

RELIGIOUSLY-MOTIVATED SEXUAL ORIENTATION CHANGE: A FOLLOW-UP STUDY

KIM W. SCHAEFFER, LYNDE NOTTEBAUM, PATTY SMITH
KARA DECH, and JILL KRAWCZYK
Point Loma Nazarene University

One year after an initial study, follow-up research was conducted on 140 individuals attempting to change their homosexual orientation due to their religious beliefs. The follow-up participants (102 males and 38 females) came from a group of 248 who took part in a prior study. Survey results indicated a behavioral success rate of 60.8% for males and 71.1% for females during the year following the initial study. Participants were considered behaviorally successful if they had abstained from any type of physical homosexual contact in the past year. Success was associated with strong religious motivation and positive mental health. Of those who were not behaviorally successful, the majority (88.2%) indicated that they were still attempting to change their sexual orientation. This finding suggests that these participants still believed enough in the possibility of change to continue to pursue reorientation.

Sexual orientation is a core aspect of an individual's identity. Sexual orientation includes the development of a personal identity or self-concept as heterosexual, bisexual, or homosexual. Some people who experience same-sex desires identify their orientation as homosexual and strive to become comfortable within that sexual identity. Other individuals struggle with unwanted homosexual desires and choose to attempt sexual reorientation rather than embrace the gay or lesbian lifestyle. Many individuals with a homosexual orientation are Christian and believe that homosexuality is wrong for religious reasons. Unable to reconcile their religious beliefs with their homosexuality, they may opt for reorientation in an effort to become heterosexual.

Sexual reorientation is controversial. The American Psychiatric Association removed homosexuality from its official list of mental disorders in 1973, and the American Psychological Association (APA) supported that action in 1975 (APA, 1997). With homosexuality no longer considered pathological and in the absence of clear scientific evidence that change is possible, many mental health professionals feel that it is unethical to offer sexual reorientation therapy to individuals who desire to change (Edwards, 1996). They claim that the mere availability of reorientation therapy propagates the myth that homosexuality is a mental illness, and they further contend that suffering individuals should learn to accept their presumably immutable condition. They often point to society's homophobia and intolerance as the cause of a homosexual's suffering (Edwards, 1996), while ignoring the deeper internal struggle which occurs within many homosexual individuals regardless of societal attitudes. Dissatisfied homosexuals are also often discouraged from seeking reorientation by their well-intending church, family, and friends who wish to extend acceptance of their loved one's condition, desire to not be seen as narrow-minded, and have been led to believe that reorientation is simply not possible.

The majority of research in the area of sexual reorientation was conducted when homosexuality was still considered a mental disorder. Clippinger (1974) examined the possibility of change in his review of various sexual reorientation treatments and their success. Twelve different studies conducted by independent researchers and involving 785 homosexual individuals in treatment for change found that 307 individuals (38%) successfully changed their homosexuality, with an additional 10 to 30% experiencing some degree of change. Successful change indicates the absence of homosexual

Correspondence concerning this article should be addressed to Kim W. Schaeffer, PhD, Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, California 92106. Electronic mail may be sent to KimSchaeffer@ptloma.edu.

behavior and fantasy, and in some cases also the absence of homosexual dream content and movement towards heterosexuality. Most of the studies included follow-up from 1 to 5 years to as much as 30 years after the initial studies were conducted. Although these studies suggest evidence for the possibility of change, many mental health professionals have emphasized caveats in the research (Haldeman, 1994; Murphy, 1992).

Although most reorientation research has examined methods which involve behavioral or psychodynamic therapies, religion-based programs which address reorientation also exist. These programs typically stress the recognition of homosexuality as sinful and the need to overcome the sin. They employ such techniques as Bible study, prayer, fellowship, and individual or group therapy. Limited research has examined religion-based programs. Pattison and Pattison (1980) conducted a study of individuals affiliated with EXIT of Melodyland, an ex-gay Christian ministry. The researchers interviewed 11 males who reported to have experienced a change in orientation from homosexual to heterosexual. All 11 men attributed their shift in sexual orientation to religious growth. In another study, Schaeffer, Hyde, Kroencke, McCormick, and Nottebaum (in press) examined 248 individuals associated with Exodus International, an ex-gay Christian organization devoted to helping individuals who struggle with homosexuality. Based upon survey research, that study found that individuals were experiencing successful reorientation in sexual feelings and behaviors. Further, successful reorientation was associated with a strong Christian commitment and emotional well-being. No evidence was found for the effectiveness of reorientation therapy.

Because of the acknowledged need for longitudinal studies in this area, it was decided to undertake a follow-up study of the participants in the initial sexuality study conducted by Schaeffer et al. (in press). The present study examined these individuals approximately one year after the original study was conducted. The following questions were addressed: (a) How many of these individuals are still attempting to change or have changed their sexual orientation? (b) How many of these individuals have been successful in their reorientation efforts during the past year? (c) Do religious commitment, extent of involvement in the homosexual lifestyle, or reorientation therapy predict success? (d) Is feeling-based sexual orientation associated with behavior-based success?

METHOD

Participants

Participants in the present study were individuals who took part in the study conducted by Schaeffer et al. (in press) and gave permission for follow-up. Participants in the initial study were recruited from the Exodus International North American Conferences held in Wilmore, Kentucky in 1993, Fort Collins, Colorado in 1994, and San Diego, California in 1995. According to the conference director at that time, approximately 65% of those attending either struggle with or have overcome homosexuality, with family members, clergy, and church lay leaders typically comprising the remaining 35%. These individuals may be attending their first conference or have a longer-term association with the group. Each participant who volunteered for the initial study was asked to provide a name and address on the returned consent form in order to be contacted for a follow-up study. Of the 248 subjects who participated in the initial study, 208 (83.9%) gave permission to be followed up. Of those who gave permission for follow-up, 140 (67.3%) returned the follow-up survey. Of these 140 individuals, there were 102 males and 38 females. See Table 1 for a breakdown of participants by conference.

The sample was comprised of 131 Caucasians (94.2%), 2 African-Americans (1.4%), 4 Asian-Americans (2.9%), and 2 Hispanics (1.4%). The mean age of the males in the follow-up sample was 37.30 ($SD = 9.82$) years. The mean age of the females was 35.26 ($SD = 8.91$) years. Education was measured in years, with 12 years denoting completion of high school, 16 years denoting a 4-year college degree, and so on. The mean educational level for males was 15.70 years ($SD = 2.04$), while the mean for females was 14.79 years ($SD = 1.97$).

To verify that individuals in the follow-up sample adequately represented the initial sample population, differences on age and education were examined. An alpha level of .05 was used for all statistical tests in this article. Differences were examined for participants who did not give permission for follow-up, participants who gave permission but did not return the follow-up survey, and participants who gave permission and did return the survey. See Table 2 for age and education means. Groups (no permission, permission without follow-up, follow-up) \times Gender (male, female) analyses of variance (ANOVAs) on age and education revealed a nonsignificant group main effect and a nonsignificant Group \times Gender interac-

Table 1
Participants by Conference

Conference	Participated In Initial Study	Gave Permission For Follow-up		Participated In Follow-up Study	
	<i>n</i>	<i>n</i>	%	<i>n</i>	%
Kentucky, 1993					
Male	81	72	88.9	49	68.1
Female	15	12	80.0	9	75.0
Total	96	84	87.5	58	69.0
Colorado, 1994					
Male	59	44	74.6	29	65.9
Female	24	16	66.7	10	62.5
Total	83	60	72.3	39	65.0
California, 1995					
Male	44	41	93.2	23	56.1
Female	26	23	88.5	19	82.6
Total	70	64	91.4	42	65.6

Table 2
Means on Age and Education

	Age		Education	
	Male	Female	Male	Female
No Permission				
<i>n</i>	26	14	27	14
<i>M</i>	37.7	39.4	15.8	14.4
<i>SD</i>	8.18	7.65	2.07	2.34
Permission				
<i>n</i>	157	51	156	51
<i>M</i>	37.1	35.1	15.6	14.7
<i>SD</i>	9.92	8.93	2.09	2.05
No Follow-up				
<i>n</i>	56	13	56	13
<i>M</i>	36.7	34.6	15.6	14.6
<i>SD</i>	10.10	9.33	2.20	2.33
Follow-up				
<i>n</i>	102	38	101	38
<i>M</i>	37.3	35.3	15.7	14.8
<i>SD</i>	9.82	8.91	2.04	1.97

tion; however, a statistically significant gender main effect was found on education, $F(1, 242) = 10.70, p = .001$. Within the initial sample, the males were found to be significantly more educated than the females, and this trend continued within all samples. These analyses indicate that, in regard to age and education, the follow-up sample matched the initial population.

Instrument

The instrument used in the follow-up study was a modified version of the survey used in the initial study conducted by Schaeffer et al. (in press). Participants were asked questions related to personal ideology, religion, counseling/therapy history, mental health, relationships, sexual history, change history, control, reasons for change, and social contact. Most questions were yes/no or Likert-type with a four or five point scale.

To assess change status, participants were asked about their level of agreement with the statement, "My current goal is to remain gay or homosexual" (Likert five point scale, strongly disagree to strongly agree). Participants were considered still attempting to change if they disagreed with that statement, or if they were undecided about that statement but responded affirmatively to the question, "Are you currently trying to stop being gay or homosexual?"

Sexual behavior was measured through questions such as, "How many different individuals did you have homosexual sex with during the past year?" and "During the past year have you participated in homosexual contact?" Participants were given a list of different types of contact and asked to indicate the number of times and the number of partners for each type of contact during the past year. The list included passionate kissing, caressing, body rubbing, masturbating a partner, oral-genital contact, and anal intercourse. In this article, participants who reported that they had not engaged in any type of physical homosexual contact in the past year were considered behaviorally successful.

Extent of involvement in the homosexual lifestyle was ascertained through questions concerning whether a participant's mother, father, siblings, employer, or coworkers suspected or knew of his or her homosexual orientation ("Does your mother, if living, know that you are gay or homosexual?"); the proportion of the participant's same-sex friends who were homosexual; and the number of homosexual partners during the participant's lifetime.

Religious experience was measured through questions pertaining to religious preference, degree of religiosity ("How religious in the conventional sense would you say that you are?"), and attendance of religious functions during the past year. A participant's level of religious motivation was determined based upon agreement with the statements, "I rely on a 'higher power' or God to provide the focus for behavioral change" and "I have a personal relationship with Jesus Christ." All participants were considered motivated, but participants who strongly agreed (scored five) with both statements and also indicated that either their theological beliefs or Christian conversion was the most influential reason for their decision to change were considered highly motivated.

Most of the questions intended to evaluate mental health used a graphic step scale from Low (zero) to High (nine). Respondents were asked to circle the number that best described their self-acceptance, tension, depression, paranoia, or guilt during the past week. Using Likert scales, participants reported on their current level of happiness as compared to one year ago and their level of loneliness during the past month. Questions used to determine counseling history included: "Have you seen a therapist or counselor in the past year?"; "Was the visit to try to give up being gay or homosexual?"; "Did the therapist help you to accept or change your sexual orientation?"; and "Are you currently seeing a therapist?"

The sexual history questions used to measure feeling and behavior-based sexual orientation were based upon a Kinsey's classification of sexual orientation. Participants were asked to categorize their current feeling orientation as 0 (*Exclusively heterosexual*), 1 (*Mainly heterosexual*), 2 (*Mainly heterosexual with a substantial degree of homosexuality*), 3 (*As much heterosexual as homosexual*), 4 (*Mainly homosexual with a substantial degree of heterosexuality*), 5 (*Mainly homosexual*), or 6 (*Exclusively homosexual*). Participants categorized their current behavior orientation in the same manner.

Procedures

Participants in the initial study were gathered through announcements about the study made during general sessions of the conference and at locations throughout the conference area which were readily visible to most attendees. Each initial participant who gave permission for follow-up was contact-

Table 3
Mean Values of Involvement Variables

Variable	Successful			Not Successful		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Mother aware ^a	2.47	0.83	74	2.52	0.80	48
Father aware ^a	2.41	0.87	64	2.21	0.98	39
Siblings aware ^b	2.86	1.34	78	2.67	1.40	45
Employer aware ^a	1.90	0.95	82	1.74	0.88	43
Coworkers aware ^c	2.16	1.23	81	1.80	0.99	45
Proportion of same-sex friends who are homosexual ^d	2.07	0.71	88	2.08	0.64	49
Number of same-sex partners ever ^e	0.93	0.80	65	1.41	0.89	46

Note. ^aRange: 1-3 (1 = neither knows nor suspects, 2 = suspects, 3 = knows). ^bRange: 1-4 (1 = none know, 2 = less than half know, 3 = most know, 4 = all know). ^cRange: 1-4 (1 = none know, 2 = less than half know, 3 = about half know, 4 = most know). ^dRange: 1-4 (1 = none, 2 = less than half, 3 = more than half, 4 = all). ^eLog₁₀ values.

ed for the present study via certified mail at the name and address provided on the consent form accompanying the original survey. Research materials consisting of an information letter, the revised survey, and a prepaid return envelope were sent to the participant. The letter provided information about the follow-up study including confidentiality procedures, benefits, and the right to refused to participate in this study or any additional follow-up studies. Each letter and attached survey contained a pre-assigned participant number used to identify the participant and link follow-up results with the initial results. The participant was asked to complete and return the materials as soon as possible in the provided envelope.

RESULTS

Of the 140 participants in the follow-up sample, 132 (94.3%) reported that they were still attempting to change ($n = 91$) or had changed their sexual orientation ($n = 41$). Of the remaining 8 participants, 2 (14%) reported that they were no longer attempting reorientation, and 6 (4.3%) were unsure whether to continue with reorientation. Of all 140 participants, 89 (63.6%) reported behavioral success during the past year (2 additional participants were not successful according to our definition but had not engaged in any homosexual oral-genital contact or anal intercourse during the past year). Gender was not a signifi-

cant factor in success, $\chi^2(1) = 1.26, p = .26$. The success rate for males was 60.8% ($n = 62$), while that for females was 71.1% ($n = 27$). Of those who were not behaviorally successful, 88.2% ($n = 45$) were still trying to change orientation.

Extent of involvement in the homosexual lifestyle prior to the time of the initial study was examined as a factor in success. See Table 3 for mean values of the involvement items (note that response of "not living" or "not currently employed" to the mother/father/siblings/employer/coworker aware questions were treated as missing data). Success (no, yes) \times Gender (male, female) ANOVAs revealed no significant interactions or main effects on these variables, with the exception of a significant success main effect, $F(1, 107) = 3.96, p = .049$, and a significant gender main effect, $F(1, 107) = 16.46, p < .001$, on the "number of homosexual partners in lifetime" item. (Due to outlying observations, values for that item were converted to log₁₀ for this analysis.)

Religious experience was also examined as a factor in success. Comparing the motivated ($n = 56$) and highly motivated ($n = 84$) groups previously described, the highly motivated group experienced significantly more behavioral success than the motivated group, $\chi^2(1) = 4.03, p = .045$. The influence of attendance at religious services was investigated using

Table 4
Mean Values of Mental Health Variables

Variable	Successful (<i>n</i> = 89)		Successful (<i>n</i> = 51)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Happiness ^a	2.22	0.65	1.84	0.70
Loneliness ^b	2.32	0.85	2.96	0.80
Self-acceptance ^c	6.49	1.79	5.64	1.92
Tension ^c	5.35	2.28	6.12	2.04
Depression ^c	2.49	2.20	3.82	5.60
Paranoia ^c	0.94	1.57	1.98	2.33
Guilt ^c	2.15	2.02	3.22	2.64
Self acceptance compared to one year ago ^d	2.74	0.51	2.43	0.78
Outlook on life ^e	4.10	0.99	3.75	1.11

Note. ^aRange: 1-3 (1 = not too happy, 3 = very happy). ^bRange: 1-4 (1 = never, 4 = a great deal). ^cRange: 0-9 (0 = low, 9 = high). ^dRange: 1-3 (1 = less self-accepting, 3 = more self-accepting). ^eRange: 1-5 (1 = negative, 5 = positive).

a Time (initial, follow-up) x Success (no, yes) ANOVA with repeats on the Time factor. A statistically significant success main effect was found, $F(1, 137) = 5.45$, $p = .02$; the time main effect, $F(1, 137) = 2.31$, $p = .13$, and the Time x Success interaction, $F(1, 137) = 1.25$, $p = .26$, were both nonsignificant. To determine the benefits of change groups such as Exodus, a Success (no, yes) x Gender (male, female) ANOVA was performed on the number of group meetings attended within the past year. The analysis revealed a nonsignificant success main effect, $F(1, 136) = 1.80$, $p = .18$, a nonsignificant gender main effect, $F(1, 136) = 2.01$, $p = .16$, and a nonsignificant Success x Gender interaction, $F(1, 136) = .07$, $p = .80$.

The effectiveness of change therapy was investigated by comparing the behavioral success of participants involved in individual therapy at any time for the purpose of changing their sexual orientation with the success of those not involved in such therapy. Of the 140 participants, 86 (61.4%) had consulted with a therapist at least once for this purpose, and 68 (48.6%) had consulted with a therapist for at least the median number of sessions (10). Considering only these 68 participants as being involved in change therapy, therapy was not found to be a significant factor in success, $\chi^2(1) = 3.38$, $p = .07$. The success rate of those involved in change therapy was 55.9%, while that of those not involved in change

therapy was 70.8%.

The relationship between behavioral success and current mental health was examined to determine whether the current level of mental health experienced was related to success experienced. See Table 4 for mean values of the mental health items. Success (no, yes) x Gender (male, female) ANOVAs revealed a nonsignificant gender main effect and a nonsignificant Success x Gender interaction, but a statistically significant success main effect on all but two items: level of tension and outlook on life. Participants who experienced behavioral success reported a higher level of happiness, $F(1, 136) = 8.29$, $p < .005$; a lower level of loneliness, $F(1, 136) = 13.90$, $p < .001$; a higher level of self-acceptance, $F(1, 136) = 4.37$, $p = .04$; a lower level of depression, $F(1, 136) = 6.50$, $p = .01$; a lower level of paranoia, $F(1, 136) = 7.71$, $p = .007$; a lower level of guilt, $F(1, 136) = 7.28$, $p = .008$; and higher self-acceptance now as compared to one year ago, $F(1, 136) = 8.65$, $p = .004$.

Mean values on the feeling-based sexual orientation scale are presented in Table 5. Due to the small size of the unsuccessful female sample, only males were included in the following analysis. For males who responded to the orientation question at all three times, feelings were examined using a Time (age 18, initial, follow-up) x Success (no, yes) ANOVA with repeats on the Time factor. The analy-

Table 5
Mean Values of Feeling-Based Sexual Orientation Scale (N = 135)

Time	Successful				Not Successful			
	Male (n = 59)		Female (n = 25)		Male (n = 40)		Female (n = 11)	
	M	SD	M	SD	M	SD	M	SD
Age 18	4.81	1.49	3.32	2.29	4.28	1.55	4.00	1.84
Initial	2.85	1.85	1.44	1.36	3.30	1.88	2.82	1.66
Follow-up	2.85	1.78	1.20	1.44	3.73	1.77	3.64	1.57

Note. For means, *exclusively heterosexual* = 0; *exclusively homosexual* = 6. Five participants were excluded due to incomplete data.

sis revealed a statistically significant time main effect, $F(1, 194) = 29.15, p < .001$, a significant Time x Success interaction, $F(1, 194) = 6.09, p = .003$, and a nonsignificant success main effect, $F(1, 97) = 1.04, p = .31$. An examination of the simple effects of the Time x Success interaction indicated that the successful group was not significantly different than the unsuccessful group in feeling orientation at age 18 or at the time of the initial study; however, a statistically significant difference was found between the two groups at the time of the follow-up study, $F(1, 97) = 5.83, p = .02$.

DISCUSSION

The analyses revealed a behavioral success rate of 63.6% among follow-up participants in the past year. Participants who reported success were found to be happier, less lonely, more self-accepting, less depressed, and less paranoid than those who were not successful. Those with high religious motivation to change were more successful than those less religiously motivated. Furthermore, the fewer the homosexual partners in the past, the more likely the participant was to be successful. In terms of success, reorientation therapy was not found to be effective. Finally, feeling-based sexual orientation was found to be associated with behavioral success. Possible interpretations of these findings and associated caveats are presented below.

The participants in this study, Exodus conferences attendees, represent a select group of individuals attempting to change their homosexual orienta-

tion and may not adequately represent the population of those seeking reorientation. Likewise, participants in the follow-up study may not adequately represent the initial sample population. Group (*no permission, permission without follow-up, follow-up*) x Gender (*male, female*) ANOVAs revealed no group differences on age or education. Additional analyses were performed to examine group differences (at the time of the initial study) on the number of homosexual partners in the past year, the number of heterosexual partners in the past year, the number of homosexual partners ever, current feeling-based sexual orientation, and behavioral success. A Group x Gender ANOVA on each of these variables revealed no statistically significant group main effects. Follow-up participants therefore appear to adequately represent the initial sample population. Still, there is no way of determining whether those who participated in the follow-up study were more or less successful than those who chose not to participate.

The choice to use a behavior-based definition of success may be met fairly with criticism. Admittedly, behavior is only one of many human aspects, such as social relationships, cognitions, and feelings, which may be used to measure success. Behavior-based success was chosen because behavior can be most concretely observed. Furthermore, according to traditional theology, homosexual behavior is generally considered sinful, whereas homosexual inclinations left unacted upon are generally not considered sinful (Yarhouse & Jones, 1997). Given that participants in

this study have sought reorientation for religious reasons, a behavioral-based definition of success seems appropriate. Still, the authors are acutely aware that a more comprehensive measurement of success is needed in this area of research.

The high behavioral success rate for participants suggests that sexual reorientation is indeed possible for at least some individuals who seek to divest themselves of their homosexual orientation. To determine whether individuals who initially reported main or exclusive homosexuality were less successful than those who initially reported lesser homosexuality, two groups were formed based upon feeling-based orientation at age 18: bisexual (scored 2, 3, or 4 on the Kinsey scale) and homosexual (scored 5 or 6). A chi-square analysis revealed that the success experienced by the homosexual group ($n = 86$) was not significantly different than that experienced by the bisexual group ($n = 40$), $\chi^2(1) = 3.04, p = .08$. (Interestingly, the homosexual sample reported higher behavioral success than the bisexual sample.) A similar analysis was performed based upon feeling-based orientation at the time of the initial study. The homosexual group ($n = 29$) did not differ from the bisexual group ($n = 61$) on behavioral success, $\chi^2(1) = .04, p = .84$. These findings suggest that individuals may experience successful reorientation regardless of their initial level of homosexuality.

The finding of a significant success main effect on the "number of homosexual partners in lifetime" involvement item may indicate that the more immersed an individual has been in the homosexual lifestyle, the more difficult reorientation will be. This supports an earlier finding that the longer an individual has been practicing homosexual behaviors, the lower the likelihood of successful change (see Clipinger, 1974). This is not meant to imply that change is not possible for such individuals; however, the process may take more commitment and time as compared to individuals with less past involvement with the homosexual lifestyle.

Based upon the analyses, participants who reported strong religious motivation to change were more likely to be successful than those who did not report such strong religious motivation. This result supports the finding by Schaeffer et al. (in press) that religious motivation predicted feeling-based sexual orientation (individuals with higher religious motivation reported more feeling-based heterosexuality). Although this finding must be interpreted with cau-

tion, it does suggest that, at least for some individuals, the change process demands a strong motive such as deep religious conviction. Based upon the significant success main effect revealed by the Success x Gender ANOVA on religious services attended, successful individuals attend significantly more religious services per week ($M = 1.64, SD = .54$) than unsuccessful individuals ($M = 1.44, SD = .65$). Involvement in a change group during the past year did not predict success.

No evidence was found for the efficacy of reorientation therapy in terms of success. The success rate for participants involved in reorientation therapy (55.9%) was actually lower than that of participants not involved in such therapy (70.8%), $\chi^2(1) = 3.38, p = .07$. A similar finding was made by Schaeffer et al. (in press) at the time of the initial study. As discussed by Schaeffer et al., there are many possible interpretations to this finding, and it should not be immediately assumed that there are no benefits of reorientation therapy. The median number of sessions was used to determine who to consider as being involved in change therapy in order to give adequate test to the hypothesis. An additional analysis was performed on participants who had consulted a therapist at least once ($n = 86$). Two groups were formed: a long-term therapy group comprised of participants whose number of sessions with a therapist exceeded the third quartile (at least 38 sessions; $n = 34$), and a short-term therapy group comprised of the remaining participants ($n = 52$). Comparing these two groups, therapy was found to be a significant factor in success, $\chi^2(1) = 5.76, p = .02$. The success rate for the long-term therapy group was 70.6% while that for the short-term therapy group was 44.2%. This finding suggests that the benefits of therapy may not be experienced until well into the therapy process.

The association found between success and positive mental health is understandable given that the participants in this study are dissatisfied with their sexual orientation and so are likely to feel better about themselves as they experience movement away from homosexuality. Successful individuals may become happier as they grow into what they consider to be their true, heterosexual identity. Obviously, this finding should not be interpreted to imply that individuals with a homosexual orientation are unhappy. Indeed, individuals who have embraced their homosexual orientation may feel just as positive or better about themselves as com-

pared to those who have experienced successful change away from homosexuality. This would be an interesting area to further investigate in a future study. To verify that mental health status was associated with behavioral success rather than level of religious motivation, a Gender (*male, female*) x Religious Motivation (*high, very high*) ANOVA was performed on each mental health item. None of the main effects or interactions were statistically significant.

Feeling-based orientation was examined in addition to behavioral-based success in order to assess feeling changes over time. Successful and unsuccessful males reported similar orientation levels at age 18, establishing the consistency of the sample. Both groups also reported similar orientation levels at the time of the initial study. At the time of the follow-up study, successful males reported experiencing significantly more heterosexual feelings than unsuccessful males. This finding suggests that feeling-based orientation is associated with behavior-based success, and addresses the concern that these individuals may be sexually abstinent but still feel homosexual. Indeed, at least in our male sample, successful individuals reported moving towards heterosexuality in terms of feelings as well as behavior.

This study followed up individuals who were attempting to change or had changed their homosexual orientation approximately one year prior to the present study. The high return rate of 67.3% for the follow-up survey indicates the participants' perception of the importance of this research area. Nearly two out of three participants (63.6%) reported behavioral-based success in the past year. Success was associated with strong religious motivation and positive mental health. Of those who were not behaviorally successful, the majority (88.2%) indicated that they were still attempting to change their sexual orientation. This high retention rate seems to imply that, though perhaps not successful based upon our definition of success, these participants still believed in the possibility of change enough to

continue to pursue reorientation.

REFERENCES

- American Psychological Association. (1997). Media information: Answers to your questions about sexual orientation and homosexuality [Online]. Available: URL <http://www.apa.org/pubinfo/orient.html>.
- Clippinger, J. A. (1974). Homosexuality can be cured. *Corrective and Social Psychiatry*, 20, 15-28.
- Edwards, R. (1996, September). Can sexual orientation change with therapy? *APA Monitor*.
- Haldeman, D. C. (1994). The practice and ethics of sexual orientation conversion therapy. *Journal of Consulting and Clinical Psychology*, 62, 221-227.
- Murphy, T. F. (1992). Redirecting sexual orientation: Techniques and justifications. *The Journal of Sex Research*, 29, 501-523.
- Pattison, E. M., & Pattison, M. L. (1980). Ex Gays: Religiously mediated change in homosexuals. *American Journal of Psychiatry*, 137, 1553-1562.
- Schaeffer, K. W., Hyde, R. A., Kroencke, T., McCormick, B., & Nottebaum, L. (in press). Religiously-motivated sexual orientation change. *Journal of Psychology and Christianity*.
- Yarhouse, M. A., & Jones, S. L. (1997). A critique of materialist assumptions in interpretations of research on homosexuality. *Christian Scholar's Review*, 26, 478-495.

AUTHORS

SCHAEFFER, KIM W. *Address:* Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. *Title:* Chair, Department of Psychology, Point Loma Nazarene College. *Degrees:* BS, Psychology, Southern Nazarene University; MA, Biological Psychology, University of Oklahoma Health Sciences Center; PhD, Biological Psychology, University of Oklahoma Health Sciences Center. *Specialization:* Biological Psychology.

NOTTEBAUM, LYNDE. *Address:* Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. *Title:* Research Assistant. *Degree:* BS, computer Engineering, University of California at San Diego.

SMITH, PATTY. *Address:* Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. *Title:* Research Assistant. *Degree:* BA, Psychology, Point Loma Nazarene College.

DECH, KARA. *Address:* Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. *Title:* Research Assistant. *Degree:* BA, Psychology, Point Loma Nazarene College.

KRAWCZYK, JILL. *Address:* Department of Psychology, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. *Title:* Research Assistant. *Degree:* BA, Psychology, Point Loma Nazarene College.