



Effects of Therapy on Religious Men Who Have Unwanted Same-Sex Attraction

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Abstract

The American Psychological Association and other organizations have formally claimed that sexual orientation change therapies should not be used because they are probably ineffective and may cause harm. A survey asking for negative and positive experiences of 125 men with active lay religious belief who went through sexual orientation change efforts (SOCE) strongly conflicted with those claims. In our study, most of those who participated in group or professional help had heterosexual shifts in sexual attraction, sexual identity and behavior with large statistical effect sizes, similarly moderate-to-marked decreases in suicidality, depression, substance abuse, and increases in social functioning and self-esteem. Almost all harmful effects were none to slight. Prevalence of help or hindrance, and effect size, were comparable with those for conventional psychotherapy for unrelated mental health issues. Judged by this survey, these therapies are very beneficial for lay religious people, but no Catholic priests were in the sample, and this study makes no recommendations for them.

Keywords

APA, depression, homosexuality, self-esteem, SOCE, substance abuse, suicidality, therapy

Introduction

Sexual orientation change efforts (SOCE) and even the name are currently very unfashionable. Therapists are starting to prefer the term “Sexual Attraction Fluidity Exploration in Therapies” (SAFE-T). However, historically there has been much more ideological diversity. Kinsey, himself bisexual (Epstein 1998; Pomeroy 1972), recorded spontaneous change in his surveys of nonclinical samples and recommended a therapeutic method which achieved various degrees of change for those who sought it. Later West (1977), himself gay, summarizing the literature concluded that change sometimes occurred whether in clinical or nonclinical samples.

Studies showed that changes from nearly exclusive same-sex attraction to nearly exclusive opposite attraction occurred in 19–24 percent of individuals in therapy (Bieber et al. 1962) and sometimes much

more (Masters and Johnson 1979; van den Aardweg 1997). These samples were all clinical, hence not random, and therapy had only a minor religious component. After 1973, homosexuality was no longer considered an illness, a political rather than a scientific decision (Bayer 1987; Socarides 1995), and the subsequent difficulties of obtaining therapy for unwanted same-sex attraction are described elsewhere (Rosik 2015).

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Various skeptical authors attacked these positive studies and their methodology (Isay 1990; Haldeman 1991; Haldeman 1994; Hancock, Gock, and Haldeman 2012), mainly questioning psychological safety. Lastly, it was alleged that most clients tend to be coerced into treatment by social pressure (Ross 1983). In the 1990s, the term “reparative therapy” was coined among therapists with a more positive attitude to change, and again it was found that 15–20 percent of the people in their clinical samples claimed profound change and no significant harm to the individuals (Nicolosi, Byrd, and Potts 2000). Similar studies are Spitzer (2003), Karten and Wade (2010), and Jones and Yarhouse (2007). The studies were clinical, except the latter which was a self-help sample, and characterized by Protestant spirituality.

In 2009, a report was published by the American Psychological Association (2009b, 6), which stated “we recommend that researchers and practitioners . . . not aim to alter sexual orientation.” “The results of scientifically solid research indicate that it is unlikely that individuals will be able to reduce same-sex attraction or increase other-sex sexual attraction” (American Psychological Association 2009b, 3). “Some individuals modified their sexual orientation identity (i.e., individual or group membership and affiliation, self-labeling) and other aspects of sexuality (i.e., values and behaviors)” (American Psychological Association 2009b, 3); “We found that there was some evidence to indicate that individuals experienced harm from SOCE” (American Psychological Association 2009b, 3); SOCE “has not provided evidence of efficacy, has the potential to be harmful.” Also, “efforts to change sexual orientation are unlikely to be successful, and involve some risk of harm” (American Psychological Association 2009a, 6).

Instead of “reparative therapy,” they recommended in their report “gay-affirmative therapy.” General criticism was that studies had not been representative and had poor or no control groups. However, according to the high methodological standards suggested, there are no rigorous group surveys of help or harm of either therapy. Subsequently, they stated that “there has been no scientifically adequate research to show that therapy aimed at changing sexual orientation (sometimes called reparative or conversion therapy) is safe or effective” (American Psychological Association 2008, 3). A review of most relevant papers on change of sexual attraction to 2009 may be found elsewhere (NARTH Scientific Advisory Board 2009). The current article particularly studies the group effectiveness/safety.

If this research is really at the preliminary stage suggested, the individual psychotherapeutic response, which historically has been the deciding criterion, still should be the deciding criterion. The quotations above muddy individual and group response. A method which helped only one person in ten for some problem would be very ineffective by a group standard but could also be experienced as life-changing by that individual.

Opinions such as those of the APA have been frequently asserted. By the time the APA task force statement of “some evidence” of harm reached other national or international groups (Pan American Health Organization 2012; Australian Psychological Association 2015), evaluation of the same papers produced a statement that such therapy is “a severe threat to the health and human rights of the affected persons.” Similarly, “There is no clinical evidence demonstrating that approaches that claim to change a person’s sexual orientation are effective,” “the ‘failure’ of such approaches can further contribute to negative mental health outcomes” (Australian Psychological Association 2015, 1).

SOCE can indeed be harmful and ineffective for some individuals. One study (Shidlo and Schroeder 2002) found that 87 percent of their sample (202 respondents; recruited for dissatisfaction) believed their SOCE was a failure and over 75 percent experienced harmful effects. A Mormon sample of nearly 900 men (Dehlin et al. 2015) found their mostly church-centered SOCE had produced significant sexual identity distress in men (Cohen’s effect size $d = 0.45$, moderate); however, effects on quality of life were nil ($d = 0.01$), and the negative self-esteem effect size was small ($d = 0.22$). This sample differed from ours and had only 29 percent current religious affiliation. However, it should be noted that many informal groups supporting SOCE now decline research participation because of past experiences with unethical practices by researchers. See the discussion in Jones and Yarhouse (2007, 119 ff.), so perhaps this sample is not fully representative.

It is difficult to identify a representative sample. Degree and type of religiosity, ethnicity, socioeconomic status, and type of therapy are all potentially important. Previous studies defined their samples using different criteria, used a variety of therapies, did not report dropout rates during or after therapy, and seldom reported long-term results.

A longitudinal study (Jones and Yarhouse 2007; Jones and Yarhouse 2011), partly since the APA review, is particularly important because of its good design and methodology. We must endorse their

comment “The study . . . is significantly stronger than any existing study” (Jones and Yarhouse 2007, 143). Their volunteer group was seventy-two men from groups associated with former Protestant “Exodus” organization, and most had extensive sexual experience and involvement in the gay community. Their educational status was much higher than the general population. The study followed these men for seven years with a very good retention rate and reported on degree of change in orientation (Kinsey scale), benefit and harm, and reasons for dropout from the study. There were lasting changes of attraction and varying degrees of change. About 15 percent of the sample reported loss of almost all same-sex attraction and/or gaining almost complete opposite-sex attraction. The benefits experienced greatly outweighed the harm. Therefore, there are men who wish to change and who can change with therapeutic help, and the process predominantly creates experiences that are beneficial. The study adds significantly to the literature and challenges many negative claims.

Consequently, null hypotheses worth testing were: (1) SOCE is ineffective, (2) it produces more harm than help, (3) most reasons for therapy are cultural/family pressure, and (4) SOCE is much less effective and more harmful than therapies on completely different unwanted problems.

Method

Participants

Ex-gay ministry groups and affiliated private therapists throughout the United States that worked with individuals who wanted help with their unwanted same-sex attraction were contacted. These contact people asked individuals over eighteen years old who had either been through or were currently in therapy for their same-sex attraction and whether they might be interested in taking the survey. Participants were told that they had to have been in some past or current form of same-sex attraction which was unwanted, but the degree of any opposite-sex attraction was not a criterion. They were told that the purpose was to understand what factors helped or hurt changing same-sex attraction and behavior and to document help or harm to SOCE and/or mental health. Volunteers were given an Internet link to the website www.constantcontact.com which asked questions about the reason for starting SOCE and the degree of same-sex attraction, behavior, frequency, and any changes.

Sample Description

Response rate to the survey offer is not known. No monetary compensation was offered for participation. Over a six-week period (January 2011–February 2011), 197 surveys were filled out online, and completely, by 150 men and 8 women. For cultural and gender consistency, the survey sample was reduced to 125 male US residents. A few incomplete questionnaires were included if missing data would not affect calculations.

The geographical distribution was as follows: east, 19.2 percent; west, 31.2 percent; central, 36 percent; south, 12.8 percent. Ages were eighteen to over sixty-five (28 percent were the median ages 26–35 years). Our mean was early 40s and it was late 30s for Jones and Yarhouse (2007). Sexual attractions at these ages would normally be considered resistant to change.

White/Caucasian men were 90 percent, and 73 percent of the sample had received at least a bachelor’s degree (30 percent for total US men [Anonymous 2014a]), so the sample was well-educated (cf. Jones and Yarhouse 2007).

Median incomes were US\$63,000 for our sample and US\$42,800 for the national samples; however, education and income may have been partly a function of age.

Belief systems: 89 percent Christian in varying claimed senses (13.6 percent “nondenominational Christians,” 5 percent [eight respondents] Roman Catholic, 28 percent Mormons, 9.6 percent Jewish, 0.8 percent Bahai, and 0 percent agnostic or atheist). Active belief system was 98.6 percent (our sample) compared to 80–85 percent in the general US population (Anonymous 2014b). The religious demographic is broad, but mainline, traditional Protestant groups and Roman Catholics are underrepresented, and Mormons and Jews overrepresented. The sample is more religiously diverse than Jones and Yarhouse (2007). The sample was quite religious in observance at survey date: 55 percent of participants attended religious service on a weekly basis (cf. 80 percent for Jones and Yarhouse 2007). The Roman Catholic sample attended at least weekly, but mostly daily, so had the highest religiosity. There were two Protestant clergy in the sample, but no Catholic priests.

Marital status: 54 percent single, 46 percent married, and 42 percent had children. About 60 percent more were married than for Jones and Yarhouse (2007, 161–62). Both samples had a nearly 1:1 mixture of those initially sexually active homosexually (daily, weekly, or monthly), and abstainers, probably

Table 1. Effect of SOCE on Homosexual and Heterosexual Psychological and Behavioral Frequencies.

Action		D	W	M	Y	R	N	H/T	<i>p</i>	PS size	PS' size	95 percent CI
Homosexual fantasy	A	86	29	5	0	4						
	B	18	46	26	6	28	124	6:112	E-26	0.92	0.84	[0.74, 0.92]
Homosexual intimacy/desire	A	66	31	7	1	19						
	B	20	34	27	8	35	124	13:69	E-10	0.87	0.54	[0.42, 0.66]
Homosexual kissing	A	3	13	21	4	82						
	B	2	6	7	5	103	123	12:36	2E-4	0.71	0.41	[0.20, 0.62]
Homosexual sex	A	20	18	12	16	57						
	B	2	8	12	5	97	124	11:56	E-8	0.78	0.56	[0.40, 0.70]
Heterosexual fantasy/desire	A	3	7	28	8	77						
	B	15	31	29	10	38	123	4:62	E-14	0.77	0.54	[0.44, 0.66]
Heterosexual intimacy/desire	A	14	21	24	10	53						
	B	39	31	19	5	28	122	5:60	2E-14	0.72	0.44	[0.32, 0.52]
Heterosexual kissing	A	2	18	14	9	79						
	B	10	24	14	5	69	122	13:33	1.5E-3	0.75	0.49	[0.2, 0.72]
Heterosexual sex	A	0	20	10	5	88						
	B	4	25	12	4	78	123	9:24	7E-3	0.76	0.52	[0.14, 0.78]

Note: *p* values (for random occurrence of H/T distribution) calculated via binomial test. SOCE = sexual orientation change efforts, A = distribution before SOCE; B = distribution at survey date, D = daily, W = weekly, M = monthly, Y = yearly, R = Rarely, H/T = homosexual- and heterosexual-direction changes in frequency, CI = confidence interval, N = number of respondents.

Table 2. SOCE Hours in Therapy or Group for Those Who Completed Therapy.

Percentile	2.5	10	25	50	75	90	97.5
Therapy (hours)	0	10	38	80	178	338	450
Group (hours)	0	0	10	43	113	300	318

Note: *n* = 71. SOCE = sexual orientation change efforts.

for religious reasons (frequency, yearly or more, or rarely; see Table 1).

Reasons for entering SOCE: religious reasons 64 percent, to strengthen an existing marriage 12 percent, family pressure reasons only 3.2 percent, and extreme dislike of gay culture they experienced 4 percent (perhaps lower than expected for this religious sample).

At the survey date, 42 percent were in therapy and 58 percent posttherapy. Median therapy and group hours for those posttherapy were 80 and 43, and other percentiles are in Table 2. Median time for those posttherapy was about 3 years, only approximate, since the highest response category was "more than 5 years."

Professional therapy: 97 percent for our sample, 50 percent for Jones and Yarhouse (2007), but 86 percent of our sample also participated in the type of less formal group studied by Jones and Yarhouse. A high proportion (80 percent plus) reported that

they had some degree of depression and suicidality at the start of therapy.

Measures

Homosexual sex, for the purpose of this survey, was defined as either kissing or touching genitals, anal or oral sex, and included frequencies from daily to yearly or "more rarely." Sexual attraction was taken as one major component of sexual orientation.

The survey comprised eighty-eight multiple-choice questions, taken from previously published material (Shidlo and Schroeder 2002; Spitzer 2003; Karten and Wade 2010). Eighteen questions asked what change had occurred in the frequency of homosexual and heterosexual fantasy, desire for intimacy, kissing, and sex, comparing the situation six months before the participants got help and at the survey date, with frequency choices of almost daily, weekly, monthly, yearly, or "almost never." Response scales for two measures of sexual orientation (sexual attraction and sexual identity) followed a Kinsey scale with seven categories—exclusively homosexual, mostly homosexual, more homosexual than heterosexual, equally homosexual and heterosexual, more heterosexual than homosexual, mostly heterosexual, and exclusively heterosexual (Kinsey, Pomeroy, and Martin 1948). This scale is only ordinal and, although criticized, continues to be very extensively used (Bullough 1990).

Forty-nine questions asked about helpful and harmful counseling experiences, also the duration, effectiveness, and harmfulness of the different therapeutic techniques and interventions experienced. Ten questions measured the type of SOCE (psychiatrist, psychologist, social worker, secular or pastoral counselor, ex-gay group, secular support group, weekend same-gender retreat, mentor, and personal study) and the number of sessions/hours/meetings attended. There were nineteen questions that measured the helpfulness (1 = extremely helpful to 4 = slightly helpful) or harmfulness (6 = slightly harmful to 9 = extremely harmful) of the specific therapeutic techniques of the SOCE process (thought stopping, avoiding triggers, learning appropriate boundaries, study of causes, stopping masturbation, studying family dynamics, spiritual study, same-sex nonerotic friends, same-sex nonerotic touch, increasing desire for change, reframing homosexual desire, gender affirmation, going to the gym, team sport, individual neutral exercise, covert aversion [=imagining getting AIDS], and heterosexual surrogates). Some of these, although used by previous researchers, could be questioned for relevancy. Some questions measured the mental health changes, positive and negative, experienced from their SOCE (self-esteem, depression, social functioning, suicidality, self-harm, substance abuse, and ratings through extremely, marked, moderate, slight, none, not applicable). These responses were chosen because they were mentioned as harmful possibilities (American Psychological Association 2009b; Jones and Yarhouse 2011). The type of professional help was requested, if known. Choices offered were cognitive/behavioral, Rogerian, psychoanalytical, gestalt, humanist, and existentialist.

The method partly relied on retrospective memory, which has been criticized (Bailey and Zucker 1995) for lack of objective verification, but such criticisms have probably been given too much weight because the recall of many sexual-related events now has been shown to be fairly reliable (Nyitray 2010).

Analysis

The results were analyzed statistically, partly via standard Excel statistical functions for binomial tests and some significance tests for χ^2 , but the sign test (probability of superiority [PS]) was most used because it is appropriate for before/after comparisons on the same respondent and particularly for testing whether harm or help predominated. This statistic was also recommended in the APA task force report. The p values are calculated

conventionally from the binomial distribution. PS effect size and confidence intervals (Conover 1999; Grissom and Kim 2012) were checked for this paper by Monte Carlo methods (Robert and Casella 2005).

The Monte Carlo technique randomly assembled a new set of data from the originals and recalculated the statistic. This was repeated one million times or until change in the median and confidence interval statistics was less than 1 percent for a 10 percent increment in calculations. From the very large array of sorted points, confidence limits or other properties were easily derived.

When respondents were asked for only one response, on a negative/positive scale rather than “before” and “after,” a χ^2 statistic was used and expectations for comparison were drawn from the null hypothesis that there was an equal distribution between harmful and helpful endorsement (i.e., no net effect). When data for χ^2 have low or there were zero-respondent numbers in some cells, it is usual to combine these with adjacent cells; however, when checking this sample using Monte Carlo techniques, it was found that the statistic values were stable, and combination was not needed. This avoided having to combine harmful and neutral results and was possible because of an adequate sample size. On the other hand, conventional p values were extremely low, and Monte Carlo tests showed that they probably were affected by zero-cell frequencies. Minimum values from Monte Carlo calculations for p values (<E-6) were used (Table 3) because they may be more reliable.

The correct effect size statistic here for χ^2 is Cramer's V (=SQRT(χ^2/N)), where N is the sample size (Evans and Rooney 2013, 92). The significance of this statistic is given as follows: 0.1 is a small effect, 0.3 is medium, and 0.5 is large (Cohen 1988, 224-27); and this statistic can take a value higher than 1.0 for very strong effect sizes. Cohen's well-known “ d ” has different effect sizes.

Results

In this section, many of the results are presented briefly in visual form in the figures for a rapid overview and presented with detailed statistical data in the tables.

Effectiveness

Of the 125 men that comprised the survey, 68 percent self-reported some to much reduction in their same-sex attraction and behavior and also an increase in their opposite-sex attraction and behavior. Data for the large subset that had finished

Table 3. Evaluation of Effects of Techniques on SOCE by Respondents.

Techniques	Harm					Help					P/M	χ^2	p	V	95 percent CI	N
	X	V	M	S	N	S	M	V	X							
Heterosexual friends	0	0	1	1	4	6	21	28	60	58	76	<E-6	0.79	[0.68, 0.89]	121	
Studying causes	0	0	0	2	4	14	19	28	57	64	99	E-6	0.90	[0.81, 0.95]	124	
Spiritual	1	0	1	0	5	13	28	27	49	59	99	<E-6	0.90	[0.81, 0.95]	124	
Nonerotic touch	1	2	1	5	10	11	17	34	46	12	61	<E-6	0.69	[0.57, 0.80]	127	
Family dynamics	1	2	0	0	5	19	31	25	41	39	92	<E-6	0.86	[0.77, 0.94]	124	
Boundaries	0	0	3	0	6	14	18	37	40	36	83	<E-6	0.84	[0.74, 0.92]	118	
Study of triggers	1	1	1	4	13	21	24	26	30	14	91	<E-6	0.9	[0.8, 1.0]	121	
Gender affirm	0	0	1	0	13	16	26	32	31	105	118	<E-6	1.0	[0.9, 1.1]	119	
More SOCE desire	1	1	1	3	9	15	17	29	37	15	113	<E-6	1.0	[0.9, 1.2]	113	
Reframing desire	0	2	1	1	14	16	20	23	30	22	88	<E-6	0.9	[0.8, 1.0]	107	
No masturbation	2	3	3	5	19	19	15	23	23	6.2	58	<E-6	0.7	[0.6, 0.8]	112	
Gym	1	1	9	9	12	15	21	16	13	3.3	40	3E-6	0.64	[0.5, 0.8]	97	
Neutral exercise	0	0	1	1	26	13	30	16	12	36	136	E-6	1.3	[1.2, 1.5]	99	
Team sports	1	0	2	3	15	19	17	15	6	9.5	82	<E-6	0.88	[0.7, 1.0]	78	
Covert aversion	6	1	4	6	26	18	9	6	6	2.3	63	2E-3	0.87	[0.6, 1.2]	82	

Note: Testing endorsement of harm and help. Respondents were asked to endorse one response only from entire harm/help range. P/M is the ratio of those endorsing help to those endorsing harm. p is the probability of χ^2 being 1.0. V is Cramer's V, for effect size, and CI is 95 percent confidence limits. Expectation for test was similar distribution for help and harm. df = 8 and n is number of respondents. Order of data is in terms of Figure 5. X = extremely, V = markedly, M = moderately, S = slightly, N = neutral, and SOCE = sexual orientation change efforts.

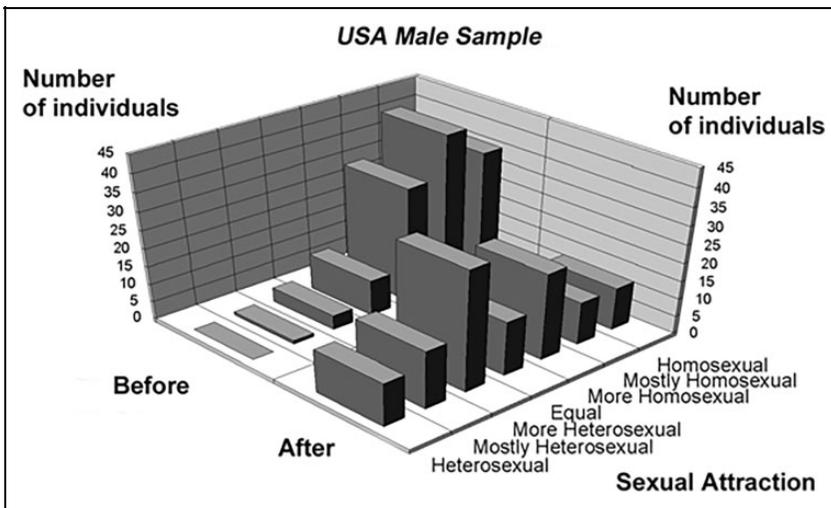


Figure 1. Sexual orientation change efforts effects on sexual attraction.

therapy suggested that changes may endure for a median of nearly 3 years.

Sexual Attraction

Figure 1 and Table 4 show change in sexual attraction (the precise definition of which was left to

respondents) followed SOCE and seem to show a notable change for the group as a whole. The endorsed individual attraction changes in Kinsey steps were calculated and plotted in Figure 2; they seem to show more changes toward the heterosexual side. For individuals, there were a calculated 1.5 steps change in Kinsey classes after SOCE

Table 4. Data for Figure 1, SOCE Changes in Sexual Attraction and Sexual Identity.

Attraction/ID	Exclusively Homosexual	Mostly Homosexual	Somewhat Homosexual	Equal	Somewhat Heterosexual	Mostly Heterosexual	Exclusively Heterosexual
	K6	K5	K4	K3	K2	K1	K0
Sexual attraction (<i>n</i> = 124)							
Before SOCE	34	43	32	10	4	1	0
After SOCE	12	12	24	15	33	16	12
Sexual identity (<i>n</i> = 125)							
Before SOCE	28	25	31	13	8	3	17
After SOCE	12	10	26	9	28	13	27

Note: SOCE = sexual orientation change efforts. K0–K6 are Kinsey steps. Statistical tests are in Table 6.

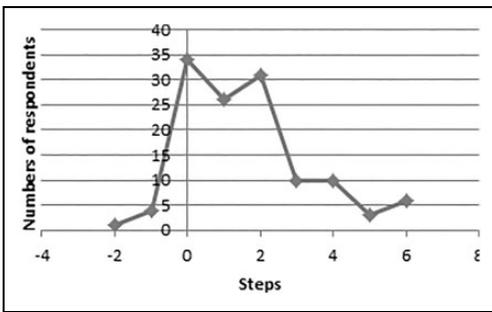


Figure 2. Distribution of individual Kinsey step changes, for sexual attraction, from before sexual orientation change efforts to the survey date, where positive steps are toward the heterosexual end. *N* = 125. Data are in Table 5.

(Figure 2; Table 5). However, that is not a very meaningful median because some positive step changes in Kinsey ratings are profound, for example, experiencing heterosexual attraction for the first time although mostly still homosexually attracted or moving to exclusive heterosexual attraction. Other steps are probably much smaller. In Table 6, the 95 percent confidence limits (CI) were calculated by Monte Carlo methods; and 0.5 is a strong effect. This test rejects the hypothesis that SOCE is ineffective in changing sexual attraction or sexual identity.

As illustrated in Table 4, there was a 56 percent decrease in those endorsing predominant homosexual attraction (K4–K6: 109 men before, 48 men after) and a twelfold increase in those endorsing predominant heterosexual attraction (K0–K2: 5 men before, 61 men after); 22 men reported feeling heterosexual attraction for the first time. Of those initially rating themselves exclusively same-sex attracted (K6) and 14 percent (5/35) reported being (K0) after SOCE. The Roman Catholic sample

all showed significant change of attraction, usually from “mostly same-sex attracted” to “more opposite-sex attracted than same-sex attracted”.

For sexual attraction (Figure 1; Table 6), the hypothesis that SOCE is ineffective is rejected because of its very low probability, 4E-20, and the effect size of 0.62 is large.

There was a 43 percent decrease in predominant homosexual identity as defined by the Kinsey classes (84 men before, 48 men after), and a nearly 2.5 times increase in predominant heterosexual identity (28 men before, 68 men after, Table 4). The effect size was 0.66, similarly large.

Changes in Frequency

Figures 3 and 4 show representative changes in frequencies for heterosexual fantasy and homosexual sex. Table 1 shows changes in frequency for homosexual and heterosexual fantasy, desire for intimacy, kissing, and sex.

The hypothesis of ineffectiveness of SOCE is rejected for all of the measures (Table 1), and effect sizes are moderate to large. There is a decrease in homosexual measures and an increase in heterosexual measures.

There is a large range in change of frequencies for the individuals (not shown), rather than the groups, but an indicative figure is an order of magnitude decrease of frequencies in homosexual categories and similar increase in the heterosexual categories .

Of twenty-one married respondents, after therapy, one became separated, one divorced, and three essentially stopped heterosexual interaction. These reactions following disclosure to spouses are not surprising. Of the others, eight showed unchanged but typical heterosexual frequency, and seven showed a median of twelve times previous frequency which

Table 5. Kinsey Step Changes for Individuals.

Number of Kinsey attraction steps	-2	-1	0	+1	+2	+3	+4	+5	+6
Number of respondents	1	4	34	26	31	10	10	3	6

Note: Positive changes are toward heterosexual.

Table 6. SOCE Effects on Sexual Attraction and Sexual Identity Changes Evaluated via Sign Test (Whole Sample).

Attraction/ID	<i>n</i>	Changes H/T	<i>p</i>	Ratio H/T	PS Size	PS' Size	95 percent CI
Sexual attraction	124	5:85	4E-20	17	0.82	0.62	[0.52, 0.72]
Sexual ID	125	12:68	6.0E-11	5.7	0.83	0.66	[0.51, 0.79]

Note: *p* values (for random occurrence of H/T distribution) calculated via binomial test, PS is "probability of superiority" index, the effect size for the sign test). Since this is compared with 0.5 (no superiority), PS' size shows the corrected effect size, i.e. compared with .0. *df* for the sign test is 1. H = homosexual direction, T = heterosexual direction, CI = confidence interval, and SOCE = sexual orientation change efforts.

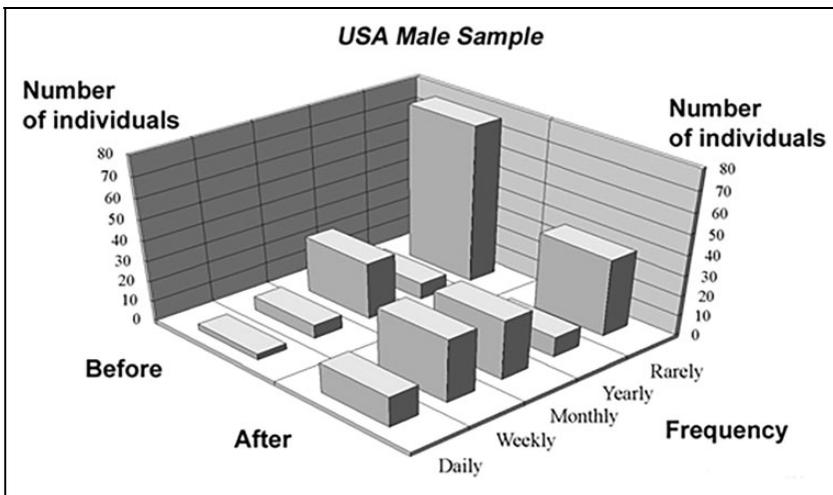


Figure 3. Sexual orientation change effort effects on heterosexual fantasy frequency. Data are in Table 1.

is large. The distribution was not normally distributed nor with logarithmic transformation, so deeper statistical analysis awaits further study, but Monte Carlo tests showed that the probability of sampling producing the above effect was only 1.8E-4.

Therapies and Techniques

The names of professional therapies were only recalled by 20 percent of participants, and the only category with more than three responses was cognitive/behavioral, which sixteen participants found helpful and two harmful. From a binomial test, the hypothesis of harm predominating is rejected at the

p = 0.0007 level. Cramer's *V* is 1.3, a large effect. One would in any case not expect this well-known technique to be inherently harmful.

Therapy. When asked what was most helpful to SOCE (data not shown), 26.4 percent endorsed participation in the weekend gender-affirming retreat; and 63 percent of the total sample had tried this. Seeing a mental health, family, or marriage counselor was endorsed by 13.6 percent, seeing a psychologist 12.8 percent, and experiencing a mentoring relationship 12 percent. No therapy received most favored endorsement from a majority. The participants rated

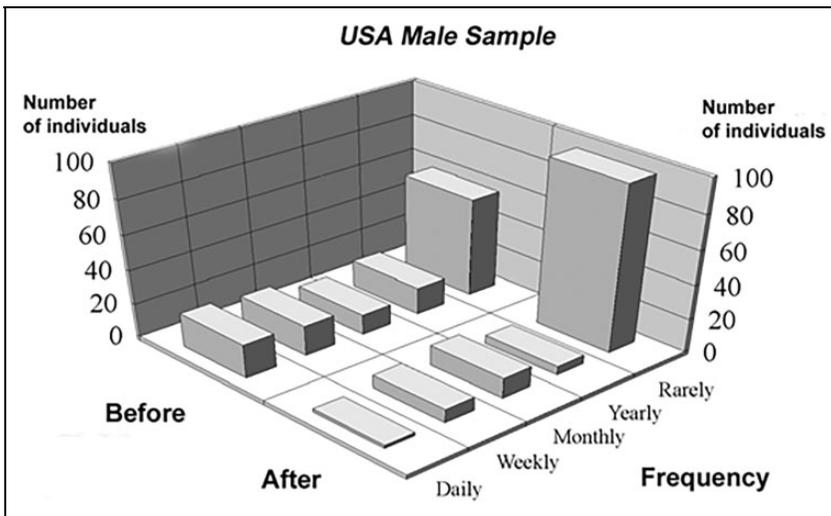


Figure 4. Sexual orientation change effort effects on homosexual sex frequency. Data are in Table 1.

the types of therapists as mostly similar in effectiveness, and in all cases predominantly helpful (data not shown), but it is rather remarkable that the short retreat was preferred more than psychological counseling (58 percent of sample), for whom the median length of therapy was 80 hours. This is rather long compared with data for other unwanted issues (Okiishi et al. 2006).

Techniques for SOCE

Figure 5 allows a quick comparison of harmfulness/helpfulness of those techniques familiar to readers, with those less familiar, or more SOCE-specific, and appears to show a strong and general endorsement of effectiveness. Many kinds of techniques were represented, and most of the participants had tried most of the techniques surveyed. The therapeutic techniques that survey participants endorsed as particularly helpful (ratings of “extremely,” “markedly,” and “moderately” combined) were “developing nonerotic relationships with same-sex peers, mentors, family members, and friends” (87 percent); “understanding better the causes of your homosexuality and your emotional needs and issues” (83 percent); “meditation and spiritual work” (83 percent); “exploring linkages between your childhood and family experiences and your same-sex attraction or behavior” (78 percent); and “learning to maintain appropriate boundaries” (76 percent).

Harm. The techniques that participants rated as the most harmful to SOCE overall (all responses

combined) were “going to the gym” (16 percent), “imagining getting AIDS” (used as “covert aversion” 13.6 percent), “stopping homosexual thoughts” (12.8 percent), and “abstaining from masturbation” (10.4 percent). The number who used them can be gauged from data in Table 3. It is not clear to what extent techniques were used in the informal groups as compared with in more formal therapy.

Overall, the hypothesis that any technique was predominantly harmful was strongly rejected, and effect sizes for the χ^2 calculations were all large (Table 3). These tests reject the hypotheses that these techniques are ineffective in SOCE.

Positive effects on self-esteem were all marked or extreme, and the three respondents with initial suicidality all experienced an extreme beneficial effect. The Roman Catholic subsample showed no net harm.

Helpfulness of Therapy on Mental Health Issues

For the impact of SOCE on each mental health issue (Figure 6; Table 7), respondents were first asked to give a grade from “none” or “not applicable” through “slightly helpful” to “extremely helpful,” for the helpful outcomes. Next, they repeated this for the harmful outcomes, thus they supplied both a possible positive and negative response. For each issue, the grouped overall negative impact was slight. For positive impacts, the median results were self-esteem, marked; social functioning, marked; depression, moderate; self-harm, marked; suicidality, marked; and substance abuse, extreme.

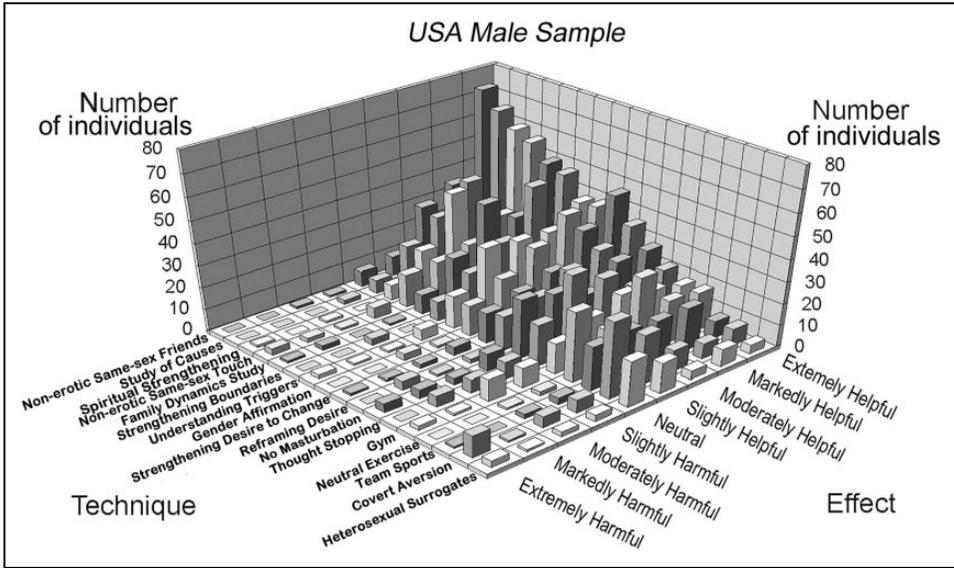


Figure 5. Overall harmful and helpful effects of various techniques on sexual orientation change efforts, showing apparent frequency contrast between harm and help. Respondents were asked to rate all techniques but with one effectiveness endorsement per technique. Order of techniques is only for visibility of columns. Data and statistical tests are in Table 1.

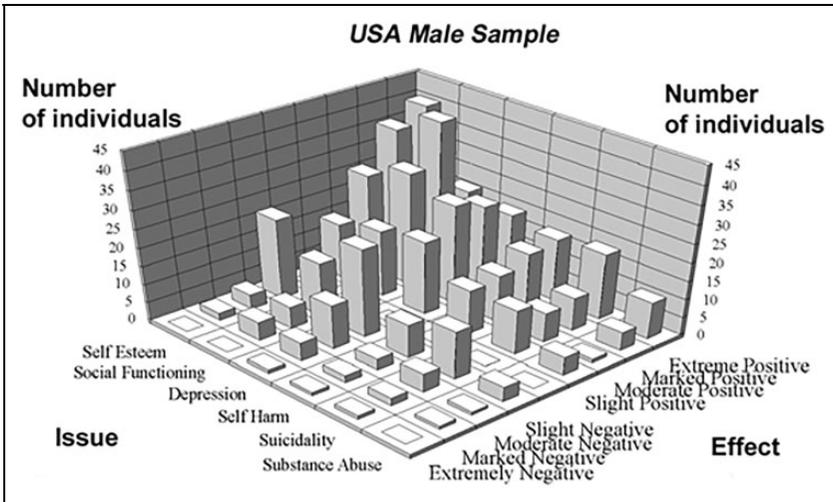


Figure 6. Sexual orientation change effort effects on help and harm for six self-reported mental health issues. Help and harm sections are separated by a null row for clarity. “None” and “Not Applicable” similarly are omitted. Apparent contrast between harm and help frequencies. Data and statistical tests are in Table 7.

The hypothesis that harmful mental health issues arising from SOCE have higher prevalence than expected is examined in Table 7. Using self-esteem as an example, the negative experiences total 5, and other responses to the negative question total 96. We take those as the “observed” values in a χ^2 test, compared with the “expected” values from the positive

experiences. The positive experiences total 106, and other responses to the positive question total 7. We used a χ^2 test via a 2×2 cell structure. The hypotheses that harm predominates is rejected strongly because calculated probabilities are extremely low. The effect sizes are high, sometimes very high. An exception is substance abuse (moderate effect size),

Table 7. Sexual Orientation Change Effort Effects on Help and Harm for Six Self-reported Mental Health Issues.

Harm/Help	Self-Esteem	Social functioning	Depression	Self-harm	Suicidality	Substance Abuse
Negative responses						
Extremely negative	0	0	0	1	1	0
Markedly negative	1	2	3	1	1	1
Moderately negative	0	0	3	0	2	1
Slightly negative	4	2	9	6	7	3
None	88	86	69	76	73	60
Not applicable	8	12	13	33	30	58
Sample numbers	101	102	97	117	114	123
Positive responses						
Slightly positive	16	21	21	10	8	4
Moderately positive	17	30	21	12	9	1
Markedly positive	36	33	16	13	6	5
Extremely positive	37	19	17	17	17	10
None	6	9	17	21	26	20
Not applicable	1	3	16	45	51	83
Help/harm	20.1	26	5	6.5	3.6	4
χ^2	1,372	800	133	65	31	13.4
<i>p</i>	2E-300	4E-176	8E-31	5E-16	3E-8	2E-4
Cramer's <i>V</i>	3.7	2.8	1.17	0.75	0.51	0.33
95 percent CI	[3.5, 3.9]	[2.7, 2.9]	[1.0, 1.3]	[0.65, 0.85]	[0.40, 0.60]	[0.22, 0.41]

Note: Harm and help values are sums of negative and positive values, respectively. See text for more detail. SOCE = sexual orientation change efforts and CI = confidence interval. *df* = 1. *p* values are for χ^2 .

but few had that issue. Several participants reported improvement for more than one issue (data not shown).

Harmfulness of Therapy

Helpfulness predominated (Table 7). Only one participant reported extreme negative effects, which were on suicidality and self-harm. In contrast, most of the reported net degrees of harm were "none to slight." About 75 percent reported net harm in only one (varying) category of the six options. Most percentages of respondents reporting harm were below 10 percent. The high (98.6 percent) active faith reported means, on the most conservative interpretation, very little loss of religiosity, which would be considered a harm by this type of respondent.

Discussion

Reliability of Respondents

Spitzer has stated that he cannot exclude the possibility that many of the people in his 2003 survey lied about their changes, and he no longer wants to assert that he has shown that there were real changes

(Spitzer 2012). However, if veteran researchers cannot tell whether their subjects were lying, this destroys a major portion of the findings in most sociological fields. Probably one partial defense against such a criticism is to encourage respondents as evenhandedly as possible to report negative and positive experiences, as in this survey.

Another criticism is "In some research, individuals, through participating in SOCE became skilled at ignoring or tolerating their same-sex attractions." (American Psychological Association 2009c, 3). Any survey distortion from this source may be minimized by requiring numerical frequency data, as in this survey.

Effectiveness

A subset (14 percent) claimed a change in attraction from exclusive homosexuality to exclusive heterosexuality (cf. Jones and Yarhouse 2011), which means that they believe they lost one exclusive attraction and gained another exclusive attraction. One psychological response must be extinguished and a quite different one enhanced, which seems at least a two-stage task, and a quite profound change

(Rachman 1966). For these clients, the therapy was markedly successful. If “unlikely to be successful” (American Psychological Association 2009a) means only a 14 percent success rate for very profound change, many lay religious individuals will still feel this worth trying. As shown by the effect sizes, decrease in same-sex fantasy and intimacy desire was comparable to increase in the opposite-sex equivalents (Table 1).

A fair summary of the change efforts in this study and for this sample and milieu would therefore be “likely to succeed to some extent in a majority of cases.” For those participants who experienced opposite-sex attraction for the first time, even a small degree of this might be classified by them as a very large qualitative change.

Spontaneous Change Compared with Therapeutic Change

In a random sample of 6,000 men and no therapy, and comparing ages 21 and 28, 6.2 percent showed some change of same-sex attraction, and 24 individuals who reported themselves to be exclusively homosexual at age 21 reported themselves exclusively heterosexual at age 28 (Savin-Williams, Joyner, and Rieger 2012). Change is less frequent at older ages, and over the course of ten years, in the fourth decade, 2 percent showed some degree of change in attraction (Mock and Eibach 2011). These results are much lower than the rates in this study; however, the two studies were based on statistically representative samples, unlike our convenience sample. Recent work is also supportive of some spontaneous change (Katz-Wise and Hyde 2015). The concept of the immutability of sexual attraction must be rejected.

Techniques

Figure 5 and Table 3 show help or hindrance to SOCE progress from various techniques and do not show SOCE causing psychological harm. Figure 5 and Table 3 show that all the various techniques helped or, to a lesser extent, were neutral; and none overall hindered SOCE. Effect sizes were strong. Since most respondents tried most techniques and hence some helpful ones, any hindrance from a specific one does not seem generally serious for SOCE.

As a broad generalization, a surprisingly wide variety of techniques seemed to have some helpful effect, and these were often approximately comparable in helpfulness. This reflects the findings from more general surveys on therapy by others; many

techniques may help any particular condition (Reisner 2005).

The 80 percent rate of depression/suicidality in our sample was similar to that in Jones and Yarhouse (2011) but overall did not warrant clinical attention. The effect sizes for predominant positive SOCE impact on mental health issues (Table 7) resemble general effect sizes (often about 0.7) in a meta-review of psychotherapeutic techniques elsewhere (Shedler 2010). It is not surprising that the mental health issues were helped in the supportive milieu of the informal groups, combined with formal therapy. Participants reported improvements (with large effect sizes) in self-esteem and social functioning, and similarly decreases in suicidality, substance abuse, depression, and self-harm. Before therapy, they had experienced an average of three of these problems. The changes had apparently lasted for a median of nearly 3 years, for those post-SOCE. The degree and intensity of the initial conditions are not known and are self-reported, nor are they on established psychometric scales. It is improbable they would reach diagnosable levels according to official standards if tested because in the SOCE milieu, severe conditions seen in a group are usually referred for help or will be apparent during professional therapy. The large effect sizes hence refer to degrees of conditions more treatable than usual and unsurprisingly are often a little higher than those for change in sexual attraction under SOCE. The degree of change of the comorbid problems was sufficiently high that for them a fair summary would be “likely to change to a large extent during SOCE”.

Secularity

Supporting other surveys, this one does not find general cultural and family pressures to be predominant, hence does not support the null hypothesis (Ross 1990). Religious reasons for SOCE greatly predominated. However, secular counselors/groups received comparable approval ratings to nonsecular, so reported help did not depend exclusively on religiosity.

Strengths and Limitations

One strength of the study is the sample size of 125 men. Monte Carlo tests usefully showed that this was sufficient to give stable results for all the statistics that were tested. It was also important that the study specifically sought both those who had benefited from the therapy and those who had not, and this may have given clearer sample characteristics than

some previous surveys. Similarly, the frequency estimates may have also led to more clarity.

About half the sample was post-therapy which allowed a 3-year median follow-up. This is limited, but seven years follow-up (Jones and Yarhouse 2011) gave very similar conclusions.

There are some limitations. The survey did not provide dropout rates during therapy. It also remains possible that the sample is not representative, even of lay religious men, although the participants were invited to contribute both positive and negative experiences. The study was based on the participants' self-reported data, so generalization must be limited; this is a group of lay religious people who had unwanted same-sex attraction. The sample was mostly (90 percent) well-educated, Caucasian Protestants (but included Roman Catholics, Jews, and Mormon men), and had higher than usual median income. They represent US cultural streams. However, many of the SOCE techniques they reported were not primarily religious in nature. That and the diverse faith spectrum represented suggests a much wider applicability than just to Protestant evangelical groups and perhaps even to the irreligious.

The changes were generally satisfactory to the individuals, but acceptability to church authorities is a completely different matter, particularly considering those who might be called to take a public or responsible role, and would need further study.

Improvements would probably involve better ensuring a representative sample, particularly including those who are less religious, further consideration of survey design, more standardized measures, more longitudinal methodology, and more comparison with therapy for other conditions.

Control Group

Some critics might insist on a control group; however, respondents would have to have unwanted same-sex attraction, plus depression and suicidality, etc., and deliberately leave these without therapy for a time probably measured in years, which is almost certainly unethical (Spitzer 2003) except in a "waiting list" situation which is not applicable here.

Criteria for Therapy Endorsement

The desire of the APA for a sociologically appropriate control group in these studies is unlikely ever to be ethically attained, and so the acceptability of these therapies must be based on other criteria. One is the decrease in unwelcome features and increase in welcome features, in a religiously supportive atmosphere,

which itself is welcome to participants. In the present group study, there was observed strengthening of opposite-sex attraction, and twenty-two respondents reported such attraction for the first time. In contrast, ten in the K6 class did not change. Experiencing opposite-sex attraction for the first time is presumably not controversial, nor is strengthening it, but may be less likely during gay-affirmative therapy. There was a claimed loss of all same-sex attraction by twelve respondents, and five of them claimed a remarkable change from exclusive SSA to exclusive OSA. Whether benefits will also apply to a secular group would have to be addressed by other surveys.

Contrary to the APA emphasis on group sociological criteria, we affirm that psychotherapy is ultimately tailored to individuals, and this is one important measure of satisfactory therapy. For example, we take harmful or helpful effects to a statistically insignificant group of individuals to be worth considering, whereas a pure sociological approach does not. If this emphasis predominated, some individuals would be prevented from obtaining the help they wanted.

We repeat that the statistical tests in this article do not compare a survey and a traditional control group but compare whether the difference between the survey group and a hypothetical null group could arise through chance sampling fluctuation of numbers in different categories. Evidence-based advice to clients would be that many techniques/therapists may be helpful and should be considered.

Comparison with Other Effectiveness/Harmfulness Rates

The study's effectiveness rates for counseling people with unwanted same-sex attraction were comparable to the effectiveness rates of psychotherapy in general for any unwanted issue. Meta-level study on a wide range of therapies has shown that the average person who received counseling for whatever problem was better off than 70 percent to 75 percent of the persons who did not receive counseling (Lambert 2011). The current study showed that two-thirds of the men surveyed had more heterosexual attraction and less homosexual attraction after receiving therapeutic help for their unwanted same-sex attraction. This appears to be a numerically similar improvement rate.

The study also had a similar harmfulness rate compared to general psychotherapy. The percentage of patients leaving treatment worse off than when entering is 5–10 percent (Hansen, Lambert, and Forman 2002). The current study had a similar rate (12 percent) for depression (c.f. Spitzer 2003; Nicolosi, Byrd,

and Potts 2000). In the present study, increased suicidality was 8.9 percent, but intensity was slight, and other unwanted problems were less than 5 percent.

Most importantly, the overwhelming majority—70 percent of the participants—claimed only beneficial effects from the therapy. This contrasts greatly with the 5 percent in the group of Shidlo and Schroeder (2002), specifically recruited for dissatisfaction, and 66 percent having an active faith compared with 98.6 percent for ours. In our study, respondents were asked to give both positive and negative experiences, and our results correspond much better with those of Jones and Yarhouse (2007), so the Shidlo and Schroeder (2002) and Dehlin et al. (2015) studies are not universally representative.

APA Issues

As mentioned in the introduction, the APA states that SOCE may be harmful/ineffective and discourages both therapists from administering therapy and clients from seeking SOCE from them. The APA also states that there is no adequate methodologically sound research on recent SOCE (internal validity concerns, lack of comparison groups, rare long-term follow-up, client attrition, and unreliable retrospective self-reports; American Psychological Association 2009b). However, given the opinion of Spitzer (2003) above, the same doubts apply to gay-affirmative research. On the one hand, the research community ignores all the positive study results from the dozens of SOCE studies done over the past several decades. On the other hand, the alternative therapeutic interventions seem to have been little quantitatively tested in the 15 years since Spitzer's criticism (but see Flentje, Heck, and Cochran 2014), and for many clients, gay-affirmative therapy would be permanently inadmissible on religious grounds. The question becomes both an issue of scientific assessment and an issue of whether those men who wish to change have civil rights to pursue such change in the way they deem best or whether the APA has the right to prevent them from doing that by misleadingly claiming that they may be hurt when the data indicate, at least for lay religious men and informed therapy, that this is unlikely.

The survey considered in the present article is further evidence that the APA should reconsider their position of discouraging men from seeking SOCE for their unwanted same-sex attraction. The effectiveness rates and effect sizes and deterioration or harmfulness rates for counseling people in the survey with unwanted same-sex attraction are similar to the effectiveness rates of general counseling for

other conditions. The studies show that decreases in depression, suicidality, substance abuse, and self-harm and increases in self-esteem and social functioning accompany SOCE, making it worthwhile even for those improvements. If told about the effectiveness and harmfulness rates of SOCE including comorbid conditions, clients could make a rational choice regarding receiving therapy to minimize their unwanted homosexual attractions and developing their heterosexual potential. In fact, the ability to make such a choice should be considered fundamental to client autonomy and self-determination, as mentioned previously (Spitzer 2003). It is certainly an issue of basic civil rights.

Some (Hancock, Gock, and Haldeman 2012) appear to want therapies totally free of side effects, apparently following the dictum "first do no harm" by which is really meant avoiding deliberate embracing of predominant known harm (Inman 1860). Zero harm is not realistic, nor probably attainable for any type of therapy. It has been known for at least a century that serious sequelae may accompany even good therapy, and 29 percent of general psychotherapists reported that during their career, at least one patient had committed suicide (Pope and Tabachnick 1993). Minimalization is a much more realistic goal. Statistically, therefore, no therapy will achieve zero-harm long-term, but whether one is a critic or a practitioner, no one wants to hurt clients.

Given the results of this survey, the current recommendation by the American Psychological Association (2008) that "ethical practitioners refrain from attempts to change individuals' sexual orientation" is itself unethical, at least for lay religious men. A reevaluation would, at a minimum, spark motivation to conduct studies with the best possible research methodology, so that SOCE can be better evaluated and improved further. The bottom line is that individuals with unwanted same-sex attraction have the fundamental right to seek strengthening of opposite-sex attraction, and this should be fully respected. Through their change efforts, they are likely to see at least some change and help with unrelated mental issues, and they have a right to know this.

Conclusion

For this survey group, contrary to the null hypotheses, SOCE is neither ineffective, nor harmful, conflicting with APA findings. On the basis of this survey, religious clients could be told that some degree of change is likely from SOCE, and positive change in suicidality, self-esteem, depression, self-harm, substance abuse, social functioning should

be moderate to marked. Also contrary to the null hypotheses, social pressures do not predominate as reasons for entering SOCE, and effect sizes are not clearly less than for standard psychotherapies.

Degree of harm is zero to slight and about typical of harm for therapy for other unwanted problems. This therapy is not really exceptional but should be considered in the ranks of the conventional, with conventional safeguards as codified several years ago (NARTH 2010). Roman Catholic respondents reacted to therapy much the same as other faith groups, and this option could be seriously considered for them also. It would be important, however, to draw on the experience of those with relevant experience, including the Catholic group "Courage" and also important to study further long-term follow-up for those who might be called to public and responsible positions in the Church. It is ironic in an age which claims to take tolerance of diversity as one of its highest values that SOCE should be thought to be an exception to the principle.

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