. In 1998, the APA appeared to support the theory that homosexuality is innate and people were simply “born that way”: “There is considerable recent evidence to suggest that biology, including genetic or inborn hormonal factors, play a significant role in a person’s sexuality” (APA, 1998). But in 2008, the APA described the matter differently:

*There is no consensus among scientists about the exact reasons that an individual develops a heterosexual, bisexual, gay, or lesbian orientation.*

Although much research has examined the possible genetic, hormonal, developmental, social, and cultural influences on sexual orientation, no findings have emerged that permit scientists to conclude that sexual orientation is determined by any particular factor or factors. Many think that *nature and nurture both play complex roles.*” (APA, 2008a; emphasis added)

Yet the APA has made minimal effort to publicize the change in its official position on such causation or to correct the accompanying popular misconception—often promoted by the media—that persons with same-sex attractions are simply “born that way.” It is difficult not to perceive this as significant professional neglect.

The absence of genetic or biological determinism in sexual orientation is underscored and clarified by large-scale studies of identical twins. These studies indicate that if one twin sibling has a nonheterosexual orientation the other sibling shares this orientation only about 11% of the time (Bailey, Dunne, & Martin, 2000; Bearman & Bruckner, 2002; Langstrom, Rahman, Carlstrom, & Lichtenstein, 2010). If factors in common like genetics or conditions in the womb overwhelmingly caused same-sex attractions, then identical twins would *always* be identical for same-sex attraction. These studies instead suggest that the largest influence on the development of same-sex attractions are environmental factors that affect one twin sibling but not the other, such as unique events or idiosyncratic personal responses.

Causatively, then, sexual orientation is by no means comparable to a characteristic—such as race or biological sex—that is thoroughly immutable. Thus, while same-sex attractions may not be experienced as chosen, it is reasonable to hold that they can be subject to conscious choices, such as those that might be facilitated in SOCE. Same-sex attractions and behaviors are not strictly or primarily determined by biology or genetics and are naturalistically subject to significant change, particularly in youth and early adulthood. This should raise serious questions about the legitimacy of SB 1172's and AB 3371's portrayal of same-sex attractions and behaviors as static traits to be embraced only by those minors who might otherwise pursue SOCE.

### **III. There Is No Scientific Basis for Blaming SOCE for the Harmful Stigma and Discrimination Reportedly Experienced by Persons with a Nonheterosexual Sexual Orientation**

Proponents of California SB 1172 and New Jersey AB 3371 frame a significant degree of their arguments concerning harm and SOCE on the negative consequences of stigma and discrimination. While these factors certainly can have deleterious

consequences for those with nonheterosexual sexual orientations, this possibility must be placed within a broader context and balanced by additional considerations.

### **The Limited Understanding of the Dynamics of Stigma and Discrimination**

From an overall perspective, the meta-analytic research (that summarizes results over multiple studies) on the association between perceived discrimination and health outcomes indicates that the strength of this relationship is significant but small (Pascoe & Richman, 2009). Furthermore, research into what influences this association has most typically found no significant role for theoretically linked factors such as social support and identification with one's group. For example, data suggest that the impact of "internalized homophobia" for understanding risk behavior among MSM is now negligible, and "the current utility of this construct for understanding sexual risk taking of MSM is called into question" (Newcomb & Mustanski, 2011, p. 189). By contrast, poly-drug use by these men continued to be a strong predictor of risky sexual behavior. Such findings should be sufficient to indicate that there is a great deal left to be understood about this entire field of study.

Other lines of inquiry suggest that stigma and discrimination alone are far from a complete explanation for greater psychiatric and health risks among nonheterosexual orientations. Mays and Cochran (2001) reported that discrimination experiences attenuated but did not eliminate associations between psychiatric morbidity and sexual orientation. In Holland, men with same-sex attractions and behaviors were found to have a higher risk for suicidal ideation and acute mental and physical health symptoms than heterosexual men, despite that country's highly tolerant attitude toward homosexuality (de Graaf, Sandfort, & ten Have, 2006; Sandfort, Bakker, Schellevis, & Vanwesenbeeck, 2006).

Research in this area is almost entirely reliant on self-reports of *perceived* discrimination, and the relation of this to objective discrimination is not well understood. Recent literature also finds that particular emotion/avoidant-based coping mechanisms

used by people reporting SSA almost entirely account for the effects of this perceived discrimination (Whitehead, 2010). For example, differential rates of health problems resulted from sexual orientation-related differences in coping styles among men, with an emotion-oriented coping style mediating the differences in mental and physical health between heterosexual and homosexual men (Sandfort et al., 2009).

### **Some Health Outcomes Are Likely Based in Anatomy More Than Stigma**

In addition, some health risks, such as HIV transmission among gay men, may be influenced by stigma but are ultimately grounded in biological reality. A recent comprehensive review found an overall 1.4% per-act probability of HIV transmission for anal sex and a 40.4% per-partner probability (Beyer et al., 2012). The authors noted, “The 1.4% per-act probability is roughly 18-times greater than that which has been estimated for vaginal intercourse” (p. 5). Recent CDC statistics indicate the rate of new HIV diagnoses in the United States among men who have sex with men is more than forty-four times that of other men (Centers for Disease Control, 2011). Young gay and bisexual men age thirteen to twenty-nine accounted for 27% of all new HIV infections in 2009 and were the only group for whom new HIV infections increased between 2006 and 2009 (Prejean et al., 2011). Sharing such information with prospective SOCE clients is not inherently manipulative but rather, when balanced with other considerations, constitutes an ethically obligated aspect of informed consent.

### **SOCE Not a Proxy for Stigma or Discrimination**

The lessening of stigma associated with “coming out” need not imply an affirmation of a gay, lesbian, or bisexual identity or the enactment of same-sex behavior. SOCE practitioners often encourage the client’s acceptance of his or her unwanted same-sex attractions and the disclosure of this reality with safe others as a potential aid in the pursuit of change or, in cases where change does not occur, behavioral management of

sexual identity. This typically occurs when clients desire to live within the boundaries of their conservative religious values and beliefs. While it is often assumed that conservative religious environments are stigmatizing and harmful for sexual minorities by definition, this is by no means a universal finding. One study of black lesbian, gay, and bisexual young adults, 86% of whom were open about their sexual identity, found that “participants who reported lower religious faith scores and lower internalized homonegativity scores reported the lowest resiliency, while those reporting higher religious faith scores and higher internalized homonegativity reported the highest resiliency scores” (Walker & Longmire-Avital, 2012, p. 5).

Referral for SOCE therefore cannot be designated as a proxy for harm-inducing family rejection and stigma, as the proponents of SB 1172 and AB 3371 seem to assume. Only a few studies have directly examined the link between family rejection and health risk among minors (Saewyc, 2011). The derived findings from those studies can be contrary to expected theories, such as the discovery that same-sex-attracted boys who participated in more shared activities with their parents were *more likely* to run away from home and use illegal drugs than those who participated in fewer shared activities (Pearson & Wilkinson, 2013). Even more importantly, no studies have examined family relationships in the context of SOCE participation (APA, 2009). Thus, SB 1172 and AB 3371 would unnecessarily and without scientific warrant eliminate the potential role of conservative religious values for ameliorating the effects of stigma in the context of SOCE. This would prevent clients from one means of prioritizing their religious values above their same-sex attractions when these factors are in conflict. The contention that a desire to modify same-sex attractions and behaviors can only be an expression of self-stigma reflects a serious disregard for and misunderstanding of conservative religious and moral values (Jones et al., 2010).

## **Encouraging Same-Sex Behavior May Result in Risk-Justifying Attitudes**

Finally, new research is raising the possibility that some widely accepted theories germane to the discussion of stigma, discrimination, and health outcomes may in fact have gotten things backward. A longitudinal study of gay and bisexual men by Heubner, Neilands, Rebchook, and Kegeles (2011) found that

in contrast to the causal predictions made by most theories of health behavior, attitudes and norms did not predict sexual risk behavior over time. Rather, sexual risk behavior at Time 1 was associated with changes in norms and attitudes at Time 2. These findings are more consistent with a small, but growing body of investigations that suggest instead that engaging in health behaviors can also influence attitudes and beliefs about those behaviors. (p. 114)

Thus, safe-sex norms and attitudes did not lead to reduced unprotected anal intercourse; rather, participants' engagement in such HIV-risk behavior appeared to change how they thought and felt about the behavior and enhanced their willingness to engage in it. Such findings raise serious concerns about the impact of SB 1172 and AB 3371: A law that allows only for the affirmation and ultimate enactment of same-sex attractions may in fact increase HIV risk and negative health outcomes for some minors who might otherwise have sought SOCE.

While stigma and discrimination are real concerns, they are not universal explanations for greater psychiatric and health risks among sexual minorities, some of which are likely to be grounded in the biology of certain sexual practices. Moreover, the effects of stigma and discrimination can be addressed significantly within SOCE for many clients, though this is no doubt hard to comprehend for those not sharing the religious

values of SOCE consumers. There is no longitudinal research involving consumers of SOCE that links the known effects of stigma and discrimination to the practice of SOCE. SOCE is simply *ipso facto* presumed to constitute a form of stigma and discrimination. This is in keeping with the persistently unfavorable manner in which SOCE is portrayed by mental health associations. SOCE practitioners and consumers are associated with poor practices as a matter of course (APA, 2009, 2012; Jones et al., 2010). This arguably is a form of stigma and discrimination toward practitioners of SOCE, who have ironically developed their own set of practice guidelines that, when followed, can be expected to reduce the risk of harm to SOCE consumers (NARTH, 2010).

#### **IV. Spitzer's Reassessment of His *Interpretation* of the Results of His 2003 Study on SOCE Does *Not* Invalidate the Results He Reported**

Finally, proponents of New Jersey's AB 3371 have understandably pointed out that Robert Spitzer, MD—author of one of the primary studies conducted on SOCE (Spitzer, 2003)—has recently changed his assessment of the study and believes that it does not provide clear evidence of sexual orientation change (Spitzer, 2012). It appears that he may have originally wished to retract the 2003 study, but Kenneth Zucker, PhD—the editor of the journal in which the study was published—denied this request. Zucker has been quoted regarding his exchange with Spitzer as observing:

You can retract data incorrectly analyzed; to do that, you publish an erratum. You can retract an article if the data were falsified—or the journal retracts it if the editor knows of it. As I understand it, he's [Spitzer] just saying ten years later that he wants to retract his interpretation of the data. Well, we'd probably have to retract hundreds of scientific papers with regard to interpretation, and we don't do that. (Dreger, 2012)

## *Countering a One-Sided Representation of Science*

What Zucker is essentially saying is that there is nothing in the science of the study that warrants retraction, so all that is left for one to change is his interpretation of the findings, which is what Spitzer appears to have done. Spitzer's change of interpretation hinges on his new belief that reports of change in his research were not credible, an assertion made by others at the time of the study. Instead, he now asserts that participants' accounts of change may have involved "self-deception or outright lying" (Spitzer, 2012).

It is curious that Spitzer's (2012) apology seems to imply that he earlier claimed his research proved the efficacy of SOCE. As was understood at the time, the design of Spitzer's study ensured his research would not definitively *prove* that SOCE can be effective. Certainly it did not prove that all gays and lesbians can change their sexual orientation or that sexual orientation is simply a choice. The fact that some people inappropriately drew such conclusions appears to be a factor in Spitzer's reassessment. Yet the fundamental interpretive question did and still does boil down to one of plausibility: Given the study limitations, is it *plausible* that some participants in SOCE reported actual change?

Since nothing has changed regarding the scientific merit of the Spitzer study, the interpretive choice one faces regarding the limitations of self-report in this study also remains. Either all of the accounts across all of the measures of change across participant and spousal reports are self-deceptions and/or deliberate fabrications, or they suggest it is possible that some individuals actually do experience change in the dimensions of sexual orientation. Good people can disagree about which of these interpretive conclusions they favor, but assuredly it is not unscientific or unreasonable to continue to believe the study supports the plausibility of change.

In fact, the reasonableness of this position has been bolstered recently by the willingness of some of the participants in Spitzer's research to speak up in defense of their experience of change (Armelli, Moose, Paulk, & Phelan, 2013). They expressed clear disappointment in Spitzer's new claims:

### *Countering a One-Sided Representation of Science*

Once thankful to Spitzer for articulating our experience and those of others, we are now blindsided by his “reassessment,” without even conducting empirical longitudinal follow-up. We know of other past participants who also feel disappointed that they have been summarily dismissed. Many are afraid to speak up due to the current political climate and potential costs to their careers and families should they do so. (p. 1336)

It seems clear, then, that unless one postulates initial and ongoing self-deception and fabrication by participants to an incredulous degree, Spitzer’s study still has something to contribute regarding the possibility of change in sexual orientation.

### **Concluding Statements**

There should be no doubt that licensed mental health professionals who practice some form of SOCE care deeply about the well-being of sexual minority youth and see SOCE as a valid option for psychological care, while simultaneously affirming the client’s right to pursue gay-affirmative forms of psychotherapy. While it is not possible here to respond to all the accusations that are typically leveled against SOCE, the information in the present document should be sufficient to question the scientific (not to mention Constitutional) merits of California SB 1172 and New Jersey AB 3371.

As we noted at the outset:

- (1) The science as pertains to SOCE efficacy and harm is not nearly as conclusive and definitive as proponents of SB 1172 and AB 3371 portray them to be. Their one-sided presentation of the science is a byproduct of a pervasive lack of viewpoint diversity within professional organizations and their constituent social scientists regarding sexual orientation research.

*Countering a One-Sided Representation of Science*

- (2) Professional activism and related advocacy interests have superseded allegiance to the process of scientific discovery regarding SOCE, as is evident in the highly discrepant methodological standards professional organizations have utilized to evaluate efficacy and harm.
- (3) An impressive body of scientific data indicates that nonheterosexual sexual orientations should not be viewed as always immutable but are often, though not always, subject to change, especially among youth.
- (4) The role of stigma and discrimination on negative health outcomes among nonheterosexual identities is real but provides only a small and partial understanding of these concerns. Most importantly, applying this literature uncritically to SOCE is scientifically and ethically dubious.
- (5) The proper course of action for politicians and the courts to take given the current limited scientific base of knowledge regarding SOCE should be to encourage further and ideologically diverse research, not to place a ban on its professional practice that supersedes existing regulatory oversight and may create unintended consequences for licensed therapists.

As this brief has documented, there is reasonable evidence to suggest that professional associations such as the APA do not approach the SOCE literature in an objective manner, but rather with an eye to their advocacy interests. This is seen in the purposeful exclusion of conservative and SOCE-sympathetic psychologists from the APA Task Force as well as the clearly uneven application of methodological standards in assessing evidence of SOCE efficacy and harm.

## *Countering a One-Sided Representation of Science*

As the Task Force noted, the prevalence of success and harm from SOCE cannot be determined at present. Anecdotal accounts of harm, which are a focal point of attention by supporters of SB 1172 and AB 3371, cannot serve as a basis for the blanket prohibition of an entire form of psychological care, however meaningful they may be on a personal level. While such “hearsay” evidence is “not nothing,” it is negligent if not fraudulent that APA and other professional organizations accept such unverified claims that experiences of SOCE were “harmful” while dismissing much better-documented claims that experiences of SOCE were “beneficial” and were not “harmful” (Phelan, Whitehead, & Sutton, 2009). Indeed, it is not difficult to find counterbalancing anecdotal accounts of benefit from SOCE (see <http://www.voices-of-change.org/>). Furthermore, accounts of harm cannot tell us if the prevalence of reported harm from SOCE is any greater than that from psychotherapy in general, where research demonstrates that 5 to 10% of clients report deterioration while up to 50% experience no reliable change during treatment (Hansen, Lambert, & Forman, 2002; Lambert & Ogles, 2004).

The normative occurrence of spontaneous change in sexual orientation among youth, the nontrivial degree of choice reported by some in the development of sexual orientation, and the questionable blanket application of the literature on stigma and discrimination to SOCE further bring into question the appropriateness of SB 1172 and AB 3371. Sexual orientation is not a stable and enduring trait among youth, and this lends plausibility to the potential for professionally conducted SOCE to assist in change in unwanted same-sex attraction and behaviors with some minors. Granted, high-quality research is needed to confirm this suspicion. However, it should be mentioned in this regard that SB 1172 and AB 3371 would make further research on SOCE with minors impossible in California and New Jersey, respectively, despite the APA Task Force’s clear mandate that such research be conducted (APA, 2009).

Any genuine harm that results from SOCE practice with minors can most appropriately be remedied by the application of ethical principles of practice, including

informed consent, and addressed through the existing oversight functions of state regulatory boards and state mental health associations. It is questionable and unlikely that the tangible, prosecutable harms from SOCE are as widespread as SB 1172 and AB 3371 sponsors claim. If such harms did exist, why have we heretofore not seen SOCE practitioners losing their licenses and mental health association memberships in droves? Both SB 1172 and AB 3371 are a legislative overreach that takes an overly broad and absolute approach to SOCE harm and success despite evidence suggesting age, gender, and nonheterosexual sexual orientation differences in the experience and degree of change in sexual orientation. In particular, it is fair to ask whether bisexual and mostly heterosexual youth are well served by SB 1172 and AB 3371, a distinction these laws do not make.

Proponents of SB 1172 and AB 3371 reason that because homosexuality is no longer considered to be a disorder, providing professional SOCE to minors with unwanted same-sex attractions and behaviors is at best unnecessary and at worst unethical. However, this reasoning betrays a profound misrepresentation of the scope of psychotherapeutic practice, as there are numerous examples of professionally sanctioned targets of treatment that are not considered to be disorders. These include relationship distress, normal grief reactions, and unplanned pregnancy. Clients often pursue psychological care for such difficulties due to deeply held religious and moral beliefs—such as beliefs that divorce or abortion are wrong—and may experience significant emotional distress in addressing these issues. In this context, the selective attention that SB 1172 and AB 3371 give to SOCE again hints at political advocacy rather than science as a primary inspiration for this law.

The religiously conservative faith community will not be well served if SOCE among minors is judged *never* to be an appropriate modality for psychological care, especially when the affirmative interventions include the correction of the client's "false assumptions." Should the court agree with this line of argument, then the court

is unconstitutionally taking a stand on the validity of certain forms of religious belief. By implying that there is always a better method than any form of SOCE, backers of SB 1172 and AB 3371 presume to know what form of psychological care for unwanted same-sex attractions and behaviors is best for the religiously motivated minor clients and their parents. Neither the courts nor the APA should be substituting their judgment for that of a seventeen-year-old who is calculating a cost-benefit analysis in deciding whether to undergo SOCE despite the risks. The APA is quite clear that it supports the competence of a seventeen-year-old girl to give consent to an abortion. Why does the seventeen-year-old lose competence when it comes to SOCE? Similarly, the APA is on record as supporting the availability of sexual reassignment surgery for adolescents (APA, 2008b), and AB 3371 explicitly protects this option. Is it reasonable that seventeen-year-olds who believe themselves to be the wrong biological sex be allowed to surgically alter genitalia while others with unwanted same-sex attractions and behavior be prohibited from even *talking* to a licensed therapist in a manner that could be construed as promoting the pursuit of change? This question is especially relevant in light of recent high-quality longitudinal research that suggests sexual reassignment surgery does not remedy high rates of morbidity and mortality among transgendered individuals (Dhejne et al., 2011).

The Task Force *Report* (APA, 2009) and the mental health associations that subsequently relied on it for their resolutions on SOCE provide one viewpoint into research and reasoning that likely has some merit but must be considered incomplete and therefore not definitive enough to justify a complete ban on SOCE with minors. Currently, there is a lack of sociopolitical diversity within mental health associations (Redding, 2001) that has an inhibitory influence on the production of scholarship in controversial areas such as SOCE that might run counter to preferred worldviews and advocacy interests. An authentically scientific approach to a contentious subject must proceed in a different direction in order to give confidence that the relevant database is

a sufficiently complete one on which to base public policy. As Haidt (2012) observed, genuine diversity of perspective is absolutely necessary:

In the same way, each individual reasoner is really good at one thing: finding evidence to support the position he or she already holds, usually for intuitive reasons. . . . This is why it's so important to have intellectual and ideological diversity within any group or institution whose goal is to find truth (such as an intelligence agency or a community of scientists) or to produce good public policy (such as a legislature or advisor board). (p. 90)

Such diversity is precisely what is currently lacking in professional mental health organizations and their associated scientific communities when it comes to the study of contested social issues related to sexual orientation, including SOCE (Wright & Cummings, 2005). If this were not true, it would be hard to understand how the American Psychological Association's leadership body—the Council of Representatives—could vote 157-0 to support same-sex marriage, a result that undoubtedly represents a “statistically impossible lack of diversity” (Jayson, 2011; Tierney, 2011).

To repeat a final time, a truly scientific response to the concerns of the sponsors of California SB 1172 and New Jersey AB 3371 would be to encourage bipartisan research into SOCE with minors that could provide sound data to answer questions of harm and efficacy that currently are only primitively understood. SOCE practitioners would assuredly embrace such an opportunity (Jones et al., 2010). Unfortunately, the approach taken by SB 1177 and AB 3371 sponsors represented only one political and legislative perspective on how to best address the challenges that come with the psychological care of unwanted same-sex attractions and behaviors. That approach is therefore a scientifically premature—and unjust—curtailment of the rights of current and potential SOCE consumers, their parents, and their therapists and should not be allowed to stand.

## References

- Altman, D., & Bland, J. M. (1995). Statistics notes: Absence of evidence is not evidence of absence. *British Medical Journal*, *311*, 485.
- American Psychological Association. (1998). *Answers to your questions for a better understanding of sexual orientation and homosexuality*. Washington, DC: Author.
- American Psychological Association (2008a). *Answers to your questions for a better understanding of sexual orientation and homosexuality*. Washington, DC: Author. Retrieved from [www.apa.org/topics/orientation.pdf](http://www.apa.org/topics/orientation.pdf)
- American Psychological Association. (2008b). *Transgender, gender identity, and gender expression non-discrimination*. Retrieved from <http://www.apa.org/about/policy/transgender.espx>
- American Psychological Association. (2009). *Report of the APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation*. Retrieved from <http://www.apa.org/pi/lgbt/resources/therapeuticresponse.pdf>
- American Psychological Association. (2012). Guidelines for psychological practice with lesbian, gay, and bisexual clients. *American Psychologist*, *67*(1), 10–42. doi:10.1037/a0024659
- American Psychiatric Association. (2013). *LGBT-sexual orientation*. Retrieved from <http://www.psychiatry.org/mental-health/people/lgbt-sexual-orientation>
- Armelli, J. A., Moose, E. L., Paulk, A., & Phelan, J. E. (2013). A response to Spitzer's (2012) reassessment of his 2003 study of reparative therapy of homosexuality. *Archives of Sexual Behavior*, *41*, 1335–1336. doi:10.1007/s10508-012-0032-6
- Bailey, J. M., Dunne, M. P., & Martin, N. G. (2000). Genetic and environmental influences on sexual orientation and its correlates in an Australian twin sample. *Journal of Personality and Social Psychology*, *78*, 524–536. doi:10.1037//0022-3514.78.3.524

*Countering a One-Sided Representation of Science*

- Bearman, P. S., & Bruckner, H. (2002). Opposite-sex twins and adolescent same-sex attraction. *American Journal of Sociology*, *107*, 1179–1205.
- Bell, A. P., Weinberg, M., & Hammersmith, S. K. (1981). *Homosexuality: A study of diversity among men and women*. New York: Simon & Schuster.
- Beyer, C., Baral, S. D., van Griensven, F., Goodreau, S. M., Chariyalertsak, S., Wirtz, A., and Brookmeyer, R. (2012, July 28). Global epidemiology of HIV infection in men who have sex with men. *The Lancet*, *380*, 366–377.
- Carey, D. (2007, September 20). Group to review therapy stance. *Oakland Tribune*. Retrieved from [http://findarticles.com/p/articles/mi\\_qn4176/is\\_20070711/ai\\_n19358074](http://findarticles.com/p/articles/mi_qn4176/is_20070711/ai_n19358074)
- Centers for Disease Control. (2011). *HIV and AIDS among gay and bisexual men*. Retrieved from <http://www.cdc.gov/nchhstp/newsroom/docs/2012/CDC-MSM-0612-508.pdf>
- de Graaf, R., Sandfort, T. G. M., & ten Have, M. (2006). Suicidality and sexual orientation: Differences between men and women in a general population-based sample from the Netherlands. *Archives of Sexual Behavior*, *35*, 253–262. doi:10.1007/s10508-006-9020-z
- Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Langstrom, N., & Landen, M. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: Cohort study in Sweden. *PLoS ONE*, *6*(2), 1–8. doi:10.1371/journal.pone.0016885
- Diamond, L. M. (2005). A new view of lesbian subtypes: Stable versus fluid identity trajectories over an 8-year period. *Psychology of Women Quarterly*, *29*, 119–128.
- Diamond, L. M. (2008). Female bisexuality from adolescence to adulthood: Results from a 10-year longitudinal study. *Developmental Psychology*, *44*, 5–14. doi:10.1037/0012-1649.44.1.5

- Dickson, N., Paul, C., & Herbison, P. (2003). Same-sex attraction in a birth cohort: Prevalence and persistence in early adulthood. *Social Science & Medicine*, *56*, 1607–1615. doi:10.1016/S0277-9536(02)00161-2
- Dreger, A. (2012, April 11). How to ex an “ex-gay” study. Retrieved from <http://psychologytoday.com/blog/fetishes-i-dont-get/201204/how-ex-ex-gay-study>
- Francis, A. M. (2008). Family and sexual orientation: The family-demographic correlates of homosexuality in men and women. *Journal of Sex Research*, *45*, 371–377. doi:10.1080/00224490802398357
- Freund, K., & Blanchard, R. (1983). Is the distant relationship of fathers and homosexual sons related to the sons’ erotic preference for male partners, or to the sons’ atypical gender identity, or both? *Journal of Homosexuality*, *9*, 7–25.
- Frisch, M., & Hviid, A. (2006). Childhood family correlates of heterosexual and homosexual marriages: A national cohort study of two million Danes. *Archives of Sexual Behavior*, *35*, 533–547.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. New York: Pantheon Books.
- Hansen, N. B., Lambert, M. J., & Forman, E. M. (2002). The psychotherapy dose-response effect and its implications for treatment delivery services. *Clinical Psychology: Science and Practice*, *9*, 329–343. doi:10.1093/clipsy.9.3.329
- Herek, G. M. (1991). Myths about sexual orientation: A lawyer’s guide to social science research. *Law and Sexuality*, *1*, 133–172.
- Herek, G. M. (2010). Sexual orientation differences as deficits: Science and stigma in the history of American psychology. *Perspectives on Psychological Science*, *5*, 693–699. doi:10.1177/1745691610388770
- Herek, G. M., Norton, A. T., Allen, T. J., & Sims, C. L. (2010). Demographic, psychological, and social characteristics of self-identified lesbian, gay, and bisexual adults in a US probability sample. *Sexuality Research and Social Policy*, *7*, 176–200.

- Hooker, E. (1957). The adjustment of the male overt homosexual. *Journal of Projective Techniques*, 21, 18–31.
- Hooker, E. (1993). Reflections of a 40-year exploration. *American Psychologist*, 48, 450–453.
- Huebner, D. M., Neilands, T. B., Rebchook, G. M., & Kegeles, S. M. (2011). Sorting through chickens and eggs: A longitudinal examination of the associations between attitudes, norms, and sexual risk behaviors. *Health Psychology*, 30 (1), 110–118. doi:10.1037.a0021973
- Jayson, S. (2011, August 5). Citing new research, psychology group supports gay marriage. *USA Today*. Retrieved from <http://usatoday30.usatoday.com/news/health/wellness/marriage/story/2011/08/Citing-new-research-psychology-group-supports-gay-marriage/49798054/1>
- Jones, S. L., Rosik, Christopher H., Williams, R. N., & Byrd, A. D. (2010). A scientific, conceptual, and ethical critique of the report of the APA Task Force on Sexual Orientation. *The General Psychologist*, 45(2), 7–18. Retrieved May 31, 2011, from <http://www.apa.org/divisions/div1/news/fall2010/Fall%202010%20TGP.pdf>
- Jones, S. L., & Yarhouse, M. A. (2007). *Ex-gays?: A longitudinal study of religiously mediated change in sexual orientation*. Downers Grove, IL: InterVarsity Press Academic.
- Klein, F., Sepekoff, B., & Wolf, T. J. (1985). Sexual orientation: A multi-variable dynamic process. *Journal of Homosexuality*, 11, 35–49.
- Lambert, M. J., & Ogles, B. M. (2004). *The efficacy and effectiveness of psychotherapy*. New York, NY: Wiley.
- Langstrom, N., Rahman, Q., Carlstrom, E., & Lichtenstein, P. (2010). Genetic and environmental effects on same-sex sexual behavior: A population study of twins in Sweden. *Archives of Sexual Behavior*, 39, 75–80. doi:10.1007/s10508-008-9386-1
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality*. Chicago, IL: University of Chicago Press.

- Laumann, E. O., Michael, R. T., & Gagnon, J. H. (1994). A political history of the national sex survey of adults. *Family Planning Perspectives, 26*, 34–38.
- Marks, L. (2012). Same-sex parenting and children's outcomes: A closer examination of the American Psychological Association's brief on lesbian and gay parenting. *Social Science Research, 41*, 735–751. Retrieved from <http://dx.doi.org/10.1016/j.ssresearch.2012.03.006>
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health, 91*, 1869–1876.
- McCord, J., McCord, W., & Thurber, E. (1962). Some effects of paternal absence on male children. *Journal of Abnormal and Social Psychology, 64*, 361–369.
- Mohr, D. C. (1995). Negative outcome in psychotherapy: A critical review. *Clinical Psychology: Science and Practice, 2*, 1–27.
- National Association for Research and Therapy of Homosexuality. (2010). Practice guidelines for the treatment of unwanted same-sex attractions and behaviors. *Journal of Human Sexuality, 2*, 5–65. Retrieved from <http://www.scribd.com/doc/115506183/Journal-of-Human-Sexuality-Vol-2>
- Newcomb, M. E., & Mustanski, B. (2011). Moderators of the relationship between internalized homophobia and risky sexual behavior in men who have sex with men: A meta-analysis. *Archives of Sexual Behavior, 40*, 189–199. doi:10.1007/s10508-009-9573-8
- Ott, M. Q., Wypij, D., Corliss, H. L., Rosario, M., Reisner, S. L., Gordon, A. R., . . . . Bryn, S. (2013). Repeated changes in reported sexual orientation identity linked to substance use behaviors in youth. *Journal of Adolescent Health, 52*, 465–472. doi:10.1016/j.jadohealth.2012.08.004
- Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*, 531–554. doi:10.1037/a0016059

- Pearson, J., & Wilkinson, L. (2013). Family relationships and adolescent well-being: Are families equally protective for same-sex attracted youth? *Journal of Youth and Adolescence*, *42*, 376–393. doi:10.1007/s10964-012-9865-5
- Peplau, L., Spalding L. R., Conley, T. D., & Veniegas, R. C. (1999). The development of sexual orientation in women. *Annual Review of Sex Research*, *10*, 70–99.
- Peters, D. K., & Cantrell, P. J. (1991). Factors distinguishing samples of lesbian and heterosexual women. *Journal of Homosexuality*, *2*, 1–15.
- Phelan, J. E., Whitehead, N., & Sutton, P. M. (2009). What the research shows: NARTH's response to the APA claims on homosexuality. *Journal of Human Sexuality*, *1*, 5–118. Retrieved from <http://www.scribd.com/doc/115507777/Journal-of-Human-Sexuality-Vol-1>
- Prejean, J., Song, R., Hernandez, A., Ziebell, A., Green, T., Walker, F., . . . Hall, H. I. (2011). Estimated HIV incidence in the United States, 2006–2009. *PLoS ONE*, *6*, 1–13. doi:10.1371/journal.pone.0017502
- Redding, R. E. (2001). Sociopolitical diversity in psychology. *American Psychologist*, *56*, 205–215. doi:10.1037//0003-066X.6.3.205
- Roberts, A. L., Glymour, M. M., & Koenen, K. C. (2013). Does maltreatment in childhood affect sexual orientation in adulthood? *Archives of Sexual Behavior*, *42*, 161–171. doi:10.1007/s10508-012-0021-9
- Rosik, Christopher H. (2012). Did the American Psychological Association's *Report on Appropriate Therapeutic Responses to Sexual Orientation* apply its research standards consistently? A preliminary examination. *Journal of Human Sexuality*, *4*, 70–85.
- Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, *123*, 346–352. doi:10.1542/peds.2007-3524

*Countering a One-Sided Representation of Science*

- Sandfort, T. G. M., Bakker, F., Schellevis, F. G., & Vanwesenbeeck, I. (2006). Sexual orientation and mental and physical health status: Findings from a Dutch population survey. *American Journal of Public Health, 96*, 1119–1125.
- Sandfort, T. G. M., Bakker, F., Schellevis, F. G., & Vanwesenbeeck, I. (2009). Coping styles as mediator of sexual orientation-related health differences. *Archives of Sexual Behavior, 38*, 253–263. doi:10.1007/s10508-007-9233-9
- Savin-Williams, R. C., Joyner, K., & Rieger, G. (2012). Prevalence and stability of self-reported sexual orientation identity during young adulthood. *Archives of Sexual Behavior, 41*, 103–110. doi:10.1007/s10508-012-9913-y
- Savin-Williams, R. C., & Ream, G. L. (2007). Prevalence and stability of sexual orientation components during adolescence and young adulthood. *Archives of Sexual Behavior, 36*, 385–349. doi:10.1007/s10508-006-9088-5
- Savin-Williams, R. C., Rieger, G., & Rosenthal, A. M. (2013). Physiological evidence for a mostly heterosexual orientation among men. *Archives of Sexual Behavior*. Advance online publication. doi:10.1037/s10508-013-0093-1
- Saewyc, E. M. (2011). Research on adolescent sexual orientation: Development, health disparities, stigma, and resilience. *Journal of Research on Adolescence, 21*, 256–272. doi:10.1111/j.1532-7795.2010.00727.x
- Schroeder, M., & Shildo, A., (2002). Ethical issues in sexual orientation conversion therapies. In A. Shildo, M. Schroeder, & J. Drescher (Eds.), *Sexual conversion therapy: Ethical, clinical and research perspectives* (pp. 131–166). New York: Haworth.
- Schumm, W. R. (2012). Re-examining a landmark research study: A teaching editorial. *Marriage & Family Review, 48*, 465–489. doi:10.1080/01494929.2012.677388
- Shildo, A., & Schroeder, M. (2002). Changing sexual orientation: A consumer's report. *Professional Psychology: Research and Practice, 33*, 249–259. doi:10.1037//0735-7028.33.3.249

*Countering a One-Sided Representation of Science*

- Siegelman, M. (1981). Parental backgrounds of homosexual and heterosexual men: A cross national replication. *Archives of Sexual Behavior, 10*, 505–513.
- Spitzer, R. L. (2003). Can some gay men and lesbians change their sexual orientation? 200 participants reporting a change from homosexual to heterosexual orientation. *Archives of Sexual Behavior, 32*(5), 403–417.
- Spitzer, R. L. (2012). Spitzer reassesses his 2003 study of reparative therapy of homosexuality [Letter to the editor]. *Archives of Sexual Behavior*. Advance online publication. doi:10.1007/s10508-012-9966-y
- Tierney, J. (2011, February 11). Social scientist sees bias within. *The New York Times*. Retrieved from [http://www.nytimes.com/2011/02/08/science/08tier.html?\\_r=3](http://www.nytimes.com/2011/02/08/science/08tier.html?_r=3)
- Townes, B. D., Ferguson, W. D., & Gillam, S. (1976). Differences in psychological sex, adjustment, and familial influences among homosexual and nonhomosexual populations. *Journal of Homosexuality, 1*, 261–272.
- Walker, J. J., & Longmire-Avital, B. (2012). The impact of religious faith and internalized homonegativity on resiliency for black lesbian, gay, and bisexual emerging adults. *Developmental Psychology*. First online publication. doi:10.1037/a0031059
- Whitehead, N. E. (2010). Homosexuality and co-morbidities: Research and therapeutic implications. *Journal of Human Sexuality, 2*, 124–175. Retrieved from [http://www.mygenes.co.nz/whiteheadcomorbid10\\_2.pdf](http://www.mygenes.co.nz/whiteheadcomorbid10_2.pdf)
- Whitehead, N. E., & Whitehead, B. (2010). *My genes made me do it! A scientific look at sexual orientation*. Whitehead Associates. Retrieved from <http://www.mygenes.co.nz/download.htm>
- Wilson, H. W., & Widom, C. S. (2010). Does physical abuse, sexual abuse, or neglect in childhood increase the likelihood of same-sex sexual relationships and cohabitation? A prospective 30-year follow-up. *Archives of Sexual Behavior, 39*, 63–74. doi:10.1007/s10508-008-9449-3
- Wright, R. W., & Cummings, N. E. (2005). *Destructive trends in mental health: The well-intentioned path to harm*. New York: Routledge.

*Countering a One-Sided Representation of Science*

- Yarhouse, M. (2009). The battle regarding sexuality. In N. C. Cummings, W. O'Donahue, & J. Cummings (Eds.), *Psychology's war on religion* (pp. 63–93). Phoenix, AZ: Zeig, Tucker & Theisen, Inc.
- Zucker, K. J. (2003). The politics and science of “reparative therapy.” *Archives of Sexual Behavior*, 32(5), 399–401.