

**4. Joseph A.Catania, David R.Gibson, Dale D.Chitwood, Thomas J.Coates, Methodological Problems in AIDS Behavioral Research : Influences on Measurement Error and Participation Bias in Studies of Sexual Behavior, Psychological Bulletin, Vol. 108, No. 3, 339- 362, 1990**

An unprecedented number of human sexuality studies have been initiated in response to the acquired immune deficiency syndrome (AIDS) epidemic. Unfortunately, methodological developments in the field of sex research have been slow in meeting the demands of AIDS investigations focusing on the diverse populations at risk for infection with the human immunodeficiency virus (e.g. adolescents, gay men, intravenous-drug users, ethnic minorities, elderly transfusees).

In this review, we have emphasized the need for methodological research on a vast number of issues relevant to the assessment of AIDS-relevant sexual behavior. An immediate priority is to map the sexual terminology that different groups of people comprehend and feel comfortable using when asking and answering questions about their sexual activities. Without a comprehensive understanding of the appropriate terminology for sex-related questions, it is more difficult to untangle other potential influences on measurement error.

Current findings suggest that participants in sex surveys have more liberal sexual attitudes and are more sexually active than nonparticipants. Though based on samples of limited generalizability, these findings underscore the fact that participation bias is a fundamental concern for researchers whose goal is to estimate the prevalence of various sexual behaviors in the population. The implications of nonparticipation in AIDS behavioral research are extremely worrisome. Two hypotheses deserve exploration. If people fail to volunteer because of the stigma of AIDS and AIDS-related transmission behaviors, then nonparticipants may be people who are more likely to practice high-risk sexual activities; the consequence would be that high risk behavior is currently underestimated. Alternatively, if people fail to volunteer because they believe they don't need help or because "I don't practice unsafe sex, so I don't need to participate," then nonparticipants may overrepresent those engaged in low-risk behavior.

Considerable work is needed to examine how recall accuracy is influenced by length of the recall period, the personal salience of past sexual events, emotions associated with one's sexual partner and behavior, the complexity of recalling behaviors performed with multiple sexual partners, the relative frequency of the specific behavior being assessed. The motivational level of the respondent to perform the task, and the types of inferential methods used to generate behavioral estimates.

Evidence from a variety of sources indicates that self- presentation bias is a significant hindrance to obtaining accurate estimates of sexual behavior.

Research concerning mode influences on measurement error and participation bias is of overlapping priority with work on respondent factors.

Comparative studies are needed that contrast data-collection modes with respect to measurement error and participation bias. Which is the best method for assessing sexual behavior, the telephone interview or the FTFI. Evidence indicates that measurement error associated with sexual questions decreases when methods that increase anonymity are used.