

A Longitudinal Study of Attempted Religiously Mediated Sexual Orientation Change

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The authors conducted a quasi-experimental longitudinal study spanning 6–7 years examining attempted religiously mediated sexual orientation change from homosexual orientation to heterosexual orientation. An initial sample was formed of 72 men and 26 women who were involved in a variety of Christian ministries, with measures of sexual attraction, infatuation and fantasy, and composite measures of sexual orientation and psychological distress, administered longitudinally. Evidence from the study suggested that change of homosexual orientation appears possible for some and that psychological distress did not increase on average as a result of the involvement in the change process. The authors explore methodological limitations circumscribing generalizability of the findings and alternative explanations of the findings, such as sexual identity change or adjustment.

The seeming professional consensus that sexual orientation is immutable was asserted for years on the Public Affairs website of the American Psychological Association, where an absolute answer to the question of change was offered: “Can therapy change sexual orientation? No [H]omosexuality is not an illness. It does not require treatment and is not changeable” (American Psychological Association, 2005). The present study was initiated at the time when the prevailing view was that homosexual orientation was not changeable. Claims of immutability have often been paired with expressed concern about harm produced by the attempt to change, such as the American Psychiatric Association’s (1998, para. 9) claim that the “potential risks of ‘reparative therapy’ are great, including depression, anxiety and self-destructive behavior.”

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The assertion that sexual orientation is immutable was notable in light of the dozens of studies published in professional journals over decades suggesting significant change by at least some of those seeking change via professional psychotherapy or religiously mediated means (e.g., Freeman & Meyer, 1975; Hatterer, 1970; Munzer, 1965; Pattison & Pattison, 1980; Truax & Tourney, 1971). Still, reports of some possibility of change in sexual attraction have continued to emerge. For example, Diamond (2007, 2008) followed a group of 89 young women over a decade across five samplings. Although this was not a study of sexual orientation change as such, Diamond (2008) studied several variables, including sexual identity labels, intensity of attraction, and behavior, and whether these variables changed over time. In general, most women who consistently identified themselves as bisexual and unlabeled “reported that attractions to men and women were about equal in intensity” (Diamond, 2008, p. 107). In contrast, most women who identified as lesbian consistently throughout the longitudinal study reported “between 90 and 95 percent of their attractions for women” (Diamond, 2008, p. 106). However, at her 10-year assessment, “10% of the women who had originally identified as lesbian ended up settling down into long-term relationships with men” (Diamond, 2007, p. 148). Showing the complexity of her findings, she further reported, “Among the 12 women who ended up re-identifying as heterosexual during the study (5 of whom returned to a lesbian, bisexual, or unlabelled identity by the 10-year point, only 3 claimed that they no longer experienced attractions for women” (p. 148). Although Diamond’s was not a study of intentional attempts to change orientation, and acknowledging possible profound developmental differences in male and female sexuality, these basic findings stand in dissonance with any absolute declaration that orientation cannot change.

The American Psychological Association’s recent pronouncements on the likelihood of change have moderated somewhat from the earlier immutability stance on their website. The Executive Summary of the Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation (American Psychological Association, 2009) stated that its review has established that “enduring change to an individual’s sexual orientation is uncommon” (p. 2), although in other places the report strikes a stance of agnosticism, stating for example that “there is little in the way of credible evidence that could clarify whether SOCE [sexual orientation change efforts] does or does not work in changing same-sex sexual attractions” (p. 28).

On what basis has immutability been asserted in light of prior published research claiming such change? Anecdotes of failed change (by “ex-ex-gays”) have contributed to such pessimism, as has the steady decline of published studies in the last several decades. Most important, the methodological rigor of past research has been challenged, with the lack of longitudinal studies the most frequent concern expressed. The public affairs website of the

American Psychological Association (2005) stated for many years that “claims [of orientation change] are poorly documented. For example, treatment outcome is not followed and reported over time as would be the standard to test the validity of any mental health intervention.” Indeed, many past studies were methodologically limited. They used obscure or idiosyncratic measures of sexual orientation change, relied on therapist ratings rather than client ratings, used reports from memory of past feelings rather than sampling participants prospectively, and/or were cross-sectional snapshots rather than true longitudinal studies. The American Psychological Association Task Force formulated five “best-practice standards for the design of efficacy research” (2009, p. 6) on SOCE:

Research on SOCE would (a) use methods that are prospective and longitudinal; (b) employ sampling methods that allow proper generalization; (c) use appropriate, objective, and high-quality measures of sexual orientation and sexual orientation identity; (d) address preexisting and co-occurring conditions, mental health problems, other interventions, and life histories to test competing explanations for any changes; and (e) include measures capable of assessing harm.

The present study was designed to address the weaknesses of previous studies, particularly the need for longitudinal studies. Though the design of the present study was conceptualized and implemented many years before the 2009 Task Force Report, this study meets many of the standards proposed by the American Psychological Association Task Force. In particular, and responding to their five recommendations:

1. The present study is prospective and longitudinal.
2. Its quasi-experimental design is adequate to address (“generalize to”) the fundamental question of whether sexual orientation change is ever possible, although the design is inadequate, as the Task Force Report points out, because of the “absence of a control or comparison group” (American Psychological Association, 2009, p. 90), to allow for decisive causal attribution of the changes noted to the religious interventions. The design is adequate, however, as a test of the possibility of change.
3. The study used the best validated measures of sexual orientation current in the late 1990s when the design was set.
4. The study did not address competing explanations as proposed by the Task Force because it had an insufficient sample size to make valid inferences.
5. The study included a validated measure of psychological distress as an index of harm.

Measurement of sexual orientation can be construed as one of the most contentious issues in studying the possibility of sexual orientation change.

Previous studies of change have been criticized for using unvalidated and/or idiosyncratic measures of sexual orientation (American Psychological Association, 2009). Although a valid concern, this criticism also makes two highly problematic assumptions: (a) that a stable consensus exists around a single definition of sexual orientation and (b) that there exists a consensus about reliable and valid ways to assess it. On the nature of sexual orientation, for example, Cochran (2001, p. 932) argued:

Sexual orientation is a multidimensional concept including inter-correlated dimensions of sexual attraction, behavior, and fantasies, as well as emotional, social, and lifestyle preferences I refer to those individuals who experience same-gender sexual desire or behavior or who label themselves with any of a number of terms (e.g., lesbian, homosexual, gay, bisexual, questioning) that reflect a sense of possessing, at least in part, a same-gender sexual orientation.

This definition reflects a modesty, fluidity, multidimensionality, and open-endedness that is well-grounded in the complex realities of sexual orientation. Similarly, despite our intent to use best measures of sexual orientation, Sell (1997) was not without basis for his general conclusion that “none of these [sexual orientation measures existing in 1997] are completely satisfactory” (p. 655). We report on two measures of sexual orientation from among the more highly regarded scales available when this study began, focusing on those that appear to most straightforwardly assess basic dimensions of sexual orientation. We did not use psychophysiological measures to assess sexual orientation, because we judged such methods to be (a) pragmatically impossible given the geographically dispersed nature of our sample, our limited control over initial assessment settings and later move to assessment via phone and self-administered questionnaires, and the limitations of our funding; (b) morally unacceptable to the bulk of our research participants because such methods require participants to be exposed to sexually explicit stimulus materials that their moral principles would direct them to refrain from; and (c) not justified in light of current research challenging the reliability and validity of the methods themselves (see Jones & Yarhouse, 2007).

There are two sets of methods used by those seeking change in sexual orientation (American Psychological Association, 2009). One set involves professional psychotherapy; these methods are often called reorientation or conversion therapies. Independently, there are religious ministries of various kinds that use a combination of spiritual and psychological methods to seek to produce orientation change. This study addresses the generic questions of whether sexual orientation is changeable and whether the attempt is harmful by focusing only on the religiously mediated approaches to change. We report longitudinal outcomes over a 6–7-year period for a group of individuals seeking sexual orientation change via a diverse cluster of religious

ministries under the Christian umbrella organization, *Exodus*. The hypotheses for this study were (a) sexual orientation change is possible for some; and (b) the attempt to change is, on average, not harmful.

METHOD

Participants

Participants were solicited from 16 different Exodus International–affiliated ministries around the United States. Exodus International (2007) is a worldwide, Christian interdenominational umbrella organization that provides support and accountability to the independent ministries that join it (e.g., providing referrals, hosting an annual conference). Exodus sees itself as articulating a Christian perspective that neither rejects homosexual persons nor embraces gay identity as an acceptable norm. This study focused on individuals who were troubled by their sexual orientation and participated in specific Exodus-affiliated ministries to achieve “freedom from homosexuality through the power of Jesus Christ” (Exodus, 2007, para. 1).

Leaders of the 16 ministries who had agreed to inform their participants of our research were sent standardized letters describing the research and soliciting participation for distribution to ministry participants, who could then contact our team directly or through the ministry leaders. The core requirements for participant inclusion were that (a) the participant be at least 18 years of age, and (b) same-sex attraction was a significant part of the motivation for their involvement with this Exodus ministry. At first, we sought only individuals who had been involved in the change process for 1 year or less at the point of recruitment into the study, but later expanded that requirement to a maximum of 3 years of involvement in the change process. When we refer to “the change process,” we are referring broadly to general involvement in an Exodus-affiliated ministry group, which typically incorporates worship, prayer, education, and discussion. Some groups have structured curricula like that of Comiskey (1989) or the less-structured outline offered by Bergner (1995), whereas others are more unstructured. Most groups are guided by some sort of generalized hypothesis that homosexual orientation is the result of emotional woundedness combined with spiritual confusion that together can be resolved through prayer for healing combined with generalized growth in religious maturity as understood in the Christian tradition and with in-depth experience with nonsexualized, healthy relationships that foster interpersonal and spiritual maturity. More details of the sample construction process and background information on Exodus International are reported in Jones and Yarhouse (2007). All participants referred to the study who met the two basic study criteria of minimum age and disturbance about same-sex attraction were enrolled.

This methodology fails to meet a number of ideal standards for longitudinal, prospective studies. For example, an ideal study might be able to

determine how enrolled participants differ from all persons receiving service in the naturalistic setting under study, conduct the first assessment on participants before any services are rendered, and be able to discretely describe exactly the types of interventions used to attempt to produce change. Less ideal methods were necessary in order to study these geographically dispersed and methodologically diverse Exodus groups. The small size of most of these Exodus groups, the fact that they all enrolled new participants on a rolling basis, and their geographical dispersion together meant that we were only able to do first assessments once annually with each group, which, in turn, resulted in participants often having months or more of ministry involvement before our first assessment. The conditions of our invitations into these groups and the limitations of our funding meant that we were only assessing the specific participants referred for our study. Last, the methodological diversity of the various Exodus groups as described earlier meant that it is impossible to specify with any precision common methods used for change or which intervention methods proved valuable (or harmful). In the end, we made the pragmatic judgment that the methods we followed, with their limitations, were the only way to obtain meaningful outcome information gathered longitudinally on these religious subjects seeking sexual orientation change. Given that such individuals are the major group still seeking such change at this time (American Psychological Association, 2009), we judged it advantageous to be able to follow this sample over such an unusually long period of time to test the stability of claimed change.

At Time 1, the sample included 98 individuals: 72 men and 26 women. Sixty-four reported being never married, 27 legally married, 6 divorced, and 1 legally married but separated. They were highly educated, with 56.1% having finished college and 26.5% having completed some graduate training. They reported a high level of religious involvement, with 50% attending religious services weekly or nearly every week, and 36.7% attending more than once a week. In response to the question "Would you say you have been 'born again?'" 91.8% said yes.

Minimum age for inclusion in this study was 18 years, but the youngest subject was 21 years old at T1. The average age of participants was 37.50 years. The sample overall had considerable sexual experience. Among the 72 male participants, only 16.7% had not had sex with another man as an adult, and one third had had sex with 30 or more other men. Approximately half of the men had never had sex with a woman, and overall, the experience of the male sample with sex with women was considerably less than their experience with male partners. Of the 25 women who gave us meaningful data, only 8% had not had sex with another woman as an adult, and the largest group, 80% of the female sample, had had sex with one to nine other women. The women were less sexually experienced with men; 28% had never had sex with a man.

The participants who best fit the standards for a truly prospective study were those who had been involved in the change process for less than 1 year. We designated the 57 participants (out of the total 98 at T1) who had been in the change process for less than 1 year at the T1 assessment as the Phase 1 subpopulation, and the rest who had been committed to the change process for 1–3 years at initial assessment as Phase 2. It was expected that the results of change would be less positive in the Phase 1 group, because individuals experiencing difficulty with change would be likely to get frustrated or discouraged early on and drop out of the change process, making Phase 2 participants more likely to report success. We were able to retain Phase 1 participants in our study at roughly the same rate as those in Phase 2.

The study began with 98 participants at Time 1 (T1; we subsequently refer to Time 1 through Time 6 assessments as T1 through T6). A few participants told us their reasons for dropping out of this study: One person who reembraced his gay identity refused to continue assessment because he did not feel we would honestly report his experience. Several other participants reported directly that they believed themselves to be healed of all homosexual inclinations and withdrew from the study because continued participation reminded them of negative experiences they had when they had embraced gay or lesbian identity. The sample eroded from 98 participants at the initial T1 assessment to 73 at T3, a retention rate of 74.5%. This retention rate compares favorably to that of respected longitudinal studies, such as the National Longitudinal Study of Adolescent Health (Brückner & Bearman, 2005), which reported a retention rate from T1 to T3 of 73% for their large sample. Of the 73 participants we interviewed at T3, 61 were also interviewed at T6, for a T3 to T6 retention rate of 84%. A total of 63 participants were either interviewed or categorized at T6 out of a total original sample of 98 participants at T1, for a 6–7-year retention rate of 64%.

Procedures

This naturalistic, quasi-experimental, longitudinal study followed participants pursuing sexual orientation change via methods available in their community. The intervention methods used in the various Exodus groups to abet sexual orientation change were not standardized or otherwise controlled in any way, and our ability to establish rigorous standards for timing of assessments was limited. Use of this quasi-experimental method maximized external validity, measuring as it does the types of attempts to change sexual orientation that are going on in many organizations, while necessarily compromising certain aspects of internal validity and rigor. Thus, the methodology does not allow for rigorous examination of more sophisticated hypotheses (such as predictors or probabilities of change, or differential effectiveness of change strategies).

Because enrollment of participants for the T1 assessment involved managing contact with 16 Exodus ministries around the United States to recruit participants over a 20-month period, the time delay between T1 and T2 varied from as short as 8 months to as long as 28 months. The gaps between subsequent assessments were more standardized, mostly approximating a 12-month period between assessments. Thus, the total elapsed time between T1 and T6 varied from less than 6 years to more than 7 years.

All of the T1 assessments were conducted as face-to-face interviews, with some measures recorded from the verbal interview (the Kinsey and Shively-DeCecco scales as well as the open-ended qualitative questions), and a number of other measures administered as paper-and-pencil self-administered questionnaires (Symptom Checklist-90-Revised [SCL-90-R]) and mailed to our research office without interviewers seeing the responses (following Laumann, Gagnon, Michael, & Michaels, 1994). The interviewers were doctoral students in clinical psychology specifically trained for this study. T2 assessments were mostly conducted in person, although about 15% were conducted by phone for participants who were not otherwise available. We switched entirely to phone interviews for subsequent assessments because of increasing population dispersal, with continued gathering of the self-administered questionnaire data by mail.

Measures

KINSEY SCALE

The standard 7-point self-report Kinsey scale (Kinsey, Pomeroy, & Martin, 1948) ranges from 0 (*exclusively heterosexual*) to 6 (*exclusively homosexual*). We followed Kinsey's method of asking these questions in the verbal interview, with interviewers coding participant's responses. We asked for responses to the original version of the scale asking participants to describe the population of individuals with which one had had sexual relations (behavior), but here omit these from presentation as many of the individuals in our population gave no response to the question in the T2 through T6 assessments because they were behaviorally celibate. We report three variations of the Kinsey scale that asked about sexual attraction, emotional or romantic infatuation, and sexual fantasy, with participants responding with a printed version of the 0–6 response scale before them as a prompt. With instructions to report on their current experience in the context of the last 12 months, the specific wording of the three probes were (a) "How would you describe the gender of the persons to whom you are sexually attracted?"; (b) "How would you describe the gender of the persons with whom you have tended to be infatuated with or have a 'crush' on or to 'fall in love' with?"; and (c) "How would you describe the gender of the persons about whom you have tended to fantasize sexually or to have sexual dreams about?" It is arguable that the

Kinsey ratings on these three variables or dimensions—sexual attraction, emotional or romantic infatuation, and sexual fantasy—target foundational dimensions of sexual orientation.

SHIVELY AND DECECCO SCALE

Shively and DeCecco (1977) argued that sexual and emotional attraction had to be assessed in judging orientation, and they further conceived of heterosexual and homosexual orientation as orthogonal (rather than on a single continuum as for the Kinsey scale). Thus, the Shively and DeCecco scale comprises two questions that assess heterosexual attraction (sexual and emotional attraction) on a 5-point rating scale and two questions (sexual and emotional attraction) that assess homosexual attraction. As with the Kinsey rating, participants were queried verbally with a paper copy of the response scale before them. For heterosexuality, participants were asked, “Please rate the degree to which you are sexually attracted at a physical level to the opposite sex” and “Please rate the degree to which you are emotionally attracted (tend to become infatuated with or “fall in love” with) the opposite sex,” with responses ranging from 1 (*not at all attracted*) to 5 (*very attracted*). The heterosexuality rating is the average of these two ratings. For homosexuality, the questions substituted “same sex” for “opposite sex” in these two questions.

SYMPTOM CHECKLIST-90-REVISED (SCL-90-R)

Harm was operationally defined as increased psychological distress on average. Psychological distress was measured by the 90-item SCL-90-R (Derogatis, 1994), a measure designed for use in research and clinical settings. The SCL-90-R demonstrates clear evidence of reliability and validity to support its use (Derogatis, 2000), including its use in longitudinal studies (e.g., Ambrose, Button, & Ormrod, 1998; Bruce & Arnett, 2008). We focused on the SCL-90-R’s three global indices of the degree of respondent distress: the Global Severity Index (GSI), a highly reliable composite measure of the number of symptoms and intensity of distress; the Positive Symptom Distress Index (PSDI), a measure of the intensity of distress symptoms experienced; and the Positive Symptom Total (PST), a measure of the number of discrete psychological symptoms regardless of intensity.

QUALITATIVE OUTCOMES CATEGORIZATIONS

In reporting outcomes after the T3 assessment, Jones and Yarhouse (2007) classified 69 out of 73 T3 participants into one of six qualitative outcome categories displayed in Table 1. Categorization was based on the transcripts

TABLE 1. Descriptions of Six Qualitative Outcomes Categories

Outcomes	Description
Success: Conversion	Participants who reported change to be successful by experiencing substantial reductions in homosexual attraction and substantial conversion to heterosexual attraction and functioning.
Success: Chastity	Participants who reported change to be successful and who reported homosexual attraction to be present only incidentally or in a way that does not seem to bring about distress, allowing them to live contentedly without overt sexual activity.
Continuing	These persons may have experienced modest decreases in homosexual attraction, but were not satisfied with their degree of change and remained committed to the change process.
Nonresponse	These persons had experienced no significant sexual orientation change; they had not given up on the change process but may be confused or conflicted about which direction to turn next.
Failure: Confused	These persons had experienced no significant sexual orientation change, and had given up on the change process but without yet embracing gay identity.
Failure: Gay identity	These persons had given up on the change process and embraced gay identity.

Note. The terms *success* and *failure* were framed explicitly in terms of the values of the Exodus organization; it was recognized, for example, that individuals who had repudiated Exodus and embraced gay identity did not themselves regard that outcome as a failure.

of recorded responses to the standardized, open-ended questions that asked of participants in the interview; in particular, participant responses to three major sets of questions:

1. "At this point, are you continuing with the process of changing your homosexual orientation or feelings? Has your commitment to the process of change . . . grown stronger, grown weaker, or stayed the same?"
2. "What goals were you attempting to achieve when you began your involvement in this ministry to address these concerns? How are you doing in attaining those goals? How motivated are you to continue the change process at this point in your life?"
3. "Describe in your own words your sexual orientation as you understand it today. Please describe in your own words any significant changes in your sexual orientation since your last interview."

Out of 73 participants, 4 were not classified at T3 because of recording equipment malfunctions that deprived us of usable records of the qualitative aspects of the interview process.

At T6, we used these same six categories of outcome, but we adopted a different method of qualitative categorization. At T6, participants were presented with a written description of the six categories similar to Table 1 and asked to self-categorize their status at T6. Interviewers explained to

participants that the value-laden descriptors of the outcome categories were deliberately configured with reference to the outcome values of the Exodus organization, and that individual participants may not, for example, regard chastity as *success* or acceptance of gay identity as *failure*.

RESULTS

Quantitative Analysis of Sexual Orientation Outcomes

Kinsey scores for Attraction, Infatuation and Fantasy at T1, T3, and T6 are presented in Table 2 for all participants still in the sample at T6, for the whole population and for Phase 1 and Phase 2 cases separated. A 2 (Phase: 1 vs. 2) \times 3 (time: T1, T3, T6) mixed two-factor within-subjects analysis of variance for the attraction variable yielded a significant main effect for time for the linear trend, $F(1, 57) = 5.67, p = .021$, and for the quadratic trend, $F(1, 57) = 8.33, p = .005$, reflecting some decline in average homosexual attraction T1 to T3 and then some rebound in average scores at T6. A significant Phase \times Time interaction effect for the attraction variable emerged as a linear trend, $F(1, 57) = 9.04, p = .004$, whereas the quadratic trend neared significance, $F(1, 57) = 3.65, p = .061$, reflecting that Phase 1 subjects manifested little change from T1 to T3 to T6, whereas Phase 2 subjects showed T1 to T3 declines in average homosexual attraction with some slight reversal to T6; this interaction effect is displayed in Figure 1. The statistically significant changes were modest in terms of the absolute size.

TABLE 2. Kinsey Mean Scores, by Time and Phase \times Time

Kinsey measurement	Time 1		Time 3		Time 6	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Kinsey attraction:						
All* (<i>N</i> = 59)	4.08	0.20	3.07	0.27	3.30	0.28
Phase 1** (<i>n</i> = 29)	3.52	0.29	3.41	0.39	3.72	0.40
Phase 2** (<i>n</i> = 30)	4.63	0.28	2.73	0.38	2.87	0.40
Kinsey infatuation:						
All (<i>N</i> = 57)	3.40	0.29	2.90	0.31	2.83	0.32
Phase 1 (<i>n</i> = 28)	3.36	0.41	3.11	0.44	3.29	0.46
Phase 2 (<i>n</i> = 29)	3.45	0.40	2.69	0.43	2.38	0.45
Kinsey fantasy:						
All*** (<i>N</i> = 59)	4.61	0.21	3.66	0.27	3.77	0.27
Phase 1 (<i>n</i> = 28)	4.61	0.31	4.00	0.40	3.93	0.39
Phase 2 (<i>n</i> = 31)	4.61	0.29	3.32	0.38	3.61	0.37

Note. Participants reported on the Kinsey measure using a 7-point Likert-type scale ranging from 0 (*exclusively heterosexual*) to 6 (*exclusively homosexual*).

*Main effect for time significant as linear ($p < .05$) and quadratic ($p < .01$) trends.

**Interaction effect for Phase \times Time significant as linear ($p < .01$) trend.

***Main effect for time significant as linear ($p < .05$) and quadratic ($p < .05$) trends.

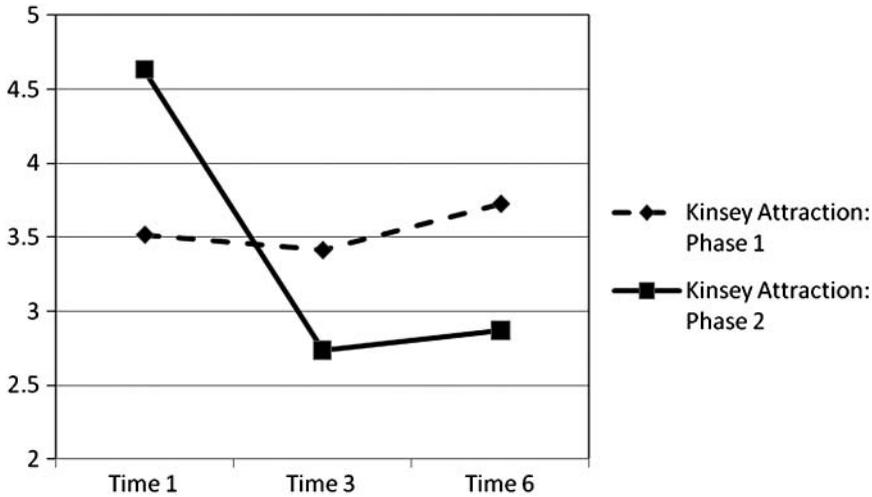


FIGURE 1. Phase \times Time Interaction effect for Kinsey attraction scores.

We performed these same analyses on the Kinsey Infatuation variable without yielding significant results. The main effect for time was nonsignificant for the linear trend, $F(1, 55) = 1.61, p = .209$, and for the quadratic trend, $F(1, 55) = 0.77, p = .383$. The Phase \times Time interaction effect was nonsignificant for the linear trend, $F(1, 55) = 1.23, p = .271$, and for the quadratic trend, $F(1, 55) = 0.00, p = .984$.

The Kinsey Fantasy variable yielded a significant main effect for time for the linear trend, $F(1, 57) = 6.53, p = .013$, and the quadratic trend, $F(1, 57) = 4.12, p = .047$, reflecting a decline in average homosexual fantasy T1 to T3 and then a plateau in average scores T3 to T6. Again, the statistically significant changes were modest in terms of the absolute size of the average changes. The Phase \times Time interaction effect was nonsignificant for the linear trend, $F(1, 57) = 0.24, p = .627$, and for the quadratic trend, $F(1, 57) = 1.01, p = .321$.

Tables 3 and 4 show a cross-tabulation of the raw Kinsey attraction and fantasy ratings, the two scales that yielded significant main effects for time, to demonstrate the diversity of reported outcomes for the study's participants T1 to T6. At T1, 11 participants reported attraction ratings of 0, 1 or 2 (variations on heterosexual response), but at T6, that number grew to 25. At T1, 43 participants reported attraction ratings of 4, 5, or 6; however, at T6, that number declined to 31. These together indicate some shift in the population away from homosexual experience and toward heterosexual experience. Similarly, at T1, 7 participants reported fantasy ratings of 0, 1 or 2; at T6, that number grew to 21; at T1, 46 participants reported fantasy ratings of 4, 5 or 6; at T6, that number declined to 35.

TABLE 3. Cross-Tabulation of Raw Kinsey Attraction Ratings at T1 and T6

Kinsey Rating T1	Kinsey Attraction Rating at T6							Total
	0	1	2	3	4	5	6	
0	0	1	0	0	0	0	0	1
1	2	1	0	1	1	1	1	7
2	0	1	0	0	0	1	1	3
3	1	0	1	2	2	1	0	7
4	1	4	1	1	1	4	3	15
5	4	1	1	1	2	2	5	16
6	1	4	1	0	1	3	2	12
Total	9	12	4	5	7	12	12	61

If a clinically significant shift in either Kinsey variable were defined as a movement of 3 points or larger toward heterosexuality (e.g., a shift from 6 at T1 to 3 or lower at T6), 18 of 61 T6 participants reported that magnitude of shift or greater T1 to T6 for Kinsey Attraction, and 13 for fantasy. It is clear that many subjects made no significant shift as a result of Exodus involvement or shifted in the opposite direction from that valued by Exodus. The participants whose scores are in the descending diagonal of cells in each table are those whose scores remained the same (8 for attraction, 11 for fantasy). Scores below this diagonal represented those who experienced some degree of shift toward heterosexuality (31 for attraction, 32 for fantasy), whereas scores above this diagonal represented those who experienced some degree of shift toward homosexuality (22 for attraction, 17 for fantasy). This ratio of positive to negative change did not attain significance for attraction ($\chi^2 = 1.20$, $df = 1$, $p > .05$), but was significant by McNamara's test for the fantasy variable ($\chi^2 = 4.00$, $df = 1$, $p < .05$). Overall, more participants experienced a positive (for Exodus) shift toward heterosexual experience than did those who experienced either no shift or a negative shift toward homosexual experience: 31 positive shift versus 30 none or negative (8+22) for attraction, and 32 positive shift versus 28 none or negative (11+17) for fantasy.

TABLE 4. Cross-Tabulation of Raw Kinsey Fantasy Ratings at T1 and T6

Kinsey Rating T1	Kinsey Fantasy Rating at T6							Total
	0	1	2	3	4	5	6	
0	0	0	1	0	0	1	0	2
1	1	0	0	0	0	1	1	3
2	1	0	1	0	0	0	0	2
3	1	2	1	1	1	0	1	7
4	0	0	1	2	1	1	2	7
5	0	1	2	1	2	3	8	17
6	1	7	1	0	2	6	5	22
Total	4	10	7	4	6	12	17	60

TABLE 5. Shively and DeCecco Mean Ratings by Time and Phase \times Time

Shively and DeCecco scale	Time 1		Time 3		Time 6	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Homosexuality: All*	3.85	0.12	3.17	0.15	3.14	0.16
Phase 1**	3.95	0.17	3.53	0.21	3.55	0.24
Phase 2**	3.75	0.16	2.81	0.20	2.73	0.22
Heterosexuality: All	2.46	0.12	2.77	0.16	2.86	0.17
Phase 1	2.52	0.18	2.67	0.23	2.57	0.24
Phase 2	2.41	0.17	2.86	0.22	3.16	0.23

Note. For each scale, there were 61 participants (29 in Phase 1, 32 in Phase 2). Participants reported on the Shively and DeCecco measure using a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*very*).

*Main effect for time significant as linear ($p < .001$) and quadratic ($p < .005$) trend.

**Main effect for phase significant ($p < .05$).

The Shively and DeCecco scale obtains separate ratings of heterosexual and homosexual orientation; these scores are presented in Table 5 for all participants still in the sample at T6, and with Phase 1 and Phase 2 cases separated. A 2 (phase) \times 3 (time) mixed two-factor within-subjects multivariate analysis of variance yielded a significant main effect for time for the homosexuality subscale, for the linear trend $F(1, 59) = 13.99, p = .000$, and for the quadratic trend, $F(1, 59) = 8.98, p = .004$, reflecting the decline in homosexual attraction T1 to T3 and then the distinct leveling off in average scores for the whole population at T6. Changes in the average heterosexuality subscale scores approached but did not attain statistical significance as a main effect for time as a linear trend, $F(1, 59) = 3.92, p = .052$; the quadratic trend did not approach significance, $F(1, 59) = 0.81, p = .373$. No significant Phase \times Time interaction effect for either Shively and DeCecco subscale emerged. The Phase \times Time interaction effect for the homosexuality subscale was nonsignificant for the linear trend, $F(1, 59) = 2.69, p = .106$, and for the quadratic trend, $F(1, 59) = 0.99, p = .324$; similarly, the Phase \times Time interaction effect for the heterosexuality subscale was nonsignificant for the linear trend, $F(1, 59) = 2.97, p = .090$, and for the quadratic trend, $F(1, 59) = 0.49, p = .825$. A 2 (phase) \times 3 (time) mixed two-factor within-subjects multivariate analysis of variance yielded a significant main effect for Phase for the homosexuality subscale, $F(1, 59) = 6.90, p = .011$, reflecting the more significant decline in these scores for Phase 2 than for Phase 1 participants; the same test failed to yield a significant main effect for Phase for the heterosexuality subscale, $F(1, 59) = 0.94, p = .337$.

Quantitative Analysis of Outcomes for Harm

The Symptom Checklist-90 (SCL-90) obtains three separate subscale scores: the GSI, which is a general index of distress, the PSDI, which is a measure of intensity of distress; and the PST, which reflects numbers of discrete symptoms. These scores are presented in Table 6 for all participants still in

TABLE 6. SCL-90, by Time and Phase \times Time (Nonpatient Norms)

SCL-90 Scale	Time 1		Time 3		Time 6	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
SCL-90 GSI: All*	57.53	1.47	55.70	1.45	54.42	1.43
Phase 1**	58.15	2.18	54.46	2.15	55.96	2.12
Phase 2**	56.91	1.96	56.94	1.94	52.88	1.91
SCL-90 PSDI: All	56.23	1.04	53.37	1.11	52.46	1.01
Phase 1***	57.73	1.55	52.92	1.64	53.62	1.50
Phase 2***	54.72	1.40	53.81	1.48	51.31	1.35
SCL-90 PST: All	55.96	1.44	55.13	1.42	54.14	1.36
Phase 1	55.69	2.14	54.00	2.11	55.50	2.02
Phase 2	56.22	1.93	56.25	1.91	52.78	1.82

Note. For each measure, there were 58 patients (26 in Phase 1, 32 in Phase 2). GSI = General Severity Index; PSDI = Positive Symptom Distress Index, and PST = Positive Symptom Total; SCL-90 = Symptom Checklist-90.

*Main effect for time significant as linear ($p < .05$) trend.

**Interaction effect for Phase \times Time significant as quadratic ($p < .05$) trend.

***Main effect for time significant as linear ($p < .01$) trend.

the sample at T6, with Phase 1 and Phase 2 cases separated. A 2 (phase) \times 3 (time) mixed two-factor within-subjects multivariate analysis of variance yielded a significant main effect for time for the GSI variable as a linear trend, $F(1, 56) = 6.05$, $p = .017$, but not for the quadratic trend, $F(1, 56) = 0.06$, $p = .804$. Similarly, the PSDI variable yielded a significant main effect for time as a linear trend, $F(1, 56) = 8.82$, $p = .004$, but not for the quadratic trend, $F(1, 56) = 1.02$, $p = .316$. In both cases, these linear main effects reflected modest improvement in absolute terms in distress symptoms over time as measured by the overall measure (GSI) and intensity measure (PSDI). The PST failed to yield a significant main effect either as a linear trend, $F(1, 56) = 2.17$, $p = .146$, or quadratic trend, $F(1, 56) = 0.01$, $p = .944$.

Only one of the Phase \times Time interaction effects attained statistical significance. The GSI variable did not yield a significant linear trend, $F(1, 56) = 0.53$, $p = .471$, but the quadratic trend was significant, $F(1, 56) = 4.44$, $p = .040$, reflecting that for Phase 1 subjects GSI declined T1 to T3 and then leveled T3 to T6, whereas for Phase 2 subjects, GSI was level T1 to T3 and then declined T3 to T6; this interaction effect is displayed in Figure 2. The PSDI was not significant as a linear trend, $F(1, 56) = 0.78$, $p = .780$, or as a quadratic trend, $F(1, 56) = 3.38$, $p = .071$. The PST was not significant as a linear trend, $F(1, 56) = 1.74$, $p = .193$, or as a quadratic trend, $F(1, 56) = 2.39$, $p = .128$.

Qualitative Analysis of Sexual Orientation Outcomes

The results of the qualitative analysis are displayed in Table 7. A total of 57 participants were interviewed at T3, and then interviewed and also gave

TABLE 7. T3 and T6 Qualitative Outcome Categorizations

	Success: Conversion	Success: Chastity	Continuing	Nonresponse	Failure: Confused	Failure: Gay Identity
Disposition of T3 Cases						
T3 categorization ($N = 69^a$)	11 (15%)	17 (23%)	21 (29%)	11 (15%)	3 (4%)	6 (8%)
T3 subjects not interviewed at T6; 12 total; by T3 categorization	2 ^b	1	6	2	0	1
Subjects rated at T3 and T6; 57 total; by T3 categorization	9	16	15	9	3	5
Direction of categorization shifts of T3 cases from T3 to T6 ^c	8 stable (73%) 1 →	9 stable (53%) ← 2 5 →	2 stable (10%) ← 7 5 → 1 NR	1 stable (9%) ← 3 4 → 1 NR	1 stable (33%) ← 1 1 →	4 stable (67%) ← 1
T6 categorizations						
Stable cases with same T3 & T6 ratings; 25 total; by T6/T3 categorization	8	9	2	1	1	4
Shifted cases by T6 categorization ^d	4	7	8	3	2	6
5 total new cases at T6; by T6 categorization ^e	2	2	0	0	0	1

(Continued on next page)

TABLE 7. T3 and T6 Qualitative Outcome Categorizations (*Continued*)

	Success: Conversion	Success: Chastity	Continuing	Nonresponse	Failure: Confused	Failure: Gay Identity
Total T6 cases by T6 self-categorization; 61 total	14 (23%)	18 (30%)	10 (16%)	4 (7%)	3 (5%)	12 (20%)
T6 Phase 1 cases and percentages by category	5 Phase 1 (36%)	6 Phase 1 (33%)	4 Phase 1 (40%)	2 Phase 1 (50%)	2 Phase 1 (67%)	10 Phase 1 (83%)

^aPercentages are out of the T3 total and thus add to 94%; the remaining 4 (6%) were the T3 recording failures.

^bOne of these two participants was rated as Success: Conversion at T3, but he subsequently repudiated his testimony of success and reported that he had embraced gay identity. This subject refused formal study participation for T4, T5 and T6, but by letter at T4 and by phone at T5/T6 affirmed full embrace of gay identity. He thus is reported as a noninterview in this cell but is added as an additional self-rated Failure: Gay Identity case at T6 in the "Total T6 Cases" row without being categorized at T6 as either a stable, shifted, or new case. Hence, whereas the totals for columns 1 to 5 in row 8 are all the sums of rows 5, 6, and 7 above them, the total in row 8/column 6 is the 11 cases totaled from the three rows above plus this one added Failure: Gay Identity case.

^c"Stable" designates cases with the same T3 and T6 ratings (percentage is the number of stable divided by row 1 number). ← = shifted left toward more successful by Exodius standards; → = shifted right toward less successful; note that these shifts could be by one or more categories. NR = no report; that is, T3 cases who refused to give self-categorization at T6.

^dCases by T6 categorization that were in a different outcome categorization group at T3. Note that the row 6 report of shifted cases is not the same as the row 4 report of shifts because row 4 reports cases by their initial T3 categorization (column 3; 12 cases that were Continuing at T3 were something else at T6), and row 6 reports cases by their final T6 categorization (8 cases in column 3 were categorized as Continuing at T6 but were in some other category at T3).

^eThese five new cases at T6 were comprised of one additional case that was not interviewed at T3 or T4 but that was recaptured, interviewed, and categorized for T5 and T6 (reported here as Success: Chastity); and of the four cases that were not categorized at T3 because of taping failures but that were successfully interviewed and categorized at T6 (two as Success: Conversion, one as Success: Chastity, and one as Failure: Gay Identity).

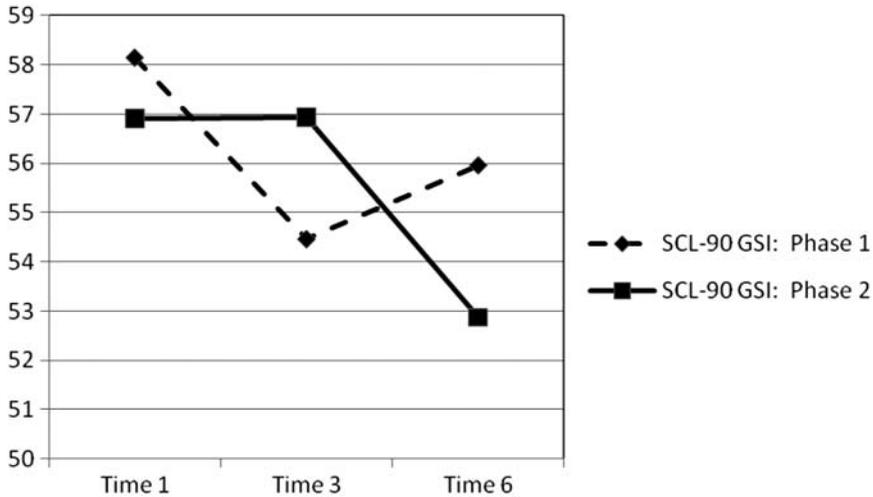


FIGURE 2. Phase \times Time interaction effect for SCL-90 GSI scores. SCL-90 GSI = Symptom Checklist-90 Global Severity Index.

self-categorization ratings at T6. The 4 cases out of 73 that were not categorized at T3 because of taping failures were successfully interviewed and self-categorized at T6; adding these 4 to the 57 cases interviewed at T3 and T6 gives us a subtotal 61 cases interviewed at T6 that were also interviewed at T3. Two new cases are added to this total: (a) one additional case that was not interviewed at either T3 or T4 but was recaptured, interviewed and categorized for T5 and T6; and (b) one case who was not formally interviewed at T4, T5, or T6 but could nevertheless be categorized as Failure: Gay Identity from T4 on the basis of phone contact. This yields 63 cases that could have given T6 self-categorizations, but two of the 57 participants interviewed at T3 and T6 did not complete self-categorizations at T6, yielding 61 final self-categorization ratings at T6.

It was the expectation after T3 that the Continuing, Nonresponse, and Failure: Confused qualitative outcome groups should dwindle disproportionately over time, as each of these classifications suggests distinct instability. Dropouts from the study between T3 and T6 were highest in the T3 Continuing group. Despite a smaller number of participants for the T6 sample than at T3, the absolute size of the two Exodus Success outcome groups grew from T3 to T6, but the group that grew the most in absolute and proportional terms was Failure: Gay Identity. The categories showing greatest stability of outcome T3 to T6 as a percentage were the Success: Conversion (73%) and Failure: Gay Identity (67%) categories, with slightly less stability in the Success: Chastity category (53%). Of the one subject each that shifted from the Success: Conversion and Failure: Gay Identity categories from T3 to T6, each moved to the Continuing category at T6. The categories showing greatest

stability of outcome T3 to T6 in absolute terms in row 4 were the Success: Chastity (16 participants) and Continuing (15 participants) categories.

The largest absolute shift from T3 to T6 of those who participated in the T6 interview was a T3 Success: Chastity case that became a T6 Failure: Gay Identity case. Next largest was a Nonresponse case at T3 that became a T6 Success: Conversion case. The subject with the largest individual shift reported in the study (from Success: Conversion to Failure: Gay Identity) was the subject not formally interviewed at T6 who last completed an interview at T3 but affirmed by phone that he continued to embrace gay identity at T6.

Most germane to our principal hypothesis regarding change of sexual orientation, 53% of the T6 sample that self-categorized did so as some version of success, either as Success: Conversion (23%) or Success: Chastity (30%). At T6, 25% of the sample self-categorized as a failure by Exodus standards (Confused or Gay Identity).

DISCUSSION

On a number of standardized quantitative measures of sexual orientation, this population experienced statistically significant change away from homosexual experience and orientation. Although statistically significant, the average changes in absolute terms on the quantitative measures are modest at best, though the qualitative outcomes suggest clinically and personally significant outcomes for a number of individuals. The diversity of outcomes, as portrayed in the cross-tabulation table of raw Kinsey attraction and fantasy scores and in the qualitative outcomes, partially explains the modest absolute magnitudes of the quantitative outcomes, as they depict individuals shifting from more average scores at T1 to both extremes of final outcomes. In other words, the modest if significant average changes are composites of some dramatic shifts to a gay identity, but also of others who report dramatic changes away from homosexual orientation. Results were considerably less dramatic for the Phase 1 subpopulation (i.e., those in the change process for less than 1 year at the Time 1 assessment).

Our first hypothesis was that sexual orientation is changeable. If change is taken to mean a reduction in homosexual attraction and an increase in heterosexual attraction, we found evidence that successful change of sexual orientation occurred for some individuals concurrent with involvement in the religiously mediated change methods of Exodus Ministries (23% of the T6 sample by qualitative self-categorization). Those who report a successful heterosexual adjustment regard themselves as having changed their sexual orientation. For conventionally religious persons, a reduction in homosexual attraction and stable behavioral chastity as reported by 30% of the T6 sample may also be regarded as a successful outcome. Those who report chastity regard themselves as having reestablished their sexual identities to be defined

in some way other than by their homosexual attractions. No data emerging from this study suggest that this is a maladaptive or unsustainable outcome.

Phase 1 participants, those inducted into the study early in their change venture, appear to be disproportionately represented among the more negative qualitative outcomes and had more modest quantitative outcomes. This may indicate that positive outcomes for those first initiating the change process are likely less positive than the overall findings of this study would suggest, that the change process is difficult and requires extraordinary persistence to attain success, or other possibilities. There were, however, some Phase 1 participants in all qualitative outcome categories.

The qualitative Success: Chastity outcomes might be regarded legitimately not as change of orientation but rather as a shift in sexual identity (see American Psychological Association, 2009; Worthington & Reynolds, 2009). Recent theoretical (e.g., Yarhouse, 2001) and empirical (e.g., Beckstead & Morrow, 2004; Wolkomir, 2006; Yarhouse & Tan, 2004; Yarhouse, Tan, & Pawlowski, 2005) work on sexual identity among religious sexual minorities suggests that attributions and meaning are critical in the decision to integrate same-sex attractions into a gay identity or the decision to disidentify with a gay identity and the persons and institutions that support gay identity. Some religious persons attribute their same-sex attraction to who they really are, and they integrate their attractions into a private and public gay identity. Other religious persons, though, attribute their attractions to living in an imperfect world, early parent-child relationships, experiences of childhood sexual abuse, and so on, and form their identity around other aspects of themselves, such as their religious identity, which they may experience as equally or more central to their identity than their experiences of same-sex attraction (Yarhouse & Tan, 2004).

In light of the role of attributions and meaning in sexual identity labeling, is it possible as well that some of what is reported in this study as change of orientation (i.e., the outcomes experienced by the Success: Conversion participants) is more accurately understood as change in sexual identity? An interesting observation about this data is that most of the change that was reported on the self-report measures occurred early in the change attempt. Our previous report (Jones & Yarhouse, 2007) indicated that this change most commonly occurred between T1 and T2, and that the shift that occurred was sustained through T3. The present data suggest such change can be sustained through T6 for those who report successful change. These findings go against the common argument that change of orientation is gradual and occurs over an extended period of time. Some may see these results as reflecting not a change in sexual orientation for most participants who reported such change, but rather a change in sexual identity. Such a change might result from how one thinks of oneself and labels one's sexual preferences (i.e., attributions and meaning making). It is also possible, though, that this data reflects persons who experienced a change in orientation and a change in sexual

identity. In some individuals, a shift in sexual identity might subsequently be consolidated as true shift in sexual orientation. The Kinsey measures of sexual attraction and sexual fantasy would seem to measure some of the fundamental dimensions of sexual orientation. The shifts reported appear to be consolidated and sustained over time for those who reported a successful outcome at T6. It certainly appears from this data that the process of change is complex and multifaceted.

The proportion of participants that must be considered unequivocal successes (Conversion) by the standards of Exodus increased from 15% of the sample at T3 to 23% of the sample at T6. Combined with the Chastity outcome participants, 53% of the T6 sample attained a form of success that these individuals consider a successful outcome, this compared to a total of 38% of such successful outcomes at T3. An additional 16% continue 6 and 7 years later to pursue change, and appear to have derived enough benefit from the change attempt to continue down this challenging path despite not attaining the outcomes they desire. In contrast, the outcomes that are regarded by Exodus as failures are not so regarded by many in the professional community nor by these individuals; the Failure: Gay Identity outcome cases are not properly analogous to relapses to worsened manifestations of addictive behavior or heightened psychotic states.

The overall T6 outcomes reported here must be seen as an overly optimistic representation of the possibility of change. What would be the most pessimistic prognostication of outcomes in sexual orientation change from the Exodus process one could make from this data? If one assumed that only the Phase 1 participants were valid representatives of a true prospective study (which might be true), and that all missing cases were failures (which we know not to be true), one could conclude that from 57 initial Phase 1 participants, only five attained Success: Conversion status (9%), six attained Success: Chastity (11%), and four attained Continuing status (7%). One could further insist that only Success: Conversion status represents a successful outcome rigorously construed. By these standards, only 9% of the sample attained success. On the one hand, this outcome refutes any putative claim that sexual orientation is not changeable; on the other hand, this is not an optimistic projection of likelihood of change for one considering that process.

The attempt to change sexual orientation did not appear to be harmful on average for these participants. The only statistically significant trends that emerged for the GSI (global) and PSDI (distress intensity) variables indicated improving psychological symptoms T1 to T6. Despite these findings, we cannot conclude that particular individuals in this study were not harmed by their attempt to change. Specific individuals may claim to have experienced harm from the attempt to change, and those claims may be legitimate, but although it may be that the attempt to change orientation caused harm by its very nature, it may also be that the harm was caused by particular intervention methods that were inept, harsh, punitive, or otherwise

ill-conceived, and not from the attempt to change itself. Our findings mitigate against any absolute claim that attempted change is likely to be harmful in and of itself.

The change results documented in this study are generated by a set of diverse, religiously based intervention programs. The diversity of the methods implemented by the various 16 ministries from which we obtained participants, combined with the size of our sample, leaves us unable to determine or even speculate on key elements of the process of change, or to discriminate active from inactive elements of the intervention methods. The study of religious change methods introduces unique uncertainty. Many authors have discussed the poorly understood power of religious and quasi-religious change; Frank (1961) discussed long ago the power of religiously mediated change, as did Miller and C'deBaca (2001) more recently. The effective ingredients of such change may be explainable in utterly naturalistic terms (i.e., the mundane wrapped up in religious interpretation). Diamond (2007) explained the modest change documented in her sample via naturalistic means, saying "stability reliably emerges as new patterns of thought and behavior are repeated and reinforced via internal feedback mechanisms" (p. 145). Perhaps the same happened in this population, but religious change processes could also harness other processes and resources not typically associated with psychological methods and not adequately explained by recourse to naturalistic phenomena.

In conclusion, the findings of this study appear to contradict the commonly expressed view that sexual orientation is not changeable and that the attempt to change is highly likely to result in harm for those who make such an attempt.

REFERENCES

- Ambrose, L. M., Button, E. J., & Ormrod, J. A. (1998). A long-term follow-up study of a cohort of referrals to an adult mental health clinical psychology department. *British Journal of Clinical Psychology, 37*, 113–115.
- American Psychiatric Association. (1998). *Psychiatric treatment and sexual orientation position statement*. Retrieved from <http://www.psych.org/Departments/EDU/Library/APAOfficialDocumentsandRelated/PositionStatements/200001.aspx>.
- American Psychological Association. (2005). *Answers to your questions about sexual orientation and homosexuality*. Retrieved from <http://www.apa.org/pubinfo/answers.html>
- American Psychological Association. (2009). *Report of the APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation*. Retrieved from <http://www.apa.org/pi/lgbt/resources/therapeutic-response.pdf>
- Beckstead, A. L., & Morrow, S. L. (2004). Mormon clients' experiences of conversion therapy: The need for a new treatment approach. *The Counseling Psychologist, 32*, 651–690.

- Bergner, M. (1995). *Setting love in order: Hope and healing for the homosexual*. Grand Rapids, MI: Baker Books.
- Bruce, A. S., & Arnett, P. A. (2008). Longitudinal study of the Symptom Checklist 90-Revised in multiple sclerosis patients. *The Clinical Neuropsychologist*, *22*, 46–59.
- Brückner, H., & Bearman, P. (2005). After the promise: The STD consequences of adolescent virginity pledges. *Journal of Adolescent Health*, *36*, 271–278.
- Cochran, S. D. (2001). Emerging issues in research on lesbians' and gay men's mental health: Does sexual orientation really matter? *American Psychologist*, *56*, 931–941.
- Comiskey, A. (1989). *Pursuing sexual wholeness: How God heals the homosexual*. Lake Mary, FL: Charisma House.
- Derogatis, L. R. (1994). *SCL-90-R: Administration, scoring and procedures manual*. Minneapolis, MN: National Computer Systems.
- Derogatis, L. R. (2000). SCL-90. In A. E. Kazdin (Ed.), *Encyclopedia of psychology* (Vol. 7, pp. 192–193). Washington, DC: American Psychological Association.
- Diamond, L. M. (2007). A dynamical systems approach to the development and expression of female same-sex sexuality. *Perspectives on Psychological Science*, *2*, 142–161.
- Diamond, L. M. (2008). *Sexual fluidity: Understanding women's love and desire*. Cambridge, MA: Harvard University Press.
- Exodus International. (2007). *Policy statements: Statement on homosexuality*. Retrieved from <http://exodus.to/content/view/34/118>
- Frank, J. (1961). *Persuasion and healing: A comparative study of psychotherapy*. Baltimore, MD: The Johns Hopkins University Press.
- Freeman, W., & Meyer, R. G. (1975). A behavioral alteration of sexual preferences in the human male. *Behavior Therapy*, *6*, 206–212.
- Hatterer, L. (1970). *Changing heterosexuality in the male: Treatment for men troubled by homosexuality*. New York, NY: McGraw-Hill.
- Jones, S. L., & Yarhouse, M. A. (2007). *Ex-gays? A longitudinal study of religiously mediated change in sexual orientation*. Downers Grove, IL: InterVarsity Press.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia, PA: Saunders.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels S. (1994). *The social organization of sexuality*. Chicago, IL: University of Chicago Press.
- Miller, W. R., & C'deBaca, J. (2001). *Quantum change: When epiphanies and sudden insights transform ordinary lives*. New York, NY: Guilford Press.
- Munzer, J. (1965). Treatment of the homosexual in group psychotherapy. *Topical Problems of Psychotherapy*, *5*, 164–169.
- Pattison, E. M., & Pattison, M. (1980). "Ex-gays": Religiously mediated change in homosexuals. *American Journal of Psychiatry*, *137*, 1553–1562.
- Sell, R. L. (1997). Defining and measuring sexual orientation: A review. *Archives of Sexual Behavior*, *26*, 643–658.
- Shively, M. G., & DeCecco, J. P. (1977). Components of sexual identity. *Journal of Homosexuality*, *3*, 41–48.
- Truax, R. A., & Tourney, G. (1971) Male homosexuals in group psychotherapy. *Diseases of the Nervous System*, *32*, 707–711.

- Wolkomir, M. (2006). *Be not deceived: The sacred and sexual struggles of gay and ex-gay Christian men*. New Brunswick, NJ: Rutgers University Press.
- Worthington, R. L., & Reynolds, A. L. (2009). Within-group differences in sexual orientation and identity. *Journal of Counseling Psychology, 56*, 44–55.
- Yarhouse, M. A. (2001). Sexual identity development: The influence of evaluative frameworks on identity synthesis. *Psychotherapy, 38*, 331–341.
- Yarhouse, M. A., & Tan, E. S. N. (2004). *Sexual identity synthesis: Attributions, meaning-making, and the search for congruence*. Lanham, MD: University Press of America.
- Yarhouse, M. A., Tan, E. S. N., & Pawlowski, L. M. (2005). Sexual identity development and synthesis among LGB-identified and LGB dis-identified persons. *Journal of Psychology and Theology, 33*, 3–16.

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