A Critical Review of 2020 Research on Harms from Efforts to Change Sexual Attractions and Behaviors: Minimal Advancement of Science, Maximal Advancement of Agendas

Christopher H. Rosik, Ph.D.[1]

Link Care Center & Fresno Pacific University

The following critique provides a critical examination of three recent empirical studies purporting to show evidence of harms from exposure to change-allowing therapies. Thirteen areas of methodological and definitional concern are presented to highlight the severely problematic nature of utilizing this research to support legal bans on SAFE-T in particular and contemporary change-allowing therapies generally. This analysis also briefly examines a model law for banning change-related practices, which identified some new developments in this ban template with special relevance to faith-based practitioners and organizations. Overall, these articles shed more light on the motives and aims of the authors' agendas than they provide scientifically based assistance in identifying specific sources of harm directly attributable to contemporary SAFE-T. Hence, these studies (like most before them) cannot be credibly employed to support the draconian infringements on professional and religious speech and practice dictated by current legislative bans.

Keywords: SAFE-T, SOCE, conversion therapy, research limitations, legal bans

The year 2020 has seen a significant expansion of the research base purporting harms from the pursuit of change in unwanted same-sex behaviors and attractions in a professional therapy or religious counseling setting. A literature base is being constructed by opponents of sexual attraction fluidity exploration in therapy (SAFE-T)[2]

[1] Christopher H. Rosik, Ph.D., is a psychologist and director of research at the Link Care Center in Fresno, California, as well as a clinical faculty member of Fresno Pacific University. Dr. Rosik is a Past-President of the Alliance for Therapeutic Choice and Scientific Integrity and currently serves as the Editor for the *Journal of Human Sexuality*.

Correspondence concerning this article should be addressed to Christopher H. Rosik, 1734 W. Shaw Ave., Fresno, CA 93711. Email: christopherrosik@linkcare.org

The author gratefully acknowledges feedback provided by D. Paul Sullins, Ph.D., and Walter R. Schumm, Ph.D., on certain aspects of this critique.

[2] I will employ the term SAFE-T when referring to contemporary change-allowing treatments generally but will use the terms "conversion therapy" (CT) and "sexual orientation change efforts" (SOCE) when referring to details of a specific article where the authors adopt such language.

that is widely believed to be laying a foundation to outlaw such therapies not only for minors in professional therapy contexts, but also for adults and for consumers in religious environments. In this critical review, I will examine three significant studies reporting harm from change-allowing therapies, first describing their findings and subsequently outlining several ways the studies are too methodologically compromised for making widespread claims of harm sufficient to justify the outlawing of professional and religious practice and speech. I follow this with a brief discussion of a recently developed template for therapy bans that appears to provide a strategic "game plan" that would prohibit SAFE-T in municipalities, states, and nations.

Findings from Recent Studies

Blosnich et al. (2020)

John R. Blosnich

Blosnich et al. reported analyzing data from 1,518 nontransgender sexual minority adults obtained through the Generations survey. Their stated intent was to examine how sexual orientation change efforts (SOCE) are associated with suicide morbidity after controlling for adverse childhood experiences (ACEs). Of the 7% of their sample who reported exposure to SOCE, 80.8% reported SOCE from a religious leader. After adjusting for demographics and ACEs, sexual minorities exposed to SOCE had nearly twice the odds of lifetime suicidal ideation, 75% increased odds of planning to attempt suicide, and 88% increased odds of a suicide attempt with minor injury compared with sexual minorities who did not experience SOCE. However, they did not find a significant relation between experiencing SOCE and suicide attempt with moderate or severe injury.

Meanley, Haberlen et al. (2020)

Steven P. Meanley

Meanley, Haberlen et al. found participants (n=1,156) who were included in a multi-city sample of men who have sex with men (MSM) enrolled in the Multicenter AIDS Cohort Study (MACS) who completed health surveys as a part of their biannual study visits. Multivariate regressions were used to examine the associations of prior conversion therapy (CT) with current depressive symptoms, internalize homophobia (IH), PTSD, and cumulative psychosocial conditions. Their sample was predominantly non-Hispanic white. They report 15% of the sample indicated prior CT exposure. Findings indicated men exposed to CT were more likely to have depressive symptoms and above-average IH. These participants also had 2–2.5 times the odds of reporting 1 and ≥ 2 psychosocial conditions, respectively. Resilience was not found to moderate these associations.

Salway et al. (2020)

Travis Salway

Salway et al. utilized a sample (n=8,388) of Canadian sexual minority men from the *Sex Now* survey from 2011 to 2012 with the intent of describing the prevalence, social-demographic correlates, and health consequences of SOCE among these men. Of this sample, 3.5% of participants reported SOCE exposure, which was higher among gay compared to bisexual men, transgender compared to cisgender respondents, those who were "out" about their sexuality compared to those not "out," Indigenous and other racial minorities as compared to White men, and those earning a personal income less than $30,000 compared with those earning at least $60,000. Exposure to SOCE was reported to be positively associated with loneliness, regular illicit drug use, suicidal ideation, and suicide attempt.

An Overview of Methodological Issues and Concerns

The findings from these studies all point to what their authors believe is a definitive conclusion: change-allowing therapies (including SAFE-T) are harmful. However, the following examination of this research instead suggests these studies may not have been exposed to sufficient critical scrutiny by the research teams and the journal reviewers. I note 13 areas of actual and potential concern.

1. Prejudicial Definitions of Change-Allowing Therapies

All of these studies set the stage in their introduction for what follows by defining SOCE or CT in highly prejudicial terms. Blosnich et al. describe SOCE as involving ". . . a variety of approaches such as immersion in heterosexual-focused cognitive therapy, amplification of shame for same-gender attraction, and physical punishment (e.g., electric shock) intended to condition against mental or physical attraction to the same gender" (p. 1024). Meanley, Haberlen et al. state, "Common forms of conversion therapy include aversion/shock therapies, gender norm policing, individual therapies, and religious-focused therapy" (p. 7). Salway et al. label SOCE as ". . . pseudoscientific practices intended to suppress or deny unwanted feelings of sexual attraction to members of the same gender/sex" (p. 503) and state,

> SOCE draw on a range of discredited methods including aversion therapy (e.g., electric shock), attempted desensitization to same-gender/sex erotic materials, psychodynamic therapy with a focus on etiology of the individual's sexuality, and religious approaches (e.g., prayer, Bible reading). (p. 503)

It appears from such caricatures of contemporary SAFE-T that these researchers are stuck in the 1960s and 1970s with little interest in updating their awareness of modern practitioners or practices. A less charitable but more likely characterization would be they are deliberately grooming readers with images of electric shocks and gay porn in order to solidify anti-change prejudice from the get-go. After all, who would not be against such horribly abusive practices, if only they *actually had* been

practiced by professionals in the past *four* decades. In a moment of refreshing candor, University of Utah College of Law professor Clifford Rosky, who developed a therapy ban bill in Utah, confided to the local gay press what these researchers suppressed:

> Licensed therapists haven't been doing electric shock therapy and adversant [sic] practices in decades. . . . What they do these days . . . was talk therapy. As we know, words are just as damaging to children. (2019)

In contrast to these misleading portrayals, a non-rhetorical and more objective depiction of the matter would say something to this effect:

> Decades ago, harmful aversion techniques such as use of electro shocks were utilized in attempts to change sexual orientation by many in the mental health professions. Evidence for the contemporary use of these techniques in change efforts is lacking. Some consumers have reported harm from more recent change efforts. The existent research does not provide definitive conclusions regarding to what extent harms are attributable to the change efforts, what specific change efforts may lead to harm, and how valid it is to generalize from these studies to the population of sexual minorities as a whole, including those who do not identify as LGBT.

2. Questionable Validity of Studies Cited to Depict Change-Allowing Therapies as Universally Harmful

All of these studies make the case for SAFE-T as a serious health hazard for clients by referencing studies known to have significant limitations in their ability to generalize beyond their samples. Blosnich et al. reports negative outcomes from SOCE to include ". . . increased distress, depression, hopelessness, and suicidal thoughts and behaviors" (p. 1024). In support of this conclusion, the authors cite only four articles, which one might assume would provide evidence they believe is the most conclusively indicative of harm. However, two of the studies are Flentje et al. (2013) and Shidlo and Schroeder (2002)—research that has serious limitations. Another of these citations is a survey from the Trevor Project (2019), an activist organization which is not known for being non-partisan.

Not surprisingly, Meanley, Haberlen et al. make similar claims about CT's harms of increased depression, suicidality, and IH. They reference Shidlo and Schroeder (2002) as well as Bradshaw et al. (2015) and Ryan et al. (2020). Finally, Salway et al. report SOCE to be ". . . associated with numerous negative health outcomes including self-hatred, depression, and suicidal ideation and suicide attempts" (p. 503). The authors support this contention by citing four studies (can you guess which ones?): Shidlo and Schroeder, Ryan et al., Flentje et al., and a report from another activist group, Movement Advancement Project (2015), who advocate for broad therapy bans. Later in the article Salway et al. provide only the Ryan et al. and Flentje et al. studies to support their blanket claim that SOCE is associated with ". . . loneliness, substance use, depression, anxiety, suicidal ideation, and suicide attempts" (p. 505). I have enumerated the serious limitations of most of these studies previously (Rosik, 2014; Rosik, 2019a, 2019b), and interested readers can examine these writings for a critical analysis of this literature. I am struck by how prior studies with severe methodological limitations are used as support by current studies with similar deficiencies to produce sweeping

conclusions to support expansive therapy bans. As I have noted before, using this literature to comprehend SAFE-T makes as much sense as studying former marital therapy clients who have since divorced to understand the harms and effectiveness of marital therapy. In what appears to be an ideological echo-chamber within which these researchers exist, one is left to wonder to what degree, if any, these researchers are exposed to alternate perspectives that could help them see their confirmation bias and exert a much needed scientific circumspection.

It is also worth mentioning in this discussion that all of these studies reference the Williams Institute report (Mallory et al., 2018), either by citing the estimates from the report of 700,000 people being exposed to SOCE (Meanley, Haberlen et al.; Salway et al.) or by analyzing data directly from the Generations survey on which the report is based (Blosnich et al.). I have observed in another review (Rosik, 2020a, this issue) the likelihood of significant overestimation of exposure to any meaningful definition of SOCE and the clear evidence of ideological bias in the report's conclusions. Overall, there appears to be a kind of unspoken template for how to introduce the issues whenever SOCE is studied, and to go against this orthodoxy no doubt limits the chances researchers have for publication on the topic in most journals.

3. Reliance on Gay Identified Samples

A growing concern with the literature on change-allowing therapies is the overwhelming reliance on sampling of non-heterosexual persons who identify as gay, lesbian, bisexual, transgender, and other sexual minority identities who are typically surveyed through LGBT-identified venues and networks. The present research studies are no exception to this rule. Blosnich et al., as noted above, utilized the Generations survey, whose eligibility criteria for involvement in the study included the identification as LGB, queer, or same-gender loving. Salway et al. obtained their data through *Sex Now*, an online survey of sexual minority men in Canada recruited from LGB venues, ". . . including dating and sex-seeking websites, social media, community organization newsletters, a database of previous study participants, and word of mouth" (p. 504). As could be expected, this recruitment approach resulted in a sample where 96.9% of participants were gay or bisexually identified. Finally, Meanley, Haberlen et al. indicated that 89.4% of their sample identified as gay men. They also noted that the 10.8% of original participants who did not provide complete responses and were therefore excluded from the analyses were significantly more likely to have indicated a non-gay identity.

This is problematic in that recent research is suggesting that LGB-identified persons and those with SSA who reject an LGB identity are not equivalent groups of sexual minorities and likely have different patterns of religious belief and practice, sexual practice, and even experiences of change-allowing therapies (Lefevor et al., 2020; Rosik, 2020b). Those not LGB-identified, compared to those adopting LGB identities, tend to report being more traditionally religious, more actively religious, less engaged in same-sex behavior, more single and celibate or in a heterosexual relationship, and more likely to report most change-oriented goals as being helpful. This plausibly has created significant misrepresentation of those rejecting an LGB identity undiscoverable by research such as that under scrutiny in this analysis. The potential size of this lacuna within organized psychology begs for there to be greater attention paid to this minority within a

minority as therapy bans expand in scope and jurisdiction.

4. Additional Sampling Concerns

Apart from failing to capture non-LGB-identified sexual minorities, these studies have other limitations that make generalizing beyond the samples highly questionable. For example, Meanley, Haberlen et al. and Salway et al. excluded women entirely, which at the very least should limit generalizations about change-allowing therapies from these studies to men. Although Meanley, Haberlen et al. thankfully did not recruit on the basis of LGBT identity they obtained data from the Multicenter AIDS Cohort Study (MACS), an ongoing study of men where eligibility is limited to men who have had any sexual intercourse with another man since enrolling in the MACS. Not surprisingly, they reported that 49.1% of their sample was HIV+. These authors cite an early study from this project, which gives some indication of the sexual activity of this cohort (Kaslow et al., 1987):

> Nearly 5,000 homosexual men volunteered for semiannual interview, physical examination, and laboratory testing in four metropolitan areas. A significant majority of these men in each center (69–83%) reported having 50 or more lifetime sexual partners, and over 80% had engaged in receptive anal intercourse with at least some of their partners in the previous two years. (p. 310)

Again, such sample characteristics likely eliminated consideration of many sexual minorities who might report benefit from SAFE-T, since these individuals tend to be more religious and often have limited same-sex experience (Lefevor et al., 2020; Rosik, 2020b).

Meanley, Haberlen et al. additionally reported 29.8% of their sample indicated "limited decision-making power" regarding the initiation of therapy, which may indicate they were minors at the time forced by parents to go to psychotherapy or religious counseling. Should this be a marker of coercion, then this further brings into question the validity of generalizing from this sample to contemporary forms of SAFE-T, which is non-coercive and client-centered by definition. Finally, Meanley, Haberlen et al.'s sample consisted of older gay men who reflected upon their past experience of SOCE, which raises a further concern worthy of its own section.

5. Retrospective Reports

The problem of potential recall bias has been universal in this literature to date, and these studies prove no exception. Blosnich et al.'s use of the Generations survey means that participants were reported on SOCE experiences decades earlier (Rosik, 2020a, this issue). Interestingly, they acknowledge that participant reports of ACE exposure may be prone to recall bias (p. 1029), but do not offer this as a concern for reports of SOCE. Salway et al. note 78.3% of participants exposed to SOCE had been exposed more than 12 months ago and 61% of the entire sample were age 40 or older. This suggests their participants were recalling SOCE from years and often decades prior to the study. Meanley, Haberlen et al.'s study of midlife and older men lent itself specifically to recall concerns, which the authors specifically mention as a limitation. And with good reason. The average age of their full sample was 62.6 years (SD=8.6) and among those exposed to SOCE, the average age beginning SOCE was 23.8 years (SD=10.2). Prior SOCE was also found to be significantly

more prevalent among older participants. Hence, it is exceedingly probable that most SOCE experiences being recollected had occurred nearly four decades ago. What this great lag time means is that the SOCE practices being evaluated are those from the ’70s and ’80s, which bear little resemblance to the practices of therapists who explore sexual attraction fluidity with their clients today. It is questionable to call for bans on contemporary psychotherapy practices that may well bear little resemblance to what these men went through.

The recollection of such distant experiences is fraught with peril, as the APA (2009) Task Force Report noted: “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 is noteworthy that Meanley, Stall et al. (2020) dismiss these concerns in a study using the same dataset, stating, “. . . we argue that our analyses are warranted based on considerable evidence that demonstrates the enduring salience of shame that arise from traumatic experiences” (p. 338). This dismissal comes despite the relative uniqueness of their sample and the fact they neither assessed nor controlled for shame, PTSD, and aversive childhood experiences (ACEs). Surely the authors would treat positive or neutral reports of CT that were four decades old with immense skepticism.

6. Confounding Effects of Childhood Trauma

Neither Salway et al. nor Meanley, Haberlen et al. reported participants’ experience of childhood trauma. Such data may not have been available in the dataset employed by Salway et al., but regardless, this possible confounding covariate seemed to be of no interest to the authors of both studies in considering the associations of SOCE with harms. As is common in the literature, this plausible limitation is conveniently ignored. In fact, Meanley, Haberlen et al. even mention in their discussion the associations found among sexual minorities in a prior study using the MACS dataset between long-term depressive symptoms and “sexuality-related victimization in formative years.” This suggests that childhood sexual victimization was an available but unutilized variable to be included by Meanley, Haberlen et al. if they had been so inclined. It appears from their writing the authors only consider SOCE to be a form of childhood trauma leading to harms and hence fail to explore the less “affirmative” view that pre-therapy childhood trauma experiences may in fact account for the harms attributed to SOCE.

By contrast, Blosnich et al.’s study is one of the few to actually try to account for childhood trauma and makes the case that the effects of exposure to SOCE cannot be attributed simply to such events. Unfortunately, their operationalization of their trauma variable is done in such a manner as to bring their findings into serious question. The main issue is that these researchers used an additive total of aversive childhood events (ACEs) as their measure of ACEs in their regression models. However, inspecting their Table 2 examining ACE’s and SOCE exposure for each specific type of traumatic experience yields a critical insight: the sum of the ACEs of the SOCE group was not composed of the same ACEs as the non-SOCE group, and not all ACEs have the same effect on suicidality. The SOCE and non-SOCE groups did not differ on experiences of household substance use, parental separation or divorce, parental mental illness, and incarcerated household member.

However, the SOCE group experienced a very different distribution of ACEs than the non-SOCE group in regard to significantly greater exposure to parental violence and

emotional, physical, and sexual abuse. Specifically, the SOCE group was three times more likely to have experienced sexual abuse and twice as likely to report experiencing physical abuse and violence between parents. These latter traumatic experiences interact to produce even stronger risks, if someone experiences more than one of them (Fuller-Thomson et al., 2016). This level of risk is more than sufficient to account for the increased risk of suicidality among the SOCE group. Had the authors adjusted their models for this difference in ACE distributions between their sample groups rather than simply utilize the sum total of ACE categories reported by participants, it would likely have accounted for the difference in risk, conceivably even resulting in a lower suicide risk among the SOCE group.

7. Lack of Adequate Comparison Groups

All three of these studies attribute harms to change-oriented practices on the basis of contrasts between a SOCE or CT exposure group and a comparison group. Meanley, Haberlen et al. compare lifetime CT exposure group with a no CT exposure group. Salway et al. has a similar contrast between SOCE exposure and no exposure groups. Blosnich et al. report differences between participants who experienced SOCE and those who did not. This may appear convincing to those predisposed to finding harm from such experiences, but in truth these comparisons are quite insufficient and potentially misleading. What is needed and not provided is a comparison group of participants who experienced therapies that *did not* involve SOCE. Only with such a comparison can we really obtain any insight into the degree participants involved in therapy *in general* constitute a distressed group whose reports of emotional and behavioral problems may have pre-existed before SOCE rather than were caused by it. To their credit, but with little fanfare, Blosnich et al. at least acknowledge this issue: ". . . we could not examine the relationship of non-SOCE mental health treatments, ACEs, and suicidality" (p. 1029).

8. Single Item Measures

Each of the studies under examination utilized a single item measure to assess for exposure to SOCE or CT. The *Sex Now* survey utilized by Salway et al. asked participants, "Have you ever attended sexual repair/reorientation counseling?" with response options being "no," "some time ago," "last 12 months," or "both prior to and last 12 months." The Generations survey employed by Blosnich et al., asked participants, "Did you ever receive treatment from someone who tried to change your sexual orientation (such as try to make you straight/heterosexual?" Response options were "no," "yes, from a health care professional (such as a psychologist or counselor who was not religious focused)," and "yes, from a religious leader (such as a pastor, religious counselor, priest)." Meanley, Haberlen et al. reported their CT item asked participants to indicate whether they had ever undergone conversion therapy to change their sexual orientation." Response options were "no" and "yes," and "yes" responders were provided a battery of items to specify the types of therapies undergone (e.g., psychotherapy, group-based therapy, prayer/religion-based therapy, gender role reinforcement, aversion therapy, pharmacological treatments).

Although single-item measures have their role, particularly in exploratory research, they are not without significant limitations in light of the aim of these researchers to support change-allowing therapy bans. These measures of SOCE are fraught with validity concerns, for being non-specific as regards to "treatment," "tried to change," "try to make,"

"conversion therapy," or "repair/ reorientation counseling" and hence impossible to interpret definitively. Such "treatments" could run the gamut from harmful aversive practices to generic prayers for healing or discussions of religious moral teaching. We cannot know what participants envisioned and thus the authors can have no real understanding of the source of their findings. This state of affairs is acknowledged, in a rather understated manner, by Blosnich et al.'s comment that, "Our measure of SOCE is limited in that it does not differentiate among the diverse experiences SOCE people may have had" (p. 1029). They further note, "The Generations survey team developed the SOCE measure, and although it seems straightforward, no evidence of the measure's validity and reliability exists at this time" (p. 1029). In other words, we cannot be sure what we think we are measuring really is what is being measured or that it measures the same thing across participants.

Meanley, Haberlen et al. attempt to provide more specificity, finding CT occurred in psychotherapy for 67.3% of participants reporting CT exposure. Group-based psychotherapy was the next most reported form of CT at 39.2%, followed by prayer/religion-based CT at 30.4%. Tellingly in light of the aforementioned ubiquity of including damaging aversive techniques in contemporary definitions of CT, even in Meanley, Haberlen et al.'s older age sample, only 4.1% reported ever experiencing CT that included aversion techniques. Although these findings are of interest, they do not solve the problem of what specific techniques and practices constituted CT. Hence, even if the findings were valid, they would only support an empirical basis for the most nebulous and overreaching prohibitions on professional therapy and religious practice. This is how it has become possible for judges to equate preventing trans girls from competing in biological girls' sports with conversion therapy (M. Sharp, personal communication, August 31, 2020).

It is also worth observing that such lack of specificity, when used in research that purports to *support* the facilitation of change through therapy, is grounds for having studies retracted on the basis of statistical concerns. Case in point is the Santero et al. (2018) paper retracted by *Linacre Quarterly*, which was withdrawn for three reasons, the first two being:

> 1. No common intervention was given to participants that would allow for a valid conclusion to be drawn.
>
> 2. The paper did not establish a demonstrated relationship between the intervention and the survey that measures the intervention in that the paper did not clearly address whether all respondents were treated according to the same (or similar) protocols and for the same periods of time, and/or by therapists of like or similar training and expertise. ("Retraction Notice," p. 108)

Details concerning the questionable rationale for this retraction have been offered elsewhere (Retraction Watch, 2019; Whitehead, 2019), but for the present purposes it is enough to observe that these reasons for retraction would also appear to apply to the non-specific and hence non-standardized definitions of SOCE or CT in the research considered here. This is yet another example of the glaring lack of evenhandedness in the evaluation of alleged harms and benefits from change-allowing therapies dating back to the APA Report (American Psychological Association, 2009), wherein the methodological standards are exceedingly more rigorous for claims of benefit than they are for assertions of harm (Jones, Rosik, & Williams, 2010).

One final source of non-specificity is the potential confounding involved in lumping change-allowing professional psychotherapy with unregulated religious approaches to change. It needs to be emphasized that none of these three studies can distinguish between religious and licensed therapists, Salway et al. because their item did not make such a differentiation and Meanley, Haberlen et al. and Blosnich et al. because they chose to combine into a single category those who experienced change-oriented practices facilitated by either or both types of providers. This further limits their ability to generalize findings given the plausibility of differential outcomes between provider types.

9. The High-Low Fallacy

Consumers of the literature on change-allowing therapies need to pay special attention to the presence of the high-low fallacy. This fallacy occurs when researchers interpret small but significant differences at one end of a scale as if the differences reflect values at the scale endpoints (Reyna, 2018). An example of this fallacy is found in Meanley, Haberlen et al.'s treatment of their findings on internalized homophobia (IH). These researchers claim in their discussion that CT contributes to psychosocial health inequality among men having sex with men in part because of its association with greater IH. However, the distribution of IH in the sample was reported to be right skewed with only 15.5% of participants having above-average IH. This raises the likelihood of the high-low fallacy coming into play, i.e., the comparison is actually between those who are very low in IH with those who are moderately low in IH, but it is represented as a contrast between a low IH non-SOCE group and a high IH SOCE group.

This is why it is so important when reading this literature to carefully examine how variables are scaled, the norms of scales utilized, and where group means fall relative to these scales and their norms. Accurate interpretation of the findings may hinge on comprehending this context.

10. Causality Is Assumed from Correlational Data

All of the studies in question are correlational in nature and involve convenience samples obtained at a single point in time for each participant. This is tacitly or explicitly conceded by these researchers. Blosnich et al. confess, ". . . our measure did not allow us to accurately time SOCE experiences as they related to ACEs exposure" (p. 1029). Meanley, Haberlen et al. grant their retrospective data only permit them to argue for CT as a "contributing," rather than "causal," factor for negative psychosocial health, although this has the appearance of a distinction without a difference. Salway et al. specifically eschew causal interests, stating, ". . . our objective was to describe the demographic and psychosocial profile of those exposed to SOCE rather than identify causal effects" (p. 504). Despite being cognizant of the inappropriateness of attributing harms to change-oriented therapies, these researchers lapse into causal statements in their discussions with some regularity.

Salway et al. infer SOCE causes harms on a questionable basis: "We are unable to know whether SOCE preceded the psychosocial health outcomes identified by participants; however, reverse causation is unlikely given that the major drivers of seeking SOCE correspond to environmental attitudes—for example, family religiosity—rather than intraindividual factors" (p. 507). Similarly, Blosnich et al. noted that 80% of those seeking SOCE did so in a religious setting. It is conceivable that participants raised in a strict religious setting experienced greater

distress due to the incongruence of their sexual minority status with their religious ideals and not from the SOCE itself. In fact, Blosnich et al. and Salway et al. use their findings to criticize the religious basis of much SOCE exposure, implicitly acknowledging this association, while apparently remaining blind to the possibility of an independent effect of strong familial religiousness on sexual minority distress and suicidality.

A plausible alternative hypothesis to putative causal effects of SOCE on suicidality is that those seeking treatment are a more distressed group at the outset of their clinical presentation. The attribution of increased suicidality to SOCE is quite speculative without a non-SOCE treatment group and a longitudinal design, features that are in very short supply in this literature. Most ACEs reported by Blosnich, which by definition took place before age 18, and in the case of sexual abuse (the ACE most strongly associated with SOCE) before age 13, would likely have taken place before the SOCE attempts. Given that a third of the sample were over age 51, it is quite possible, even likely, that some of the suicidal behavior preceded the SOCE. Hence, it seems very reasonable to believe experiencing suicidal behavior caused many participants or participants' parents such concern they sought out SOCE, and not the other way around.

Blosnich et al. also reported LG-identified participants were more likely to report experiencing SOCE than bisexually identified respondents or respondents with other sexual minority identities (e.g., queer, pansexual). Yet all but one measure of suicidality was higher among bisexual and other sexual minority respondents than it was among LG participants. Suicide ideation and planning were both higher among non-LG participants, significantly so for other sexual identities who were at about twice the risk than the LG participants. Contrary to Blosnich et al.'s conclusions, suicide risk was higher among those less exposed to SOCE.

Despite the clearly indeterminate causal nature of the findings from these studies, the very opposite is frequently implied. Meanley, Haberlen et al. opine their findings support CT as a sexual minority stressor that "contributes" to psychosocial health inequality, which only supports their policy recommendations if it infers causality. Citing studies that suffer from the same causal uncertainties, Blosnich et al. assert their findings add to the research showing SOCE "may compound or create problems" and describe ". . . SOCE as a stressor with particularly insidious associations with suicide risk" (p. 1027). All of these researchers view their findings as adding further weight to therapy bans, which in itself is grounds for believing they make a causal connection between past exposure to change-allowing therapies and current emotional distress. In actuality, as outlined earlier, these studies build off of earlier studies that suffer from many of the same serious limitations that should preclude definitive statements of causality. As concerns contemporary SAFE-T then, this oppositional research is a house of cards built upon a house of cards.

11. Underwhelming Effect Sizes

In general, when considering the key Odds Ratios (ORs) and Risk Ratios (RRs) provided in these studies, the findings appear not to be as striking as they are touted to be. Meanley, Haberlen et al. report adjusted ORs of 1.72, 1.55, and 1.38 for associations of CT exposure with depressive symptoms, IH, and PTSD, respectively. Blosnich et al. found adjusted ORs of 1.92, 1.75, 1.88, and 1.67 for suicidal ideation, suicide planning, suicide attempt with no/minor injury, and suicide attempt with moderate/severe injury, respectively. Salway et al. observed RRs of

1.83, 1.06, 2.71, 1.42, and 2.49 with loneliness, regular binge alcohol use, regular illicit drug use, ever having suicide ideation, and ever attempting suicide, respectively. Given that ORs/RRs of 1.68 have been estimated to reflect small effects and 3.47 to reflect medium effects (Chen, Cohen, & Chen, 2010), it is evident that these results can at best be interpreted as displaying no effect in a few cases or small to somewhat below medium effects for the other variables. Moreover, several of these ratios have 95% confidence intervals that include or almost include zero, the point at which there is presumed to be no effect. These include the association of SOCE with (1) depressive symptoms, IH, and PTSD (Meanley, Haberlen et al.); (2) suicide planning, suicide attempts with no/minor injury, suicide attempt with moderate/severe injury (Blosnich et al.); and (3) regular binge alcohol use (Salway et al.). Hence, these findings were at best barely significant, despite the fact the datasets were very large. It is also worth noting from Blosnich et al. that the adjusted OR for the association between childhood sexual abuse and SOCE is 2.95, a larger effect than for any of the associations with SOCE and suicidality.

Schumm (2015) has recommended that research results meet a certain standard before being deemed adequate to be considered in policy and judicial decision-making. These standards limit such consideration to studies that (1) have at least medium effect sizes; (2) use random samples from known populations; and (3) employ reliable and valid independent variables. By these reasonable standards, the studies being examined in this analysis make *at best* a very modest contribution to the literature.

12. (Not So) Hidden Agendas

Given the modest and less than equivocal conclusions that can be drawn from these studies, the sweeping scope of the policy recommendations these researchers support with their findings is breathtaking. Meanley, Haberlen et al. conclude their results support organizations that "denounce" CT as "unethical" based on the potential danger posed by CT practices, even though they do not know the specifics as to what these practices actually are. Blosnich et al. are perhaps slightly more subdued, but nevertheless still advocate that, "Greater awareness of the harms of SOCE need to be conveyed to the general public, especially in areas that may have a greater prevalence of professionals who engage in SOCE" (p. 1029). Salway et al., meanwhile, offer perhaps the most draconian application of their findings. They bemoan the fact that "denouncements" by professional bodies have not brought the practice of SOCE to an end. Citing existing bans, they urge the Canadian government to eradicate SOCE, which ". . . may require an amendment to the criminal code as well as other multilevel legislative actions" (p. 507).

Elsewhere, Salway (2020) has written more pointedly about his objections to SOCE:

> To effectively prevent conversion therapy, legislative bans must adjust their definitions to clearly state that the defining feature of conversion therapy is not an attempt to "convert" or "change" intrinsic feelings of gender identity or expression or sexual orientation. Rather, the defining feature is the goal of avoiding acceptance and acknowledgement of LGBTQ2 lives as compatible with being healthy and happy. . . . That sense of self is what is fundamentally at stake in the debates over conversion therapy.

In this vision, there is only one way for sexual minorities to find health and happiness, and Salway is so confident it is his way he is willing to advocate for the outlawing of all other potential paths.

These clear and dramatic policy exhortations, based on such generally equivocal findings, seem to betray an enthusiasm on the part of these researchers to obtain findings more in line with their policy objectives than with a nuanced discernment of scientific realities concerning change-allowing therapies. In fact, the organization behind the *Sex Now* survey utilized by Salway et al. is pretty open about this, stating its ". . . findings are being shared early to inform immediate policy action—including the proposed federal conversion therapy ban" (Community-Based Research Center, 2020). It is hard to shake the feeling that there is a certain disingenuousness present in the appearance of scientific objectivity with these studies.

13. Traditional Religion in the Crosshairs

There is no mistaking from these studies that all the authors view traditional religious belief and practice as a serious problem in need of fixing. Meanley, Haberlen et al. suggest existing therapy bans with minors become federal law and be expanded to include language prohibiting *anyone*, including non-licensed professionals, from practicing CT. Blosnich et al. express concern that,

> . . . existing laws do not apply to adults or SOCE administered through religious leaders. This religious exemption is particularly concerning because among the sexual minorities in this sample who experienced SOCE, 4 of 5 people received it from a religious provider. (p. 1029)

Salway et al. share a concern regarding religiousness only in alluding to the danger of family religiosity as a risk factor for harm. However, prior to his study being published, he defined CT practices as relying ". . . upon a variety of methods, including coaching, counseling, therapy, *prayer*, and conversation" (Salway, 2020; emphasis added). There appears to be little doubt as to the direction this movement to ban change-allowing therapies is headed, and traditional faith communities can no longer afford to look away.

Salway et al. refer singularly to a model law—a favored template for legislative therapy bans—they believe is worthy to be enacted. Because this model law may give some indication where ban proponents are headed, I felt this model would be worth a short overview and comment in the context of critiquing studies purported to support such prohibitions.

A Proposed Model Law for Prohibiting SAFE-T

The model law endorsed by Salway et al. is the creation of Ashley[3] (2019a).

[3] Ashley is reportedly completing studies for a Doctor of Judicial Science at the University of Toronto. Ashley self-identifies as a transfeminine jurist and bioethicist, public speaker, and activist who uses they/them and gay/ghem pronouns. Ashley also noted an identity, metaphorically, as a biorg witch with flowers in her hair. Given that my only prior use of they/them pronouns with an individual has been in clinical situations involving Dissociative Identity Disorder, I chose to avoid this implication in the text by referring only to this person's listed surname.

Florence Ashley

In this document, Ashley provides an outline of the model law (pp. 7–12) followed by a detailed section of explanatory notes (pp. 12–45). The first subsection of these explanatory notes provides a detailed definition of conversion practices (identifying disallowed and permitted practices), as well as defining cause of action and pursuable damages. The interested reader should examine the source material directly, but here I will highlight several important aspects of this model law.

Definitions

No Longer Described as "Therapy"

The model law does not use the language of "conversion therapy" or even sexual orientation change efforts. Instead, it tries to be more descriptive in that it refers to "conversion practices," which is "any treatment, practice, or sustained effort" toward change (more on this aspect later). Sexual orientation but also gender identity, gender modality, and gender expression or behaviors are forbidden foci of change. The reframing of the model law around the terminology of conversion practices is done ". . . for reasons of recognizability, intelligibility, and coherence and to avoid the positive connotations associated with therapy (and other terms such as 'reparative'), which may be inappropriate in the context of unethical and harmful practices" (pp. 12–13).

Forbidding Discussions of Etiology

Noteworthy is the model law's declaration that discussions about causation of same-sex attractions or gender dysphoria are off limits. Ashley writes that forbidden conversion practices include, "Treatments practices, and sustained efforts that have for primary aim the identification of factors which may have led to the person's sexual orientation, gender identity, gender modality, gender expression or behaviors associated with a gender other than the person's sex assigned at birth, unless in the context of research which has been approved by an institutional review board" (p. 7). Perhaps this is meant to target outlier instances of counselors searching endlessly for memories of childhood trauma in an effort to "treat" same-sex attractions when the sexual minority client has not expressed an interest or desire for this. Unfortunately, the law as written does not distinguish between therapist-initiated and client-initiated examinations of etiology, and clients often present with views about what has led to their unwanted same-sex attractions.

It would appear from the language of this law that clients who present with a belief that childhood trauma has factored into their same-sex attractions and want to address their trauma history in relation to their attractions in psychotherapy or pastoral care would be engaging in prohibited conversion practices. Forbidding such discussions would be a remarkable truncation in the scope of psychological practice surround sexual orientation and gender identity and signal the forced muzzling of a historically central pillar of psychotherapy, i.e., the pursuit of insight and understanding into one's condition. To this extent, the law would mandate therapists' abdication of their professional responsibility.

Intrusion into Parenting

The model law explicitly undermines parents' rights, leaving therapists and counselors vulnerable to legal action if they recommend to parents any restrictions on

their child's expression of sexual orientation or gender identity. Outlawed would be

> treatments, practices, and sustained efforts that direct parents or tutors to set limits on their dependents' gender non-conforming behavior, impose peers of the same sex assigned at birth, or otherwise intervene in the naturalistic environment with the aim of repressing, discouraging, or changing the dependent's sexual orientation, gender identity, gender modality, gender expression or any behaviours associated with a gender other than the person's sex assigned at birth." (p. 7)

Cringe-worthy scenarios are not hard to imagine. What are therapists to tell parents whose sexual minority teenager is acting out in dangerous or dramatic ways (e.g., pursuing same-sex sexual contact in the home or demanding breast binding or cross-sex hormones)? Under this law, it appears they can only respond, "I am legally prohibited from suggesting you place any limits on your teen's same-sex behavior and gender expressions."

Misnaming Mishaps

Under Ashley's proposed law the authority of the pronoun police is fully vested. Explicitly prohibited are "treatments, practices, and sustained efforts that knowingly use names, pronouns, gendered terms, and sexual orientation terms other than those chosen or accepted by the person, except as required by law" (p. 8). Of course, reasonable sensitivity to the individual's preferences is good practice, but this language surely opens up a can of worms. What Ashley ignores is the certain risk that even well intention clinicians will be held hostage to the law, not having any clear definition of what a "sustained effort" to misname looks like to the sexual minority client. Since the ultimate arbitrator of the meaning of terms in the law *is the client*, who could be very disturbed and rejection sensitive, it is frighteningly possible for ethical therapists and counselors to end up having to fight legal/professional action instigated by disgruntled clients under this law.

Conversion Practices by Another Name

The model law identifies several names of practices that qualify as conversion practices:

> Conversion practices, conversion therapy, reparative therapy, corrective therapy, the corrective approach, the (psycho)therapeutic approach, ex-gay therapy, reorientation therapy, reintegrative therapy, gay cure therapy, sexual attraction fluidity exploration in therapy, the pathological response approach, intersex surgeries and/or interventions, intersex genital mutilation, surgeries or interventions on disorders of sex development, genital normalizing surgeries and/or interventions, and sexual orientation (and/or gender identity) change efforts are all terms that been used to refer to conversion practices. (p. 12)

It is perhaps a complement to find the Alliance's preferred terminology, sexual attraction fluidity exploration in therapy (SAFE-T), appearing in this academic literature, even if it is done so in a manner that shows no real understanding of the term. Nor does Ashley appear to be aware of the legal risks taken by using unfavorably and without permission terms under copyright, i.e., reparative therapy and reintegrative therapy. I also was a bit surprised to see the term "disorders of sexual development,"

which includes the intersex condition, since advocates of these laws tend to be generally unwilling to use the language of disorder for nearly all sexual conditions, preferring to see them as normal variants of human sexuality. Such an all-inclusive grab bag of names for conversion practices, one that even includes SAFE-T, tells me once again that what is actually in focus is the goal of change, with any practices deemed to be associated with such a goal being suspect.

Legal Codification of a Moral Imprimatur

One of the more insidious aspects of this model law is Ashley's obliviousness to its deep encroachment into the philosophical and especially moral realms. The law fundamentally introduces a new moral orthodoxy within the legal and psychotherapeutic domains without any reflection on the significance of such an imposition. Consider this description of the forbidden underpinnings of change-allowing practices: "Treatments, practices, and sustained efforts that proceed from the assumption that certain sexual orientations, gender identities, gender modalities, or gender expressions are pathological or *less desirable* than others" (p. 7; emphasis added). This language of desirability is used throughout the document in this fashion, without recognition that the desirability of any trait or characteristic is necessarily a moral category of evaluation (i.e., desirable being good and undesirable being bad).

The model law thus dictates what moral appraisal regarding same-sex behavior and gender identity expressions therapists and their clients can make. Since psychology as a field has no greater authority to prescribe morality than does religion (and one can make an argument that religion has greater authority than psychology), Ashley's law in this regard undertakes a religious-like function by decreeing the desirability of same-sex behavior and non-binary genders. This becomes a powerful and legally threatening means to enforce the new moral orthodoxy through a legal imprimatur. Clinicians become unwitting agents of moral enforcement with their clients, and even adult clients with unwanted same-sex attraction or gender identities must adhere to the government mandated moral position within the context of psychological or pastoral care. Such patronizing governmental disregard for psychotherapeutic and religious freedom is particularly difficult to stomach when the scientific literature behind legal bans is so far from being definitive.

Punitive Measures

The model law is unambiguous and expansive when it discusses the types of ethical or criminal offenses practitioners will risk by engaging in several activities related to SAFE-T.

Providing Services or Referrals

"Any person who engages in conversion practices or knowingly refers an individual to someone who engages in conversion practices has committed an act of negligence" (p. 10). The inclusion of referrals in this definition of negligence is an expansion of the scope of such laws, moving beyond clinician practices to also include making referrals to them as well to church or parachurch organizations that are deemed to be non-affirming. This significantly broadens the scope of negligence and almost certainly creates much more liability for religious leaders, who in my experience are primary referral sources for clients and parents.

Advertising

Also included within the jurisdiction of this model law is the marketing and publicizing of SAFE-T: "Any person who advertises or receives compensation in exchange for engaging in or teaching

conversion practices has engaged in unfair or deceptive trade practices" (p. 10). This statement appeals to consumer fraud laws, an increasingly favored aspect of ban legislation, as it establishes in one swoop prohibitions of SAFE-T for all ages and for both professional and religious settings.

Unprofessional Conduct

Language common to most ban legislation is also found in the model law, threatening therapists with loss of licensure. "Any licensed or certified professional who engages in, teaches, or advertises conversion practices has engaged in unprofessional conduct and shall be subject to discipline by their licensing or certifying board" (p. 10). What is somewhat new in this provision is the language concerning "teaching" such practices. This leaves open the potential for licensed counselors on church staffs who offer traditional religious instruction about sexuality and gender to be consumer fraud, potentially even when there is no direct fee-for-service. Would church giving constitute compensation to such staff counselors and make this provision of the law actionable against them if they teach non-affirmative beliefs? Does religious teaching that same-sex behavior or non-binary gender identities are sinful or otherwise undesirable when imparted by these counselors constitute fraud? The answer to these questions would likely be determined in the judicial system. Yet given the unpredictability of the courts, there is no reason to feel confident licensed or certified church staff counselors would not be as exposed as licensed clinicians outside of religious settings under this provision of the law.

Organizational Liability

The most novel addition to the model law is its specific targeting of organizations and government agencies.

> It is illegal and constitutes an act of negligence for any organization or governmental entity to:
>
> a. Engage in or refer an individual to practitioners of conversion practices;
> b. Provide health coverage for conversion practices;
> c. Provide a grant or contract to any entity that engages in or refers individuals to practitioners of conversion practices; or
> d. Refuse to provide a grant or contract to any entity for refusing to engage in, teach, or advertise conversion practices.
>
> Organizations and governmental entities shall take reasonable steps to ensure compliance with sections [a to d]. (p. 11)

Although the provision reads as if government agencies and functions may be its primary focus, make no mistake that church and parachurch ministries would fall under the definition of "organization." In fleshing out what is meant by organizations, Ashley states, "The section extends the prohibition of conversion practices to legal persons other than natural persons, as organizations may be involved in the provision of conversion practices, especially in the context of unlicensed, faith-based practices" (p. 42). Given this understanding, it is impossible not to envision traditional faith communities and faith-based organizations being subjected to legal action under such a law.

Damages

The model law stipulates a cause of action: "Anyone who suffers harms or losses, including non-monetary, due to a breach of

[prior provisions] may bring a private action against the perpetrator under this act to enjoin further breaches, or to recover the damages sustained as a result, or both" (p. 11). This provision grants a civil cause of action to those subjected to conversion practices and enables them to pursue injunctive relief and/or recover damages. In other words, it makes sure those alleging harms have a right to sue. Ashley adds, "Since the harms of conversion practices may be difficult to quantify and go beyond monetary losses, it is crucial to enable the recovery of general damages for non-monetary losses" (p. 43). These non-monetary losses include ". . . pain, mental distress, loss of enjoyment of life, and harm to dignity. . . ." Such a low and broad bar for what constitutes harm certainly makes this provision a not-so-thinly-veiled encouragement to sue. "Because the purpose of laws prohibiting conversion practices is both to enable compensation for harm and losses suffered as well as discourage the practices themselves, allowing and *encouraging* punitive damages is legitimate" (p. 44; emphasis added; see also Ashley, 2019b).

Awardable damages granted under this model law include attorney's fees and costs as well as unspecified and therefore unlimited punitive damages. The law also proposes a statute of limitations of 10 years once the claimant has reached the age of majority. Of note is the apparent exclusion of organizations and government entities from this statute.

Other Stipulations

A few other aspects of this model law are worth mentioning. Through rather tortured reasoning, the law exempts as a conversion practice the occurrence of apparent sexual orientation change during the gender identity transitioning process. Using the example of a trans man who is attracted to women who could be considered as having changed his sexual orientation from lesbian to straight, Ashley (2019a) argues,

> However, under the hypothetical scenario, the sexual orientation did not change in the relevant sense. Since sexual orientation is based on gender identity and gender identity precedes transition, his sexual orientation did not change despite a nominal change in gender labels. While sexual orientation may change during or after transition, the purpose of transition is to affirm and support the person's gender, not to change their sexual orientation. (pp. 29–30)

It certainly is an open question as to whether the disgruntled consumer of social and/or medical transitioning would be so nuanced in their conceptualization were they to see an avenue to both punishing their providers and obtaining a hefty payday for their troubles. Such unintended consequences deriving from this law seem inherently plausible.

Ashley notes that many trans persons oppose mandatory psychological or medical assessments and diagnoses because they dehumanize and psychopathologize people. However, in a move of expediency over principle, the author acknowledges such assessments could constitute conversion practices but concedes including such language in the law ". . . could severely impede access to healthcare in trans communities" (p. 30).

It is also clear the language of the law allows identity development only if it does not include therapy-assisted fluidity or change.

> The requirement that acceptance and support be non-judgmental—without preference of targeted character-istic—indicates that foreclosing future identity development may

> nevertheless fall under the umbrella of conversion practices. Suggesting that one is accepted and supported as is but would not be accepted or supported if their targeted characteristics were different (e.g., "I accept you as long as you're straight.") would not fall under the notion of acceptance and support since it would be judgmental. (pp. 31–32)

The law appears to "foreclose" on future identity development of the client who says to his or her counselor, "I've experienced some shifting in my same-sex sexual attractions in the past and want to see if therapy can aid me now in the process of reducing those attractions and strengthening my heterosexual feelings and identity." In other words, to such a request the counselor can only respond, "Under law, I accept you as you are, as long as you don't try become less gay."

Such an understanding is fortified later when Ashley indicates the integration of religious and sexual identities is only accomplished if the individual deems their same-sex attractions and behavior to be on a par with their religious commitments.

> Conversion practices have justified the repression and discouragement of targeted characteristics via the goal of reducing the tension between the person's religious commitments and these characteristics. Those practices, however, place religious commitment above the targeted characteristics in the hierarchy instead of attempting to make them compatible for the individual. As such, it is not truly aiming at the development of an integrated personal identity. In this context as everywhere else, practitioners must always consider target characteristics "to be absolutely as valid and legitimate an outcome as any other identity or practice." . . . Development of an integrated personal identity is predicated in retaining both the religious commitment and the targeted characteristic of a person, and bring them into harmony." (pp. 34–35)

Beyond suffering from the erroneous view that the therapist is determining the pursuit and focus of SAFE-T, this perspective races past sensible caution to ensure informed consent and client-self-determination to prohibit clients from *ever* prioritizing their religious commitments above their same-sex attractions and behavior in a therapy or counseling setting. Again, this language appears destined to create unending conflicts for therapists, religious leaders, and non-LGB-identified sexual minorities within traditional faith communities.

Conclusion

This critique has provided a critical examination of three recent empirical studies purporting to show evidence of harms from exposure to change-allowing therapies. Thirteen areas of methodological and definitional concern have been presented to highlight the severely problematic nature of utilizing this research to support legal bans on SAFE-T in particular and contemporary change-allowing therapies generally. This analysis also briefly examined a model law for banning change-related practices, which identified some new developments in this ban template with particular relevance to faith-based practitioners and organizations. Overall, these articles shed more light on the motives and aims of the authors' agendas than they provide scientifically based assistance in unambiguously identifying

specific sources of harm attributable to contemporary SAFE-T. Hence, these studies (like most before them) cannot be credibly employed to support the draconian infringements on professional and religious speech and practice being dictated by current legislative bans.

References

Ashley, F. (2019a, May 28). *Model Law—Prohibiting Conversion Practices*. Available at SSRN: https://ssrn.com/abstract=3398402 or http://dx.doi.org/10.2139/ssrn.3398402

Ashley, F. (2019b). *Suing for Conversion Therapy Without a Statute? A Blueprint*. Canadian Bar Association. Retrieved from: https://www.cba-alberta.org/Publications-Resources/Resources/Law-Matters/Law-Matters-Summer-2019/Suing-for-Conversion-Therapy-Without-a-Statute-A

Blosnich, J. R., Henderson, E. R., Coulter, R. W. S., Golbach, J. T., & Meyer, I. H. (2020). Sexual orientation change efforts, adverse childhood experiences, and suicide ideation and attempt among sexual minority adults, United States, 2016–2018. *American Journal of Public Health, 110*(7), 1024–1030. http://dx.doi.org/10.2105/AJPH.2020.305637

Chen, H., Cohen, P., & Chen S. (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics, 39*, 860–864. http://dx.doi.org/10.1080036109/1003650383

Community-Based Research Center (2020, February). *The Latest: Conversion Therapy & SOGIECE in Canada*. Retrieved from: https://d3n8a8pro7vhmx.cloudfront.net/cbrc/pages/1072/attachments/original/1588188222/The_Latest_-_Conversion_Therapy_and_SOGIECE_in_Canada.pdf?1588188222

Fuller-Thomson, E. F., Baird, S. L., Dhrodia, R., & Brennenstuhl, S. (2016). The association between adverse childhood experiences (ACEs) and suicide attempts in a population-based study. *Child: Care, Health, and Development, 42*(5), 725–734. http://dx.doi.org/10.1111/cch.12351

Jones, S. L., Rosik, C. 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 from: https://www.apadivisions.org/division-1/publications/newsletters/general/2010/10-issue.pdf

Kaslow, R. A., Ostrow, D. G., Detels, R., Phair, J. P., Polk, B. F., Rinaldo, C. R., for the Multicenter AIDS Cohort Study (1987). The multicenter AIDS cohort study rationale: Organization and selected characteristics of the participants. *American Journal of Epidemiology, 126*(2), 310–318. http://dx.doi.org/10.1093/aje/126.2.310

Lefevor, G. T., Sorell, S. A., Kappers, G., Plunk, A., Schow, R. L., Rosik, C. H., & Beckstead, A. L. (2020). Same-sex attracted, not LGBQ: The associations of sexual identity labeling on religiousness, sexuality, and health among Mormons. *Journal of Homosexuality, 67*(7), 940–964. http://dx.doi.org/10.1080/00918369.2018.1564006

Meanley, S., Haberlen, S. A., Okafor, C. N., Brown, A., Brennan-Ing, M., Ware, D., . . . Plankey, M. W. (2020). Lifetime exposure to conversion therapy and psychosocial health among midlife and

older adult men who have sex with men. *The Gerontologist*. Advance online publication. http://dx.doi.org/10.1093/geront/gnaa069

Meanley, S. P., Stall, R. D., Dakwar, O., Egan, J. E., Friedman, M. R., Haberlen, S.A., . . . Plankey, M. W. (2020). Characterizing experiences of conversion therapy among middle-aged and older men who have sex with men from the Multicenter AIDS Cohort Study (MACS). *Sexuality Research and Social Policy, 17*, 334–342. http://dx.doi.org/10.1007/s13178-019-00396-y

Movement Advancement Project. July 2017 (April 2015). *LGBT Policy Spotlight: Conversion Therapy Bans*. Retrieved from: https://www.lgbtmap.org/policy-spotlight-conversion-therapy-bans

Movement Advancement Project. (2020). LGBT policy spotlight: conversion therapy bans. Retraction notice. *Linacre Quarterly, 87*(1), 108. http://dx.doi.org/10.1177/0024363918788559

Retraction Watch (2019, June 17). *Catholic Medical Journal Pulls Paper on Conversion Therapy over Statistical Problems*. Retrieved from: https://retractionwatch.com/2019/06/17/catholic-medical-journal-pulls-paper-on-conversion-therapy-over-statistical-problems/

Reyna, C. (2018). Scale creation, use, and misuse: Howe politics undermines measurement. In J. T. Crawford & L. Jussim (Eds.), *Politics of Social Psychology*. New York, NY: Vintage Books, 81–98.

Rosik, C. H. (2014). The reincarnation of Shidlo and Schroeder (2002). *Journal of Human Sexuality, 6*, 23–49. Retrieved from: https://8c581b4a-ebba-4f97-ab9b-725231cd9e3c.filesusr.com/ugd/ec16e9_c09726fb6df1403dae082c92f3d3d4ef.pdf

Rosik, C. H. (2019a). A research review of Ryan et al.'s Parent-initiated sexual orientation change efforts with LGBT adolescents: Implications for young adult mental health and adjustment. *Journal of Human Sexuality, 10*, 79–83.

Rosik, C. H. (2019b). RE: Ryan, Toomey, Diaz, and Russell (2018). *Journal of Homosexuality*. Advance online publication. http://dx.doi.org/10.1080/00918369.2019.1656506

Rosik, C. H. (2020a). The creation and inflation of prevalence statistics: The case of "conversion therapy." *Journal of Human Sexuality, 11*, 66–86.

Rosik, C. H. (2020b, September 25). *Research Designs, Limitations, and Questionable Practices: A Primer with Options Research Update*. Alliance for Therapeutic Choice and Scientific Integrity Annual Conference.

Rosky, C. (2019, March 5). Watered down anti-conversion therapy bill passes Utah House committee; original sponsors vote against it. *Q Salt Lake Magazine*. Retrieved from: https://www.qsaltlake.com/news/2019/03/05/watered-down-anti-conversion-therapy-bill-passes-utah-house-committee-original-sponsors-vote-against-it/

Salway, T. (2020, May 26). To end conversion therapy, we must understand what it actually means. *The Globe and Mail*. Retrieved from: https://www.theglobeandmail.com/opinion/article-to-end-conversion-therapy-we-must-understand-what-it-actually-means/

Salway, T., Ferlatte, O., Gesink, D., & Lachowsky, N. J. (2020). Prevalence of exposure to sexual orientation change efforts and associated sociodemographic

characteristics among Canadian sexual minority men. *The Canadian Journal of Psychiatry, 65*(7), 502–509. http://dx.doi.org/10.1177/0706743720902629

Schumm, W. R. (2015). Navigating treacherous waters—One researcher's 40 years of experience with controversial scientific research. *Comprehensive Psychology, 4,* 24. https://dx.doi.org/10.2466/17.CP.4.24

Whitehead, N. E. (2019). Publication and retraction of the Santero, Whitehead, Ballesteros (2018) study: A first-hand account. *Journal of Human Sexuality, 10*, 74–79.