Evaluating Interventions to Alter Sexual Orientation: Methodological and Ethical Considerations

Gregory M. Herek, Ph.D.

Department of Psychology, University of California, Davis, California 95616-8686; e-mail: gmherek@ucdavis.edu.

Consider this scenario:

A pharmaceutical company claims its new dietary supplement can change left-handed people to right-handers. Medical associations oppose the supplement on the grounds that it harms many people who use it. Noting that there is no reason for left-handed people to try to change, they urge their members not to recommend or administer the product to their patients. To test the drug company's claim, a researcher conducts brief telephone interviews with self-proclaimed "ex-lefties." He recruits respondents mainly through the drug company, which promotes his study to individuals who have given public testimonials about the product's effectiveness. They say they tried the supplement because they felt miserable as left-handers in a right-handed world. Most claim they now function as right-handers, although many report occasional thoughts about using their left hand and some occasionally lapse into left-handedness. The researcher's findings are based entirely on the one-time interviews in which he asked the ex-lefties to rate their handedness prior to taking the supplement (12 years earlier, on average) and during the previous year. Respondents' ratings of their past and current handedness are significantly different. The researcher concludes that the supplement does indeed change lefthanders to right-handers in some cases. Meanwhile, other researchers and clinicians report anecdotally that the food supplement does not change most left-handers to righthanders, but many who tried the supplement report serious negative side effects.

The main questions raised by this hypothetical story concern whether the researcher's data are valid, whether the product's harmful effects would justify its use even if it is sometimes effective, and why left-handers should be encouraged to change in the first place. Similar questions arise from Spitzer's study of self-reported change from homosexuality to heterosexuality following participation in an intervention. Because of space limitations, this comment discusses only four of the many criticisms that can be made of Spitzer's article.

Reliance on Self-Report

Spitzer's data are ultimately the testimonials of a highly select sample of activists from groups whose *raison d'etre* is to promote efforts to change homosexuals into heterosexuals. It is difficult to imagine how his recruitment strategy would have yielded anything other than reports of substantial shifts to a heterosexual orientation. Despite his acknowledgment of its serious methodological inadequacies, Spitzer asks readers to take it on faith that his respondents were both willing and able to report accurately on their past and current thoughts, feelings, and behaviors.

This represents a curious abdication of the scientist's obligation to design a study in a way to avoid known sources of bias. Recognizing that even subtle and unintentional biases can affect the data, researchers routinely adopt elaborate safeguards to prevent their own expectations and those of their research subjects from affecting a study's outcomes. Spitzer's study lacked such safeguards, despite the obvious threats to validity inherent in his sampling procedures.

Even if Spitzer's respondents sincerely tried to give true accounts of their feelings and daily behaviors from (on average) 12 years prior to the interview, their reports cannot be assumed to be reliable. People often are inaccurate when recalling earlier mental states, especially when their emotions, goals, or beliefs have changed in the interim (Levine & Safer, 2002). Memories of past beliefs, attitudes, and behaviors are affected by many factors, including personal theories about one's own behavior change over time (e.g., Ross, 1989). For this reason, asking research participants to recall their preintervention thoughts and feelings is always problematic, even when they are unaware of the study's purpose and have no ideological stake in its outcome. Given the inherently biased nature of Spitzer's sample, his failure to make even minimal attempts to assess the data's reliability (e.g., by assessing internal consistency within interviews and through follow-up interviews) and validity (e.g., through third party ratings or independent personal interviews with the respondent's spouse) seriously compromises the study.

Conclusions About Causation

The title of Spitzer's paper is somewhat misleading. Few would dispute that some people's sexual orientation changes during their lifetime. Indeed, many lesbians and gay men report living as a heterosexual before recognizing or developing their homosexual orientation. The question at issue is not whether sexual orientation can change but whether interventions can be designed to bring about such change.

Spitzer's methodology is incapable of answering this question. Even if we were to accept the respondents' selfreports as valid, simply asking people why they changed their behavior cannot establish what caused that change. Personal testimonials for the benefits of useless treatments abound. Some people genuinely believe that crystals healed them, laetrile cured their cancer, a psychic foretold their future, or a fad diet reduced their weight. Scientists, however, recognize that testimonials do not prove that an intervention works. People who undergo an intervention are often highly motivated to attest to its effectiveness. Their willingness to overstate (or actually lie about) its benefits is greater still when they have a financial or ideological stake in the intervention's success. Even when respondents sincerely attempt to be accurate, they (like all of us) remain unaware of many of their mental processes and, consequently, their accounts of the causes of their behaviors are not always reliable (e.g., Jacoby, Lindsay, & Toth, 1992; Nisbett & Wilson, 1977). This is why we use experimental designs to determine causation.

At most, Spitzer's data could demonstrate a correlation between reporting change and undergoing an intervention. Spitzer argues that a rigorous experimental study would be expensive and would take a long time to complete. These inconveniences, however, do not justify his ignoring the fact that a correlation does not establish a causal relationship.

Risk and Harm

The hypothetical dietary supplement posed substantial risks to users. So do interventions to change homosexual orientation. As he acknowledges, Spitzer's selection criteria excluded those who had tried to change their sexual orientation without success. He dismisses those "failures" as outside the purview of his study, since his intention was to document that interventions change some homosexuals into heterosexuals. But just as with the hypothetical dietary

supplement, the question of harm is important. To be sure, the risks associated with interventions to change homosexual orientation have not been experimentally demonstrated either. Concerns about such risks are based on anecdotal accounts from clinicians and self-reports by individuals who were subjected to the interventions (e.g., Haldeman, 2001; Shidlo & Schroeder, 2002).

Nonetheless, the standards for demonstrating harm are different from those for demonstrating efficacy. If harm seems to be at all likely, we have an ethical obligation to investigate the actual risk to patients before offering them an intervention. Indeed, clinical trials are structured to establish a treatment's safety before testing its efficacy. And if risks of harm exist, we must consider whether they are offset by the intervention's potential benefits. These considerations are reflected in the resolutions concerning sexual orientation change interventions passed by both the American Psychological Association and the American Psychiatric Association. Although Spitzer's article refers to those resolutions, he ignores the issue of harm except to note that (not surprisingly) his subjects did not report having experienced it.

Homosexuality Is Not an Illness

We recognize today that trying to change left-handers into right-handers is misguided. Left-handedness is not an illness. Neither is homosexuality. Yet, antigay activists promote a belief in homosexual-to-heterosexual "conversions" with missionary zeal. Why? A key reason is that an unpopular status or condition is more readily stigmatized to the extent that it is perceived as freely chosen. Recent religious campaigns selling so-called reparative therapy perpetuate the myths that homosexuality is a sickness and that gay people can (and should) become heterosexual. They are mainly about reinforcing the stigma experienced by gay men and lesbians, and blocking attempts to secure legal protections from discrimination on the basis of sexual orientation.

This is not to argue that Spitzer conducted his study to foster antigay stigma. But his article is oddly insensitive to this issue. Although he notes in passing that sexual orientation change "may be a rare or uncommon outcome of reparative therapy," it seems inevitable that activists from NARTH, Exodus, Focus on the Family, and similar groups will attempt to use the study to support their political agenda.

Conclusion

Spitzer's study is methodologically flawed and disturbingly silent about ethical concerns. It is disappointing that the *Archives* elected to publish it.