

Measuring Sexual Orientation of Young People in Health Research

**Lesbian, Gay, and Bisexual (LGB) Youth
Sexual Orientation Measurement Work Group**

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Measuring Sexual Orientation of Young People in Health Research

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Report from the April 2001
Scientific Workshop to Measure Health Concerns of
Lesbian, Gay, and Bisexual Youth

TABLE OF CONTENTS

Background

AUTHORS: LESBIAN, GAY, AND BISEXUAL (LGB) YOUTH	
SEXUAL ORIENTATION MEASUREMENT WORK GROUP	2
SUGGESTED CITATION	4
ORGANIZATIONAL SUPPORT	5
CONTRIBUTORS.....	6
TABLE OF CONTENTS.....	7

Report

EXECUTIVE SUMMARY.....	8
-------------------------------	----------

WORKSHOP BACKGROUND.....	11
---------------------------------	-----------

ASKING THE QUESTIONS: ISSUES IN PUBLIC HEALTH RESEARCH.....	15
Why Ask Questions: Using Data to Support Research Activities and Services.....	15
What Questions to Ask: Definitions and Measurements	17
How to Ask Questions: Conducting Survey Research	26

THE DEBATES: CRITICAL CONCERNS	29
Dynamics of Sexual Orientation and Identity	29
Sampling	31
Use of Findings.....	33
Health Models	34

CONCLUSION	36
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BIBLIOGRAPHY.....	37
--------------------------	-----------

APPENDIX: IMPORTANT NATIONAL SURVEYS:	41
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EXECUTIVE SUMMARY

The public health research field is at a critical juncture in its ability to develop scientifically-based knowledge of the health-related needs and experiences of youth who identify as lesbian, gay, or bisexual (LGB), engage in same-sex sexual behavior, or experience attractions to individuals of the same sex. National surveys such as the Youth Risk Behavior Surveillance System (YRBSS) and the National Longitudinal Study of Adolescent Health (Add Health) have provided information drawn from large, representative samples of young people. Many of the young people surveyed report experiencing same-sex sexual attraction, having engaged in same-sex sexual behavior, or identifying as lesbian, gay, or bisexual. These studies have helped identify correlations between sexual orientation, sexual identity, and the health experiences of adolescents. They also provide opportunities to refine research methods—such as measurement and sampling techniques—in preparation for further investigations.

This document represents the efforts of a group of nationally-recognized experts in the health of young people. The group has specific expertise studying and working with youth who identify as lesbian, gay, or bisexual, engage in same-sex sexual activity, or experience attractions to individuals of the same sex. The experts met to review basic methodological concerns in the growing area of health-related research focused on lesbian, gay, and bisexual youth. What follows is a guide for those who currently work in this area of research and those who are considering entering the field.

This report provides general recommendations, such as the need to focus as much on the strengths as the vulnerabilities of lesbian, gay, and bisexual youth. When considering other issues, such as the definitions of sexual orientation and identity and the empirical measurement of these constructs, we outline the debates without presuming to resolve what must, of necessity, remain speculative and complex areas of investigation.

Information can be powerful, especially if it is valid, reliable, and obtained using rigorous methodologies. Navigating the politics of sexuality to benefit those in need requires information of the highest quality. When dealing with sexual orientation and sexual identity in a youth population, however, researchers must frequently negotiate between the rules of scientific processes and the pragmatics of community and financial constraints. For example, one of the primary rules of methodology is that definitions and measurement tools must be appropriate to the phenomenon under investigation. Selecting which measures to apply when striving to answer a research question requires a clear understanding of the dimension the measure addresses and how it does so. The pragmatics of the current research world, however, are such that community objections and the limitations of resources are unlikely to permit comprehensive investigations of both sexual orientation and identity.

Currently, most research in the area focuses on one or more of the following dimensions, defined later in this report—sexual identity, sexual orientation or attraction, and sexual behavior. Perceived sexual identity is an additional dimension with relevance to health. Each of these dimensions has established, although not standardized, measures. Public health researchers have also developed a rationale for how these dimensions may correlate with particular public health issues. Some argue, for example, that when studying victimization or violence directed at youth, perceived sexual identity is likely to be a critical dimension since youth may be targeted because of how others label them. Psychological distress related to sexual identity—the feeling that one may be lesbian, gay, or bisexual—is likely to have a different mechanism from the distress experienced by youth who engage in same-sex sexual behavior but do not claim either a lesbian, gay, or bisexual identity.

While measures and theories exist, much work is needed to resolve basic scientific questions, such as whether or not existing measures are valid and reliable. Resolving basic scientific issues is not easy since methodological and clinical issues are investigated and resolved simultaneously. Without the ability to conduct multi-dimensional studies of sexual orientation and identity on a large sample of youth—the kind of study that would permit us to test validity and reliability—it is necessary to construct other studies. Effective studies would use one or two of these standard dimensions and build from them, through close critical review, an understanding of how well they test the experiences of both youth who identify as lesbian, gay, or bisexual, and youth who do not identify in that way but evidence a same-sex orientation.

A further methodological question concerns the fundamental issue of how best to investigate sensitively the area of sexual identity and orientation among adolescents. This requires a clear understanding of instrument design and the impact of, among other things, the wording of questions and their placement within the overall survey. For example, questions about sexual behavior, identity, and attraction should not be placed beside questions about other sensitive issues such as knowledge of HIV/AIDS or history of sexual abuse.

The study of health issues related to adolescent sexual orientation and identity is made particularly difficult, and especially interesting, by the dynamic nature of youth culture and self-identification. Researchers and theorists have observed that, sexual orientation and identity are historically and culturally influenced. They are also part of a larger complex of identifiers such as gender and race/ethnicity, and are likely to manifest differently at various stages in an individual's life. Investigating the placement of sexual identity and orientation within this complex of dimensions is a vital area of research and one with potentially critical public health applications. We need only think of smoking and drug use to image how factors such as peer pressure, cultural settings, and individual psychology play a part. Sexual orientation and identity are likely to play a

significant role in how these vulnerabilities play out in the lives of different groups of young people.

By enumerating the many methodological details of concern to researchers, we risk neglecting the research priorities that will move the public health system in a direction that will benefit all youth, including those who are lesbian, gay, and bisexual. Even methodologically constrained research can be effective and should be encouraged. One of the keys to ensuring that research efforts are effective is to build community partnerships during the conceptualization of a study and sustain those partnerships through to the interpretation and application of the results. By fixating on issues of definition, researchers may unwittingly forgo the opportunity to learn how lesbian, gay, and bisexual youth themselves construct their sense of self and meet the challenges they face. Qualitative research projects, such as rigorous ethnographic investigations, are excellent ways of partnering with youth to satisfy our curiosity about the risks and resilience of lesbian, gay, and bisexual youth. Curiosity—and concern—about health risks and resilience for lesbian, gay, and bisexual youth is the underlying impetus of this report. What we present here is intended to support rather than constrain that curiosity.

WORKSHOP BACKGROUND

Awareness of the existence of the needs of youth who identify as lesbian, gay, or bisexual, engage in same-sex sexual behavior, or experience attraction to individuals of the same-sex is growing nationally¹. Health-related research on these youth is also increasing, and the findings are drawing the attention of clinicians, policy-makers, funding agencies, advocates, and other researchers. For example, findings from large national youth-focused surveys, such as the Youth Risk Behavior Surveillance System (YRBSS) and the National Longitudinal Study of Adolescent Health (commonly referred to as "Add Health"), are now routinely quoted in support of research projects focused specifically on lesbian, gay, and bisexual youth². Data from these surveys have also justified the creation of interventions focused on these populations, such as the Safe Schools for Lesbian, Gay, Bisexual, Transgender and Questioning Youth Program in Vermont (Sell and Becker, 2001b).

Research developments have not occurred in isolation. For example, the HIV pandemic has contributed greatly to the visibility of lesbian, gay, and bisexual persons as well as increased awareness of their health needs. As a result of HIV, issues related to sexuality and sexual orientation have been discussed extensively, and the lives of youth who identify as lesbian, gay, and bisexual—even beyond the specific confines of HIV—have become the focus of increasing research. The pandemic has, in many respects, fostered the inclusion of lesbian, gay, and bisexual populations in public health initiatives including but not limited to HIV/AIDS. The success of these public health efforts is contingent upon information about health needs and treatment outcomes derived from well-designed and executed research.

¹ In writing this report, we have experienced the limitations of current terminology, especially the difficulty of describing how sexual orientation and gender, race, ethnicity, socioeconomic status etc. work together to create complex identities. The emphasis in this report is on sexual orientation among youth populations. We are particularly interested in understanding what is meant when youth identify as lesbian, gay, or bisexual, have same-sex sexual behaviors, or are sexually attracted to individuals of the same sex. For the sake of readability this has been shortened at points to the phrase "lesbian, gay, and bisexual youth." The relevance of these discussions, however, is not confined to lesbian, gay, and bisexual youth. While the workshop did not discuss the measurement of gender identity, the issues of sexual orientation are as much a part of the experience of transgender youth and transgender questioning youth as they are of youth who do not identify as transgender. The planning committee for this workshop recognized the importance and complexity of transgender issues and concluded that addressing gender identity would require additional expertise. The committee also felt that to consider gender identity appropriately would require a meeting devoted to that topic.

² Although often referenced in the context of discussion of lesbian, gay, and bisexual youth, as is the case here, Add Health researchers have been clear not to refer to the youth they surveyed as lesbian, gay, and bisexual since the questions asked in the survey did not focus on sexual identity, but rather on dimensions of same-sex romantic attractions.

The increase in data collection on lesbian, gay, and bisexual youth through large national surveys and focused research projects is illuminating the need for strong methodological foundations for the field to ensure the availability of high quality information that addresses relevant questions in an appropriate manner. The politicized nature of this area of investigation makes the pursuit of scientific information especially difficult and extremely important. Ensuring that valid and reliable information is collected requires, among other things, ongoing review of sampling and recruitment methods, close investigation of survey questions and survey procedures, and regular assessment of how research data are interpreted and applied in developing health programs and public health policies.

In the fall of 1999, when results from the YRBSS were released, Dr. Joyce Hunter of the HIV Center for Clinical and Behavioral Studies in the New York Psychiatric Institute and the Mailman School of Public Health at Columbia University; Dr. Anthony Silvestre of the American Public Health Association's (APHA) Lesbian, Gay, Bisexual and Transgender Caucus; and Dr. Thomas Scott of the University of Minnesota Medical School and the Gay and Lesbian Medical Association (GLMA) met with Dr. Susan Cochran of the Department of Epidemiology at UCLA School of Public Health to address scientific and methodological concerns about health research for lesbian, gay, and bisexual youth. While interest in the YRBSS prompted their first meetings, the group was also concerned with issues relevant to other surveys and research instruments. The Add Health study was of particular interest because it is a longitudinal research project, has a large sample, and is concerned with youth development, particularly the factors in the lives of youth that support positive, healthy developmental outcomes. Given the important role these surveys are likely to play in defining the needs of youth, the group proposed convening a scientific meeting to examine methodological and scientific issues relevant to the field.

The American Public Health Association's Lesbian, Gay, Bisexual and Transgender Caucus and the Gay and Lesbian Medical Association agreed to co-sponsor the workshop. GLMA obtained funding for the workshop utilizing the proposal developed by Drs. Joyce Hunter, Susan Cochran, Anthony Silvestre and Thomas Scott. The Henry J. Kaiser Family Foundation (KFF) provided initial funding. Jennifer Kates of KFF, Patricia Dunn of GLMA, Dr. Robert Garofalo, at the time of Children's Hospital in Boston, and Dr. Randall Sell of Columbia University joined the planning committee. Additional funding was provided by the Kevin J. Mossier and W.T. Grant Foundations. Policy leaders in the National Youth Advocacy Coalition and the Gay, Lesbian and Straight Education Network endorsed the need for medical and public health research leaders to address the methods used to obtain population-based information regarding the health needs of lesbian, gay, and bisexual youth.

On April 21, 2001, a group of 23 researchers and health care professionals gathered in New York City to discuss issues raised by health-related research that focuses on youth

who identify as lesbian, gay, bisexual, or indicate same-sex sexual behavior or attraction. The workshop participants have had extensive experience working with such youth and are familiar with the complexities of conducting research with this population. The meeting was hosted by the Program in LGBT Health in the Mailman School of Public Health at Columbia University and the HIV Center for Clinical and Behavioral Studies in the New York State Psychiatric Institute.

The meeting planners sought to provide an opportunity for participants to discuss ways to positively affect the quality of research on the relationship between sexual orientation and the health of youth. Aware that meeting this objective would require more than a discussion of standards and research questions, the planners developed a workshop agenda that included a focus on increasing awareness about the complexity of sexual orientation and sexual identities as variables as well as the importance of including these variables in health-related research and practice. The meeting also represented a step toward establishing collaborations between researchers and across projects that would increase the scope and diversity of health-related research with lesbian, gay, and bisexual youth.

The primary purpose of the workshop was defining and measuring sexual orientation and identity in adolescents. This purpose was important because valid and reliable definitions and measurements of sexual orientation and identity provide the foundation for effective public health research with lesbian, gay, and bisexual youth. Secondly, the participants were asked to consider:

- Targets for future research activities that can be the most useful in moving forward our scientific understanding of mental and physical health issues in LGB populations, and can provide insights needed to develop essential preventive interventions.
- Methodological and ethical issues that may arise during sample selection and respondent assessment, in order to improve the reliability and validity of future study findings.

This report provides basic guidance on the process of developing and selecting effective definitions and measurements. The first part of the report discusses dimensions of sexual orientation and identity and issues to consider when selecting questions. Examples of questions are offered for possible use when conducting survey research with lesbian, gay, and bisexual youth. Key issues are outlined with respect to conducting survey research, such as the process of building support for research and consideration of advantages and disadvantages of survey-based research.

The second part of the report references a number of ongoing discussions in the field of public health research on lesbian, gay, and bisexual youth. These include

considerations about the definition of orientation, identity and other dimensions, changes in sexual orientation over the life course, the complexities of sampling from this population, and how data and findings are used. The report also includes a bibliography and an appendix in which information is provided about the most prominent health-related surveys that incorporate questions on sexual orientation and identity.

ASKING THE QUESTIONS: ISSUES IN PUBLIC HEALTH RESEARCH

Why Ask Questions: Using Data to Support Research Activities and Services

Investigations of the health of lesbian, gay, and bisexual youth have been hampered by assumptions that the health of these youth does not differ from the health of heterosexual youth. It is difficult to respond effectively to these doubts as researchers find themselves caught in a "catch-22" situation. Without data confirming differences, funders are unlikely to support research and federal agencies are reluctant to place the health experiences of lesbian, gay, and bisexual youth on their research agendas. However, until funders and the federal government invest in this important research, data will be nonexistent or inadequate.

With the inclusion of questions concerning sexual orientation, identity, and behavior in many national surveys, the situation has begun to change (see Appendix). Evidence now exists that youth who identify as lesbian, gay, or bisexual, or youth who report attractions to or engage in sexual activity with same-sex partners, have higher levels of marijuana use, cigarette smoking, intravenous drug use, victimization (such as being threatened with a weapon while on school property), violence, suicide attempts and pregnancy (Resnick et al., 1997; Faulkner and Cranston, 1998; Garofalo et al., 1998; Remafedi, 1998; Fergusson, 1999; Saewyc et al., 1999; Russell, Driscoll et al., 2001; Russell, Franz et al., 2001; Russell and Joyner 2001; Sell and Becker, 2001a). An exception regarding suicide attempts has also been reported (Savin-Williams, 2001b). Evidence that these youth are at greater risk for negative health outcomes increases the need for further investigation in order to understand the particular mechanisms of risk for this population.

The Value of Summary Statistics and Comparative Data

With useful data on the prevalence of risk factors and methods to minimize these risks, health care providers are able to implement interventions that will increase the well-being of lesbian, gay, and bisexual youth. Additionally, summary statistics derived from methodologically sound research illustrate the experiences of youth populations and offer important guidance to community leaders and policy-makers.

Data of this sort are important for mobilizing public school systems to act to protect the lesbian, gay, and bisexual youth in their classrooms. For example, many lesbian, gay, and bisexual youth are subject to physical and psychological abuse while at school. By demonstrating first that there are lesbian, gay, or bisexual students in the school and then documenting the extent and nature of abuse—such as the percentage of youth injured by anti-gay slurs—school officials will understand the need to respond.

A good example of the impact reliable data can have on improving policies or practices to protect lesbian, gay, and bisexual youth occurred in the public school system in Vermont. In 1995 Vermont began collecting same-sex sexual behavior data in its Youth Risk Behavior Survey (YRBS).³ YRBS is the name for the state or local survey conducted as part of the Youth Risk Behavior Surveillance System (YRBSS). Fifty-nine out of Vermont's sixty school districts participated in the YRBS—virtually a census—and the data were distributed back into local communities. Before same-sex sexual behavior questions were added to Vermont's YRBS, local school officials were largely unaware of the needs of lesbian, gay, and bisexual youth. When the YRBS data revealed the concerns of these youth, local school administrators requested staff training on lesbian, gay, and bisexual youth issues. Vermont's Commissioner of Education subsequently convened a meeting with lesbian, gay, and bisexual youth, resulting in the establishment of the Safe Schools for Lesbian, Gay, Bisexual, Transgender, and Questioning Youth program with a part-time coordinator position. YRBS data in subsequent years prompted the state to expand the program and integrate it into a school safety program for all students coordinated by full-time staff (Sell and Becker, 2001b).

Risk and Resilience

An increasingly important focus of research on lesbian, gay, and bisexual youth is their resilience in the face of adverse events and other factors that place them at risk (Hunter, 1999). Risk factors are those health-compromising choices, behaviors and experiences that make youth vulnerable to significant morbidity, including emotional distress, violence, active substance use and teen pregnancy (Resnick et al., 1997; Saewyc et al., 1999; Russell et al., 2001; Russell et al., 2002). The resilience paradigm seeks to identify protective, nurturing factors in the lives of youth. By understanding developmentally-appropriate protective prospects for youth at risk, investigation of resilience, "frames the preeminent health and human services delivery question . . . to what extent and under what circumstances can protective factors be transplanted into the lives of young people who have been socialized in a stressful climate of uncertainty and fear?" (Resnick 2000:159). Protective factors in the general population of adolescents that have been identified by researchers include parent-family connectedness, perceived school connectedness and connectedness with caring adults outside the family (Resnick et al., 1997).

The public health value of studying resilience in lesbian, gay, and bisexual youth is illustrated by results from the National Longitudinal Study of Adolescent Health (Add Health) concerning adolescent suicide attempts reported by Borowsky, I.W., Ireland, M. & Resnick, M.D. (2001). To investigate the issue, the researchers analyzed data from just over 13,000 Hispanic, Black, and White youth, some of whom reported

³ In the same year, a question on sexual identity was added to the Massachusetts and Seattle YRBS.

experiencing same-sex attractions. Overall, 3.6% of the sample (5.1% of girls and 2.0% of boys) reported attempting suicide in the 12 months prior to completing the survey. Several factors seemed to place these youth at risk for suicide: previous suicide attempt, being either a victim or perpetrator of violence, alcohol use, marijuana use and school problems. Several factors were identified that correlated with a reduction in the odds of suicide attempts. These include perceived parent and family connected-ness, emotional well-being, high parental expectations for school achievement, actual school achievement, more people living in the household, and religiosity.

The relationship between same-sex attraction and suicide was also examined. The researchers note that previous studies have shown that gay and lesbian youth are much more likely to attempt suicide than their heterosexual peers, and may account for as many as 30% of completed youth suicides annually. This elevated risk is particularly high among gay male youth. Analysis of the Add Health data revealed that experiencing a same-sex romantic attraction predicted suicide attempts among Black, Hispanic and White male youth as well as among Black and White female youth. "Thus, a homosexual orientation seems to be a risk factor for suicidal behavior," the authors observe, one that, "cuts across gender and racial/ethnic groups." No resilience factors particular to this group of adolescents are reported. It is likely that the list of resilience factors reported above apply differently to lesbian, gay, and bisexual youth. Lesbian, gay, and bisexual youth are likely to face unique barriers to feeling connected to their parents. These are questions that further research will be able to address.

Additional research will help us identify risk factors and protective factors specific to lesbian, gay, and bisexual youth and youth who experience attraction to members of the same sex or engage in same-sex sexual behavior. It would also be important to identify which risk and protective factors are unique to lesbian, gay, and bisexual youth, and which are universal.

An additional impact of the study of protective factors is a reduction in the stigmatizing belief that lesbian, gay, and bisexual youth have only problematic behaviors. This is a consequence of research that has the primary goal of enumerating the difficulties faced by these youth. Resilience research demonstrates both the difficulties faced by youth as well as their capacity to live healthy lives despite adversity.

What Questions to Ask: Definitions and Measurements

There are many methodological challenges and limitations to conducting research on the health of youth who identify as lesbian, gay, or bisexual. Primary among these are challenges related to definition, measurement and sampling.

Sexual Orientation and Identity

The terms "homosexual," "heterosexual" and "bisexual," and the subsequent variants of gay, lesbian, etc., are little more than 100 years old. Since their creation, researchers and theorists have attempted to define them precisely. As with other identity terms, what is meant by the terms homosexual, heterosexual, and bisexual changes with cultural, social, economic, political, and historic circumstances.

Sexual orientation has been defined as a consistent pattern of sexual arousal toward persons of the same and/or opposite gender (Spitzer, 1981), encompassing elements of fantasy, conscious attractions, emotional and romantic feelings, sexual behaviors, and possibly other components (Friedman, Green, & Spitzer, 1976; Remafedi, 1985). Since the heterosexual or homosexual direction of the individual dimensions may be at variance with each other, numerous permutations of orientation are possible and probable in human populations (Gonsiorek, Sell & Weinrich, 1991). Sexual identity has been defined as self-identification, either heterosexual, homosexual, bisexual, gay, or lesbian (Chung & Katayama, 1996).

The flexibility of sexual orientation and identity is particularly evident in adolescent sub-cultures, where language and behavior change rapidly. This circumstance illustrates the fact that orientation and identity are not exclusively subjective but are influenced by what is happening in the individual's social world. In the process of investigating and exploring sexual orientation and identity, youth are also likely to present themselves differently across a relatively short time span. Changes in language are evidence of these explorations and changes. The vocabulary of sexual orientation and identity usually changes more swiftly among youth than among researchers. Keeping up with these changes is important if researchers hope to sample the lesbian, gay, and bisexual youth population accurately.

The multiple components of sexuality and the variability in its expression make it a complex area of behavioral investigation. Also, researchers hold differing opinions about the definition of sexual orientation and identity variables as well as appropriate ways to measure them. For example, some argue for a clear distinction between sexual orientation, sexual identity, and sexual behavior, for while they may be reflective of each other, they may not be clearly related. From this perspective, sexual identity refers to an organized set of perceptions that an individual has about the meaning of sexual attractions and desires. These are perceptions of how attractions and desires relate to a sense of self, which may be classified using existing social categories such as heterosexual, homosexual, gay, lesbian, etc. Sexual identity is historically and culturally specific, is changeable over the life course, and may or may not be consistent with one's sexual orientation (Savin-Williams, 1998). Sexual orientation, on the other hand, is a deeply rooted, enduring predisposition toward erotic and sexual fantasies, thoughts, affiliations, affection and bonding with members of one's own sex, the other sex, or both

sexes. Sexual orientation is not subject to conscious control, is stable, and is likely immutable. Sexual orientation is related to, but may also occasionally be independent of, sexual identity and sexual behavior (ibid.).

Separating sexual orientation and identity in this manner is useful in that it provides a way of distinguishing, for example, between those youth who engage in same-sex sexual behavior but do not identify as either lesbian, gay, or bisexual, from those youth who do identify in this way but have not, as yet, engaged in same-sex, sexual behavior. Defining and measuring orientation and identity in this manner enables us to explore hypotheses that attribute particular social stressors of sexuality to identifying or being identified as lesbian, gay, or bisexual outside of sexual behavior or sexual desire or attraction.

Other researchers argue that what we need to understand is precisely the relationship between the dimensions of behavior, identity, and orientation. That is, we need to look at the complex construction of "sexual orientation" derived from the interaction between these dimensions. The various areas of attraction, behavior, and self-identity intersect in unpredictable ways due to cultural influences, real and perceived threats to identity or physical health, and many other environmental issues, especially during adolescence. The intersections in the form of a multi-dimensional construct of sexuality (often called "sexual orientation") are what individuals experience in real-world situations and consequently should be the focus of scientific investigations (Sell 1991; Chung & Katayama, 1996; Saewyc, 1998). This question points to a philosophical debate about the extent to which subjectivity or components of subjectivity, such as the immutability of sexual orientation advocated above, are the result of cultural and historical influence, and therefore fundamentally changeable.

These debates are not resolvable here and are likely to be a continuing part of this field of research. This is, however, the context within which the scientific investigation of adolescent sexuality is conducted.

Dimensions:

In the discussion that follows, we focus on the three dimensions that are most prominent in studies of lesbian, gay, and bisexual youth and youth who experience same-sex attractions and engage in same-sex sexual behavior:

1. Identity: What is an individual's self-perception or self-label in relation to sexuality?
2. Behavior: With whom do individuals engage in sexual behavior?
3. Attraction: To whom are individuals sexually attracted?

We include a fourth dimension that is particularly valuable for health research which is focused on experiences of emotional, verbal, and physical abuse and violence.

4. Perception/attribution: How is an individual perceived or labeled by others in relation to sexuality?

These dimensions are correlated, but not perfectly. As noted above, it is also possible for dimensions to be differently oriented within the same person. For example, a young man may experience strong attractions to men, yet his sexual behavior will be confined to women. Declaring these contradictory or defining this individual as either homosexual or heterosexual is problematic. In the case of youth in particular it is important not to presume that attraction or behavior is synonymous with identity.

Attempts have been made to develop questions that isolate each of these dimensions and are able to represent an individual's relationship to each dimension accurately. These questions are combined to form scales in which the presence and intensity of each is used to indicate the construct of "sexual orientation" (for example: Klein et al., 1985; Sell, 1991; Gonsiorek et al., 1995; Chung & Katagama, 1996; Hamming & Blumenfeld, 1996).

Recently, this construct has been subject to extensive rethinking based on theories of its relation to gender identity and expression, particularly concerning transgender individuals. Defining transgender individuals in a way that incorporates a respect for both gender and sexual orientation and identity constructs is a challenge that behavioral scientists have yet to address adequately (Butler, 1990).

Considerations when Choosing Questions

When creating a survey instrument to measure the health status and needs of lesbian, gay, and, bisexual youth, a number of questions should be considered:

- ☐ What health issue is being studied?
- ☐ Does an acceptable measure already exist?
and
- ☐ What are the characteristics of the study environment?

What health issue is being studied?

The various dimensions listed here relate differently to specific health issues. It is important to note that most health concerns are multi-dimensional and are likely to correlate with more than just identity or behavior alone. Certain mental health conditions, for instance, such as substance abuse, may significantly correlate with behavior, attraction, and perception. While it would be preferable to measure the relationship of all dimensions to particular health issues, this is not always possible. Therefore, questions need to be selected that measure the dimension most closely associated with the health issue being investigated.

The following table provides a very simple selection of potential associations between dimensions of sexual orientation, behavior, attraction and perceived sexuality and health concerns. These are not definitive relationships. When conducting a study, measures should be selected only after extensive examination of the potential correlations.

Table 1: A Selection of Potential Health Concerns Commonly but not Exclusively Associated with Particular Sexuality Dimensions (*examples illustrated by shading*)

		<i>Sexuality Dimension Measured</i>			
		Orientation	Behavior	Attraction	Perceived
Health Concerns	Drug Use				
	Alcohol Use				
	Tobacco Use				
	HIV/AIDS				
	STDs				
	Pregnancy				
	Mental Health				
	Suicide				
	Violence				

Does an acceptable measure already exist?

There are many advantages to using existing questions, especially if they have been validated and found to be reliable. Using questions from prior studies will also increase the comparability of the findings. This can increase the significance and impact of the study results.

When new questions are needed, they must be piloted and their validity and reliability determined. This adds time to the research process and to the costs of the study.

What are the characteristics of the study environment?

A number of practical issues should also be considered when choosing questions. Funding levels may constrain the length of the survey and it may not be possible to have multiple questions related to sexual orientation and identity. The political climate and community attitudes are also potential constraining factors. If there is discomfort with this line of research within the community, it may be necessary for researchers to choose the least controversial questions. These are likely to be questions that focus on perceived sexual orientation.

Sometimes, due to factors such as limited funding or the focus of specific research projects, researchers do not measure each dimension of sexual orientation and identity when investigating the health concerns of lesbian, gay, and bisexual youth. It is common, for instance, to select only a single dimension to establish the study population. The dimension may appropriately reflect variations in the health issues under investigation, such as using perceived sexual identity when investigating school violence. However, measuring only one dimension limits the comparability of results with those drawn using a different dimension to define the population. For example, one cannot assume that what has been learned about suicide from a study of youth who identify as lesbian, gay, or bisexual has the same meaning as results from a study of youth who report same-sex sexual behavior or attraction. (Savin-Williams, 2001a)

The dimension or dimensions selected will also influence the sample. Different dimensions will pick up different populations. As noted above, for example, sexual attraction is likely to access the largest sample but only a subset of these youth will self-identify as lesbian, gay, or bisexual. The definition of the sample also determines whether the findings can be generalized, which can significantly impact how the data are used to guide policy or intervention design.

Examples of Selected Questions

Participants in the workshop reviewed a number of questions that relate to the constructs of sexual orientation and identity. For the most part these questions were drawn from, or are adaptations of questions from, large surveys. Workshop participants also discussed the advantages and disadvantages of different questions. No examples are provided for two of the dimensions because no single question satisfactorily captures the dimension. Experienced survey researchers will be able to assist with the selection or development of questions for these dimensions based on the particular focus of the studies.

Identity

An identity measure records an individual's self-perception or self-identity. Workshop participants emphasized that when asking questions about identity, the measure should be based on self-identification. They also noted that it is important to provide an option for youth who do not identify using the categories provided.

The example provided below, from the state of Massachusetts' Youth Risk Behavior Survey, could be a measure of sexual orientation as well as identity. For this question on the Massachusetts YRBS, respondents were provided both a "not sure" and "none of the above" option. Noting that "not sure" may be an adequate response category for youth who identify as other than heterosexual, homosexual, or bisexual, and concerned that having both these options was confusing, the final response category, "none of the above" was dropped after the first round of the survey. This decision is discussed in greater detail in the *Question Placement* section below.

Which of the following best describes you?

- ☐ *Heterosexual (straight)*
- ☐ *Gay or lesbian*
- ☐ *Bisexual*
- ☐ *Not sure*

Behavior

The Youth Risk Behavior Surveillance System includes an optional question concerning sexual behavior. In its original form, the question asked about sexual "intercourse" which many workshop participants found to be too limiting. By using the term "activity," this form of the question is inclusive of multiple behaviors.

The term "activity," however, is vague, as are the alternatives, "experience" and "contact (see the example below)." Many researchers are using more specific terms such as "genital contact" or "oral sex." We cannot be sure that youth who respond to this question would consider the same behaviors to fit under the term "activity." Cognitive testing is needed to determine the interpretation of the term "activity."

During your life, the person(s) with whom you have had sexual contact is (are):

- ☐ *I have not had sexual contact with anyone*
- ☐ *Female(s)*
- ☐ *Male(s)*
- ☐ *Female(s) and male(s)*

Attraction

One value of using a question that asks about sexual attraction is that it will draw a larger sample than questions related to the other dimensions. This is because youth are likely to know their attractions long before they act on them or apply a sexual identity label to themselves. Also, qualitative data from adolescents suggest that youth perceive sexual attraction as central to the composition of their sexual orientation and

that there exists two specific types of attraction—one cognitive in nature, the other physiologic. (Friedman et al., submitted). These data suggest that sexual attraction-related questions need to be included in attempts to measure the sexual orientation or identity of adolescents. While romantic attractions may be related to orientation and identity, this should not be used alone as an indicator of either. Moreover, the concept of attraction itself includes multiple dimensions, such as emotional, romantic, physical, sexual, and intellectual. These dimensions may need to be considered when considering attraction questions in relation to the purpose of the research.

Perceived

Some of the youth harassed for "being gay" may not identify as lesbian, gay, or bisexual. The sample question below captures that group as well as youth who do identify as lesbian, gay, or bisexual. For this reason, perceived identity should not be used alone as a measure of sexual orientation or identity. However, it is important for measuring the prevalence of harassing behaviors and threatening environments that affect those who are lesbian, gay, and bisexual, and youth more broadly. In the 1995 Seattle version of the YRBS, for example, four out of five adolescents who reported being harassed because someone thought they were gay actually identified as heterosexual (Reis and Saewyc, 1999).

Incorporating questions about perceived sexual orientation or identity will likely be supported by the many parents whose children have been victimized by their peers. Research data regarding this form of harassment have led to safe school programs in certain areas. Because this harassment is so common among school age youth and in the school environment, the wording of the question should include the phrase, "at school," or, "on your way to and from school."

Cognitive testing is needed to determine whether youth understand that harassment includes verbal abuse. The following question combines the dimensions of perceived sexual orientation and discrimination. It may be preferable to separate the two components (perceived sexual orientation and harassment/abuse) into two questions and statistically determine the correlation between them.

The following question is taken from the Wisconsin Youth Risk Behavior Survey. The version of the question used in Seattle included the parenthetical addition:

<p><i>Have you ever been threatened or hurt because someone thought you were lesbian, gay, or bisexual (at school or on your way to or from school)?</i></p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> I'm not sure</p>
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Validity and Reliability

As noted above, sexual orientation and identity are complex, multi-dimensional and interlinked concepts or constructs. Different dimensions access different components of the constructs. Determining how accurate these dimensions are as an indication of orientation or identity (i.e., their validity), and how consistent they are across time, environment and population (i.e., their reliability), are critical questions requiring extensive and ongoing investigation. Many of the questions that already exist, including those presented here, have not been subjected to rigorous validity and reliability testing because of the difficulties associated with including even one question on large-scale surveys. Moreover if only one question is included, testing its reliability and validity is difficult since it cannot be cross-validated with responses to related questions.

Research is needed on the reliability of youth's reported sexual orientations and changes in perceptions over time. Study of sexual identity development has often relied on adults' retrospective reports of events, perceptions, and feelings. Imperfect memory of past events is an obvious limitation of this strategy. An interview-based study of young sexual-minority women suggested "that recollected consistency among prior and current behavior, ideation, and attractions are not systematically associated with sexual orientation among contemporary young women." (Diamond 1998, 2000)

Question Placement

Once the actual questions have been selected, additional care must be taken when integrating them into a survey instrument. For instance, the placement of the question within the survey may influence how youth respond. The issue of placement is illustrated by the 1995 and 1997 Massachusetts Youth Risk Behavior Surveys.

In 1995 the question was embedded deep in the survey (it was question number 69) and read as follows:

- Which of the following best describes you?*
- a. Heterosexual (straight)*
 - b. Gay or Lesbian*
 - c. Bisexual*
 - d. Not Sure*
 - e. None of the Above*

In that year, 104 students self-identified as lesbian, gay, or bisexual, representing 2.5% of the overall study population. An additional 1.5% responded "not sure" and 3.7% responded "none of the above." A total of 9.3% omitted the question altogether which was similar to the omission rate for other questions on the survey.

Because of the potential ambiguity or redundancy of having both "none of the above" and "not sure" as options, "none of the above" was omitted from the 1997 survey instrument, leaving the response options as "a" through "d" in the question above. It was thought that this might alter response rates to the remaining choices, particularly the selection of options "b" and "c." However, there was no increase in the response rate to the sexual identity question.

Some researchers postulated that one of the reasons for this was the placement of the question, which was moved from number 69 in 1995 to number seven in 1997. Youth usually do not complete the survey alone but are seated together in classrooms or similar settings. Question seven is on the first page of the instrument and most of the youth were likely to be on the same page at that point in completing the survey, making it possible for someone nearby to see the response and match it to the question. Consequently, out of a concern about the confidentiality of their responses, some youth may not have answered the questions truthfully.

Researchers should avoid placing the question immediately after an even more sensitive question, especially one that could inadvertently be considered related. The question should not be included immediately after a question about sexual abuse, a question about sex work or trading sex for money, or a question about HIV/AIDS.

How to Ask Questions: Conducting Survey Research

In addition to the methodological challenges identified above, there are many challenges to conducting the research itself.

Building Support for Research

The complexities associated with research on sexuality are compounded when the focus of the research is youth, particularly lesbian, gay, and bisexual youth. As is the case with identity itself, contextual and developmental characteristics are likely to influence every aspect of the research and will need to be addressed throughout the research process, beginning with the conceptualization of the investigation.

Sexual orientation and identity are related to sexual practices, thoughts, and feelings that are, in the case of lesbian, gay, and bisexual youth, culturally proscribed. It is not uncommon for researchers to encounter resistance from parents, communities, and the youth themselves when questions about this aspect of a young person's life are asked. It is likely that time will need to be given to build understanding and support among parents and school officials and administrators. If parents and school officials are an audience for the research, they need to be approached appropriately and educated about the rationale of the research and the methods that will be used. It also may be helpful if research that focuses only on the problems youth face is avoided in favor of

undertaking studies that have a specific public health purpose and are likely to provide recommendations for how to address problems.

Adding Questions to Existing Surveys

Including questions in existing surveys that are going to be widely used can generate data that no single research study will be able to obtain. The benefits of obtaining this information are worth the effort required to have sexual orientation and identity questions adopted. However, there are limitations.

Large surveys are often designed to answer a range of research questions spanning a wide area of interest. It is highly unlikely that a researcher will be able to have all of his or her desired questions included in a survey. Also, when adding questions to an existing survey, it is not always possible to control the order or placement of questions regarding sexual orientation, identity, behavior etc. For example, the Add Health survey collects data on romantic attraction, not on self-identification as lesbian, gay, or bisexual. This is only one of the dimensions listed above. Even though this limits the survey's use as a study tool on sexual orientation or identity, the measure does identify a group of concerns and risk factors among youth who indicate same-sex romantic attractions.

Large survey research can be costly and each survey question will add to the cost of the project. Questions need to be selected very carefully and there should be data to back up the selection. Studies based on convenience samples—rather than population-based samples—or studies conducted using qualitative methods can provide useful guidance in selecting questions for large, population-based surveys. One of the keys to selecting which dimension is measured is ensuring that it is appropriate to the research focus of the survey as a whole.

Administering the Survey

Face-to-Face Interviews:

The characteristics and behavior of the research interviewer can influence the individual being interviewed. When working with youth, the overriding concern is that the interviewer needs to establish a trusting and comfortable relationship with the youth. A person just a few years older than the respondent may be more effective in the interviews than individuals the same age or much older.

Self-administered questionnaires:

While surveys are often conducted as face-to-face interviews with respondents, they are also commonly self-administered. Issues of concern with self-administered questionnaires are the qualities of the setting in which the survey is completed, the presence of other individuals in the room, the perceived effectiveness of confidentiality protections, the structure of the instrument, and the instructions provided.

Placement of questions in a self-administered questionnaire can be critical. Placing questions about sexual orientation and identity in the demographic section normalizes the questions. This is not the case if questions are included in a section concerned with risk behaviors. However, as noted above in the discussion of question order, if the demographic section is at the beginning of the survey, youth completing the questionnaire in a room with other people may be hesitant to respond truthfully because of their concern that others will see their response.

THE DEBATES: CRITICAL CONCERNS

The workshop participants strongly supported the inclusion of measures of sexual orientation and identity in public health studies. This support was not without concerns since there is still much to learn about how to include these measures, when to include them, and under what conditions sexual orientation and identity are best studied.

Participants were in agreement that measures should be related to health outcomes. In other words, if the health outcome concerns identity then the questions should be about identity; if the outcome is about sexual behavior then the questions should be about sexual behavior; and so on. However, participants also felt that until more is known about how risk is conferred, questions about as many dimensions as possible should be included in studies of health.

These issues will continue to be the focus of debates until more data become available. It is very likely that with additional data our understanding of sexual orientation and identity will grow and research practices will change.

Dynamics of Sexual Orientation and Identity

As noted earlier, there is continued dialogue concerning definitions of sexual orientation and identity. The dynamic nature of both requires ongoing critical reflection on the validity of research instruments and methods.

Self-definition

Not all youth define themselves using the labels commonly applied in research. A 15-year-old boy who has never had access to lesbian, gay, or bisexual social groups—yet experiences same-sex attractions—may identify himself in a way that will not be recognized by current survey questions. If we miss the experiences of this boy and other youth like him, we have an incomplete understanding of the relationship between health and sexual orientation or identity. It may also be necessary to ensure that certain youth are correctly assigned to research groups. For example, some youth identify as "heterosexual queers," indicating an affiliation with a sub-culture but not necessarily same-sex sexual activity. If questions are not well-designed, these youth, by virtue of their use of the word "queer" as a self-identifier, could be included with youth who do engage in same-sex behavior.

Again, youth who will some day self-identify as lesbian, gay, or bisexual may not do so during adolescence. Additionally, youth who are quite clear that they possess a same-sex sexual orientation may not perceive self-identification as a necessary component of their sexual orientation. Research is needed to understand better how adolescents define their sexual orientation and identity. In addition, measures of adolescent sexual

orientation and identity will need to be developed based on these data (Rosario et al., 1996; Friedman et al., submitted).

Developmental/Life-course Concerns

We need to deepen our understanding of how sexual identity and perhaps even orientation change across the life cycle. We also need to understand whether developmental milestones are different for lesbian, gay, and bisexual youth than for heterosexual youth. As more is learned about this issue, it will influence how research is conducted with youth who are at different stages of development. This is another approach to the difficulties that result from the fact that many youth are still exploring their identities and desires and are strongly influenced by peer pressure, family, and others in how they do so. Longitudinal research is needed to determine the stability of different dimensions of sexual orientation and variables that influence the resolution of uncertainty regarding identity. This information is particularly relevant to youth whose sexual identity is actively unfolding and has practical implications for research and health promotion.

Analyses of the Add Health data suggest that peer, school, and family environment are different for people with same-sex desires, and that context is possibly important for development. For example, analyses of these data undertaken by Russell, Seif, and Truong (2001) revealed, among other considerations, that:

- adolescent girls who report same-sex and bisexual sexual attraction also report less positive attitudes about school and more school troubles
- girls who reported same-sex attraction exclusively also scored low on maternal relationship scales
- adolescent boys reporting bisexual attractions were significantly more likely than others their age to report feeling disliked

These results add weight to speculations that lesbian, gay, and bisexual youth confront different developmental challenges from their heterosexual counterparts. Much more evidence is required to identify these differences further and illuminate their consequences. Ideally, further research will put us in a position to define the trajectory of healthy development for lesbian, gay, and bisexual youth and to have a clear sense of what these youth need if they are to navigate through the challenges and opportunities of adolescence successfully.

Lessons from "None of the Above"

As mentioned above, the "none of the above" response option to the sexual identity question used for the Massachusetts version of the YRBS has stimulated much speculation. In the 1995 survey, approximately 10% of the youth did not answer the

identity question; 3.7% chose "none of the above"; 1.5% chose "not sure"; and 2.5% indicated that they were bisexual, gay, or lesbian (n = 104).

People who chose the "none of the above" option may be heterosexuals who did not understand the question. NHANES researchers who pilot questions have noted that it is primarily heterosexual individuals who asked what the sexual identity question means. Research must be done to test whether this actually is the reason for youth's selection of the options, "none of the above."

If "none of the above" or "other" is included as a response option on surveys, researchers should be able to conduct additional investigations to determine why youth select this option.

Sampling

"Is sexual orientation such a moving target during the developmental years that we can't measure it?" - Workshop participant

Sample size and recruitment methods affect the generalizability of findings beyond the study sample. Without the resources to conduct large surveys that use random sampling methods, most researchers have had to rely on convenience samples. Consequently, the sample cannot be claimed to represent the population. Large scale, population-based surveys have the benefit of being more representative. Because of their size, these surveys also make comparisons between groups more possible. But even large surveys can fail to recruit lesbian, gay, and bisexual youth. Researchers need to pay attention to which youth are not represented on surveys. Data are interpreted to apply broadly to the whole group when in fact part of the group is missing, such as youth who may be homeless or in jails and detention centers.

When recruiting lesbian, gay, and bisexual youth, those with diverse racial, linguistic, and economic backgrounds should also be included. In the recruitment process, working with communities that provide access to these youth is important. Over-sampling may also be necessary in order to build a large enough database to allow statistical comparisons. Another strategy is to complement large surveys with research projects that employ convenience sample strategies.

In order to sample appropriately, a clear sense of the population as a whole is useful. The census, for example, provides a powerful enumeration of the population within the United States using certain demographic criteria such as gender, race, and age. This information is valuable in helping researchers construct representative samples. Accessing this kind of information for lesbian, gay, and bisexual youth is extremely difficult, if not impossible. Consequently, in the process of recruiting study samples,

researchers find they also have to define and identify the population from which they draw their sample.

A further sampling problem lies in the cohort effect. While youth of a particular generation may have common ways in which they identify, this changes from generation to generation or even over a shorter period of time. The rapidity of these changes means that data become out of date very quickly. One of the most direct ways in which this occurs is through shifts in language. While we may learn about many youth who experience same-sex attractions if we do research on "lesbian," "gay," and "bisexual" youth, there is a subset of youth who do not identify using these terms. Unless adjustments are made to questions so that they become meaningful to these youth, they are likely to be excluded from research and their health experiences and needs will remain unknown.

Regional Difference

The expression of identity is culturally formed and may be geographically or regionally specific. In studying lesbian, gay, and bisexual youth, particularly if the study is national in focus, regional differences should be documented and controlled for. For example, the many variations referred to above in the language, expression, and peer group organization around identity, may be primarily an urban phenomenon. Youth in rural areas may use more familiar labels (Kelly, 1995). In striving to be representative of one sub-culture, care must be taken not to lose youth who are not part of that group.

Race, Ethnicity, and Culture

Race, ethnicity, and culture are additional variables that are important for researchers in this area. Sexual orientation and identity are not experienced in isolation from other identity constructs such as race, which along with gender, is a fundamental way in which identity is constructed in the United States. Race marks particular community and cultural norms that shape the expression and experience of sexual orientation and identity. Race also involves histories and experiences, particularly historical and day-to-day experiences of racism, that shape the lives of the youth we work with. It is important to ensure that the experiences of racial, ethnic, and all cultural minorities are represented in study samples and that the distinctiveness of lesbian, gay, and bisexual youth of color are documented and understood. For example, investigations of resiliency in youth of color will be incomplete if they do not access the interaction between youths' experiences of both racism and homophobia (Hunter & Schaecher, 1995).

Proximal Sampling

Proximal sampling is a method of selecting comparison cases within a dataset in proximity to index cases in order to establish comparison groups. It is, in other words, a way to "sample" within a dataset. If the dataset is large enough this method can support between-group analyses and will allow researchers to isolate the effects of sexual orientation, identity, or other dimensions by controlling for other variables.

Proximal sampling has been used in the analysis of the Add Health survey data. The sample is constructed on a case-by-case basis. Thus, for each youth in the dataset who reported having same-sex romantic attractions, a control or comparison case is selected by identifying an adjacent case that had not identified same-sex attraction. The pairs are identical on as many of the variables other than sexual attraction as possible. That is, there are no differences by ethnic group, neighborhood, etc. This is a very conservative way of selecting a comparison group. Consequently, the differences found between comparison cases are strong.

Use of Findings

Interpretation/misinterpretation

Researchers must be clear about the appropriate use of questions and the guidelines for interpreting the data they generate. Providing a context for the research and the discussion of results is very important. This context grows out of the understanding of the community established in the formative stages of the investigation.

Since health research is geared toward generating information that can be applied, researchers also need to have good relationships with the service organizations that will use the findings. Partnerships between researchers and the service community are strongly encouraged and should be ongoing. This strategy is common across most population-based public health research, particularly research on the most marginalized of communities. Community members can play a key role by informing the development of research questions and designs, as well as understanding results within the context of study settings. Nonetheless, community-academic partnerships must not bias the conduct of the research or otherwise threaten the integrity of the research.

Stigma

Among the risks courted by researchers who work with marginalized populations is the possibility that the data will reinforce stigmas. As more information is made public, such as higher levels of drug use and suicide rates among lesbian, gay, and bisexual youth, it is possible that this will fuel attempts to re-pathologize the population and support programs that set out to change orientation or identity. These so-called "reparative

therapies" are based on the erroneous assumption that identity or orientation is the cause of problems.

To combat this risk, survey research, with its necessarily reductive and general focus on particular issues, must be matched with detailed and exhaustive documentation of how issues play out in the lives of different youth sub-populations. It is all too easy to simply counter stigma with arguments about the negative impacts of prejudice. Both approaches, however, fail to account for how youth understand themselves and their environments and what power they may have to respond to their experiences. Qualitative research, such as intensive ethnographic studies, can provide much more complex understandings of youth sub-cultures than is generally possible with survey research methods. In the rush to have national datasets include data elements related to sexual orientation, identity, and behavior, other forms of investigation, and their contribution to the advocacy agendas, should not be lost.

Health Models

"Discussion of a sexual orientation question is interesting. I am more interested in the other 20 or 30 questions that show what it means to have this attraction." – Workshop participant

Constructing Effective Research Activities

Discussions among researchers have been dominated by problems with defining and measuring sexual orientation and identity. Not enough has been done to set research priorities that will serve to move the public health system in a direction that will effectively serve lesbian, gay, and bisexual youth. Some researchers argue strongly that we are beyond the need to simply identify sexual orientation and that much of what is needed to move us forward from a policy perspective is not included in many of the current research activities. Adding one more question to the Youth Risk Behavior Surveillance System (YRBSS) is unlikely to move the theoretical underpinnings of the field forward dramatically although it could have a profound effect on the well-being of youth in that state. To build effective health models, surveys need to include a wide range of explanatory or contextual variables to help understand the nuances of particular issues. For example, one study has shown that bisexual, lesbian, and "unsure" girls are at increased risk for teen pregnancy and that sexual abuse appears to play a key role in this trend (Saewyc et al., 1999). To build effective interventions we need to understand much more about the actual factors involved. This information will not come from the current survey research.

As noted in the discussions of the difficulties researchers face when building samples, definitions of sexual identity should be grounded in participants' perceptions of themselves, rather than in researchers' preconceptions. For example, key participants

might define sexual identity differently from investigators. If the perspective of participants were overlooked, the ensuing research might exclude critical segments of the community and reinforce the investigators' biases.

Researchers also need to respect the possibility that asking youth about their sexual orientation in the wrong way, at the wrong time, and in the wrong place may actually function as a barrier to providing them with services. For example, placing the question on the front page of a survey instrument could subject young persons to stigma or increase their fears of stigma, therefore exacerbating feelings of isolation and willingness to seek services. Research does not happen in isolation. Researchers must acknowledge their responsibility to the broad social sphere of which research is just one component.

Community research partnerships that begin during the conceptualization phases of a study are imperative if the potential negative effects of research are to be avoided. The community approach to research will hopefully be reflected in the details of the study. By fixating on issues of definition – often a concern with how individuals identify – researchers may unwittingly isolate the youth and lose the opportunity to understand how lesbian, gay, and bisexual youth operate in society. In addition to asking about identity, researchers are strongly encouraged to also collect information about the connection between youth and their communities, families, and other adults including health care providers and educators.

In order to encourage research that will support service delivery efforts, some have recommended that every proposal include explicit plans for communicating the research results to the community. This principle, now supported by many federal programs, should be required by all funders of research.

Basic Science of Measurement and Survey

Evidence suggests that different identity terms will produce different data and that the language used for research constructs the responses received. This is a critically important effect of the decisions researchers must make when developing studies. We know little about the ultimate consequences of these decisions. This has led for a call for research on the basic science of measurement. Program funders must be educated that if the field is to advance significantly, this research must be done.

Increasing our understanding of what sexual orientation and identity are to young people, and how their perception differs from those of adults is also needed. This knowledge will take us to the next generation of survey research, one that is better informed by understanding the developmental nature of sexual orientation and identity.

CONCLUSION

The study of the relationship between health issues and sexual orientation and identity in adolescents is a comparatively young area of investigation. Results from studies conducted in recent years provide evidence of the necessity for additional research. The Add Health study quoted in the first part of the report concerning the increased risk for suicide among youth who report experiencing same-sex attractions is an example of one area of concern, that is, the need to collect data about resiliency and protective factors specific and unique to lesbian, gay, and bisexual youth. This is an observation that raises many questions, most of which we are unable to answer at this point.

In this report, we have provided an overview of the methodological issues to be considered when conducting research on adolescent sexual orientation and identity and have offered a framework within which to conceptualize and undertake such studies. Two themes stand out as indicative of the current state of the field and in need of close attention:

- The basic scientific terms used in the field need to be clarified. Theoretical propositions concerning, for example, the developmental stages of lesbian, gay, and bisexual youth must be empirically investigated, as must the relationship between the construct of sexuality and the discrete dimensions of orientation, identity, behavior, attraction, fantasy, and other dimensions. Certainly, increased research will provide data that can be used to further these discussions. These data will, in turn, guide the refinement of research instruments and methods.
- Health research must be conducted in a manner that makes it applicable to public health interventions and policy initiatives. Investigators have emphasized that research needs to be sensitive to a number of contextual environmental and individual factors. Research must be sensitive to the developmental shifts youth experience over the course of their adolescence. In addition, researchers must strive to identify the protective factors available to lesbian, gay, and bisexual youth. Sexual orientation and identity need to be investigated in relation to a wide range of explanatory variables that will help us understand the nuances of a particular issue. Stated simply, we must attend to how sexual orientation and identity fit into adolescents' experiences of their day-to-day lives.

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APPENDIX: IMPORTANT NATIONAL SURVEYS:

(Adapted from Sell R.L. and Becker J.B. (2001) Sexual orientation data: Inclusion in information systems and databases of the Department of Health and Human Services. Prepared for the Office of the Assistant Secretary for Planning and Evaluation)

The following surveys include youth in their samples and ask questions related to the sexual orientation of respondents:

YRBSS (Youth Risk Behavior Surveillance System, CDC)

The YRBSS was developed to monitor priority health-risk behaviors that contribute to the leading causes of mortality, morbidity, and social problems among youth and adults in the United States. The YRBSS monitors six categories of behaviors: (1) behaviors that contribute to unintentional and intentional injuries; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted disease, including HIV infection; (5) dietary behaviors; and, (6) physical activity. A number of states have created surveys that are based on or are similar to the YRBSS, commonly referred to as Youth Risk Behavior Surveys (YRBS). These include:

- **YRBS Massachusetts**
In 1993 the Massachusetts Department of Education added a sexual behavior question to the state YRBS that included options about sexual behavior between youth of the same sex.
- **NAIAHS (National American Indian Adolescent Health Survey)**
Administered to 55 tribes in 12 Indian Health Service areas.
- **VCY (Voices of Connecticut Youth) – Connecticut**
- **Add Health (National Adolescent Health Survey)**
Established by a 1993 Congressional statement of intent to conduct a prospective longitudinal study on determinants of adolescent health in the US. Derived from a resiliency framework, this study allows identification of risk and protective factors and includes a question on same-sex romantic attraction.
- **AHS (Minnesota Adolescent Health Survey)**
The AHS (Adolescent Health Survey) in Minnesota has afforded the greatest opportunity to work with questions around sexual orientation. Minnesota researchers worked with four sexual orientation questions involving dimensions of fantasy, attraction, behavior, and self-identity.

NHANES (National Health and Nutrition Examination Survey, CDC)

Survey designed to collect information about the health and diet of the U.S. population, combining home interview with health tests which are done in a mobile examination center. Recent rounds have included questions on sexual orientation. These questions are currently undergoing testing by the NCHS Questionnaire Design Research Lab.

NSFG (National Survey of Family Growth, CDC)

Periodic survey of women ages 15-44 in the civilian non-institutionalized population, providing current information on childbearing, contraception, and closely related aspects of maternal and child health. In recent years the survey has also included a broad range of information related to HIV and STD risk. The 2002 cycle included interviews with men aged 15-49.

BRFSS (National Behavioral Risk Factor Surveillance System, CDC)

System providing official state health agencies with the funding, training, and consultation necessary to permit them to routinely collect behavioral risk factors that are closely associated with accidents, chronic diseases, and premature death, e.g., cigarette smoking, alcohol abuse, seat belt usage, sedentary lifestyles, and sexual behavior. Results provide early indications of chronic disease trends in minority populations.

HIV/AIDS Surveillance Systems (CDC) & SHAS (Supplement to the HIV/AIDS Surveillance System, CDC)

A population-based surveillance data system used to track the HIV/AIDS epidemic. Surveillance data serve as a basis for allocation of many federal resources for HIV treatment and care services; data also provide the epidemiological basis for planning local HIV-prevention services. Reporting criteria have been periodically revised, incorporating new understanding of HIV. The supplement is a continuous clinic-based or population-based survey providing information to supplement case reports.

NHSDA (National Household Survey of Drug Abuse, SAMHSA)

Survey monitoring trends in alcohol, tobacco, and illicit drug use; measuring demographic correlates of drug use; and providing information on related topics, including drug treatment. Addition of "personal behaviors" module in 1996, done at the request and support of CDC.

NHIS (National Health Interview Survey, CDC)

Survey of civilian non-institutionalized population of the United States documenting amount, distribution, and effects of illness and disability; services rendered for or because of such conditions; and progress toward achieving national health objectives.

NHSLS (National Health and Social Life Survey)

Survey documenting sexual behavior, in-person interviews with self-administered questionnaires are used with national representative sample of U.S. households.

GSS (General Social Surveys)

Series of annual surveys documenting sexual behavior. In-person interviews with self-administered questionnaires are used with national representative samples of U.S. households.

Project HOPE International Survey of AIDS Risk Behaviors

Surveys designed to be representative of each country, for ages 16-50. In-home, face-to-face and self-completed questionnaires.

NLSAH (National Longitudinal Survey on Adolescent Health)

A longitudinal study of adolescents in grades 7-12 and the multiple social contexts in which they live. 15,243 adolescents were included in the main in-home sample, which included sexual orientation and assessment questions.

GUMS (Gay Urban Men's Survey)

Household probability sample of men who have sex with men (MSM) and who reside in some of the largest cities in the United States for the purpose of describing the health care needs of MSM, broadly defined

NCVS (National Crime Victimization Survey)

Reports the likelihood of victimization by certain crimes for the population as a whole as well as for segments of the population.

VAWS (Violence Against Women Survey)

The VAWS involved telephone interviews with a national probability sample of 8,000 women and 8,000 men 18 years of age and older. Respondents were queried about their general fear of violence and the ways in which they managed their fears, emotional abuse they had experienced by marital and cohabiting partners, and incidents of actual or threatened violence. Respondents were also queried about their experiences with emotional abuse, threats and violence by same-sex intimate partners

YMS (Young Men's Survey, CDC)

An ongoing survey of HIV/AIDS prevalence and risk behaviors among young, urban men. The survey has focused attention on young men who have sex with men.