

Identifying Mismatches between Common Sense and Technical Definitions on an HIV Risk Behavior Survey

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1. Introduction

Researchers often erroneously assume that terms utilized in survey questions will be interpreted literally as written. Unfortunately, problems can and do occur when respondents' pragmatic everyday interpretations of terms differ from researchers' technical definitions. An example of such a problem was discovered by researchers at the National Center for Health Statistics (NCHS), while conducting cognitive testing of an HIV risk behavior survey for the National Center for HIV, STD, and TB Prevention (NCHSTP).

The purpose of the study was to evaluate questionnaires about HIV risk behaviors; data from these questionnaires will ultimately be used to measure changes in HIV-related risk behaviors over time in the United States. Data from these questions can be used to explain trends in HIV incidence, HIV prevalence, and new HIV diagnoses, and ultimately to evaluate current HIV prevention programs and direct future HIV prevention activities. These data may prove to be a vital tool in CDC's mission to reduce the annual number of new HIV infections in half by 2005.

Researchers have suggested that "safe sex" behaviors differ based on characteristics of relationship of the partners, i.e., length of relationship, knowledge of partner's sexual history, and commitment level. NCHSTP researchers theorized that sexual relationships can be broken down into two categories: "steady partner" and "non-steady partner," and that respondents would understand and accept researchers' definitions of these terms.

Utilizing cognitive interviewing techniques, NCHS researchers attempted to determine whether questions utilizing NCHSTP's definitions of these categories lined up with individuals' conceptualizations of these terms. This was accomplished by exploring in depth responses to assess problems with the intention and comprehension of the terms.

2. Methods

A total of 16 cognitive interviews were conducted on September 16-17 at the Johns Hopkins School of Public Health in Baltimore, MD. All interviews were conducted in offices at the Johns Hopkins School of Public Health in Baltimore, MD. The first eight participants were self-identified men who have sex with men (MSMs). They ranged in age from 28 to 58, with a median age of 38. Five identified themselves as Black/African-American, while the other three identified themselves as white. All had at least some education beyond high school, and six were college graduates. None of these participants had ever been married.

The final eight participants were selected on the basis of having reported that they had been injection drug users (IDUs) within the last 12 months. Several were current users. Three of these participants were female, while the remaining five were male. They ranged in age from 35 to 53, with a median age of 51. Six participants were high school graduates, and five of these had some education beyond high school. Two participants did not complete high school. Seven of eight identified themselves as Black/African American, and the eighth identified himself as white. Three of the participants had never been married, two were divorced, two were separated, and one was widowed.

This questionnaire evaluation study was performed using typical cognitive interviewing methods. The basic procedure of a cognitive interview is that a questionnaire-design specialist administers the questionnaire while encouraging participants to verbalize their thoughts as much as possible, and also administers *intensive probes* following individual questions. These probes are chosen to provide insight into problems with comprehension, difficulty recalling necessary information, potential response biases, answer categories that are inappropriate, and so on. Some of these probes are selected in advance, but interviewers retain freedom to add probes to explore issues that emerge during interviews and to drop probes that become irrelevant or superfluous. More

generally, the interviewer solicits narratives about participant circumstances in order to evaluate the accuracy of information obtained on the questionnaire. For example, the interviewer may administer a closed-ended question about the number of “steady” sexual partners that a participant has had. After receiving an answer, the interviewer might ask the participant how he figured his response, how accurate he believes it to be, his interpretation of the term “steady partner,” and so on, using this discussion to evaluate how well the question is working.

Demographics

AGE	
28-35	5
36-45	4
46-58	6
GENDER	
Male	13
Female	3
SEXUALITY	
MSM	8
Heterosexual Male	5
Heterosexual Female	3
RACE	
Black	12
White	4
MARITAL STATUS	
Never married	11
Divorced	2
Separated	2
Widowed	1
EDUCATION	
Some High School	2
High School Graduate	1
Some College	7
College Graduate	4
Post Graduate Education	2

We focus here on the results of cognitive testing two series of questions.

1. Of the _____ *[insert number from previous question]* [men/women] you’ve had anal or oral sex with in the past 12 months, how many of them were steady partners? By steady, I mean a relationship with a man where you feel committed to [him/her] above anyone else AND where you have had sex together.
2. Of the _____ *[insert number from previous question]* [men/women] you’ve had oral, anal or

vaginal sex with in the past 12 months, how many of them were not steady partners?

Often, probes revealed a discrepancy between the way respondents interpreted “steady partner” and the actual definition provided.

2.1 Defining Steady Partner

Almost without exception, participants found it easy to classify particular partners as “steady” or “not steady.” However, some participants had broader interpretations of what constituted a “steady” partner than the definition in the question—for example, some included partners they were involved with on a regular basis, even if they didn’t feel “committed.” One participant pointed out that he was romantically and sexually involved with one partner, but it was a new relationship. He definitely considered it to be steady, but admitted that it might not qualify under the definition (although he thought it was heading in that direction).

We will now consider each group of participants separately. The five heterosexual male respondents in this study reported the following number of “steady” partners out of their partners: 1/1, 2/2, 2/2, 0/3, and 1/4. That is, three participants reported that they only had one or two partners, all of whom were steady; one participant reported no steady partners (but three non-steady partners); and one participant reported a mix. Probing revealed virtually no ambiguity in participants’ minds regarding whether these partners were “steady” or not—and in all cases, they seemed to meet the definition of “steady” provided. Because the majority of these participants reported that they were in monogamous relationships, their situations were simple to define, allowing for a good fit between the definition provided and their individual experiences. It appears that in simple circumstances, such as these, that the question works well.

Of the three female respondents in our study, two were in similarly unambiguous situations: they considered their partners to be steady, and these were exclusive, monogamous relationships. The third participant’s situation was more complicated. She indicated that two of her six partners were steady, but did not think of “steady” as having the same meaning as the question had specified. She thought of her steady partners as those she spent a lot of time with, was comfortable with, and had sex with for enjoyment. These two steady partners also

overlapped, and she also had encounters with non-steady partners (for cash) while with these partners. Note that her non-steady partners were quite different than her steady partners—they all paid her money for sex (which as a drug addict, she always needed.) Nevertheless, these “steady” partners fell quite short of the definition specified in the question. It is worth noting that all three of the female respondents were also IDUs, which made their personal relationships rather unstable.

Five of the eight MSM respondents considered themselves to have had “steady” partners. However, many of these participants had strong pre-formed ideas about whether a partner was “steady” or not. Participants reported their ratio of steady male partners to total male partners was 0/4, 0/6, 0/9, 1/1, 1/4, 2/8, 3/5, and 7/20, with the majority reporting 1 or no steady partners. However, based on probing afterwards, it seems likely that only one partner for each participant really qualified under the provided definition of “steady.” (One participant acknowledged that *none* of his three reported “steady” partners qualified under the definition, but pointed out that he did not agree with the definition). When participants’ conceptualization of “steady” differed from the definition provided, they seemed to stick with their own definition of the term. Thus, responses sometimes reflected partners that they considered to be “steady” but that would not have qualified according to the definition. As with the female respondents, the more complex one’s situation, the more likely respondents were to answer inaccurately, using personal definitions instead of the one provided. The end result of this discrepancy is a likely over-count of “steady” partners.

The most common point of dissension revolved around the idea of commitment. Most of those who reported steady partners thought that monogamy was sufficient to qualify as “steady” even if the commitment level was less than implied by the question. However, a few others thought that relationships could be steady *without* being monogamous.” One participant pointed out that some relationships involve commitment but are sexually open. A few others thought that neither commitment nor monogamy were absolutely necessary: one indicated that anyone he “had sex with more than once” was steady; another counted partners as steady if they had more frequent contact than others, but not necessarily monogamy (he reported seven steady partners during the year, although only one was

monogamous—the others overlapped with non-steady partners). Another participant noted that he was in a relatively new relationship, and he hoped that feelings of commitment would develop, and that he considered it to be steady; however, he also thought that a true commitment would take longer to form, and wasn’t sure that the relationship qualified according to the definition.

Furthermore, some participants’ accounting of which partners were “steady” was not entirely stable. The participant who reported seven steady partners later said indicated that one of the partners he had considered as “steady” perhaps should not be classified that way—he was not so much “steady” as “one of the ten [partners] I see every now and then,” but he tries “not to get emotionally attached.” It was pretty clear that he did not have a *commitment* with any of them, although he did report that he was monogamous with one particular partner for a three-month period, in a relationship where he “really wanted to make it work out.”

Three participants reported no steady partners, but two of them still took issue with the definition provided. One thought that a steady relationship entailed a “sexual relationship over time” *or* commitment, but it did not have to be both. Another thought that monogamy was the only issue and that commitment was basically irrelevant. The third participant in this category accepted the definition at face value.

2.2 Defining Non-steady Partner

For comparison purposes, we include a brief summary of the findings related to the second question. Female and heterosexual male participants were able to accurately answer this question without difficulty, and apparently consistently with the definitions provided. This may be due in part to low overall numbers for both steady and non-steady partners (total numbers ranged from 1 to 6 total partners).

All but one MSM participant reported having non-steady partners (total numbers ranging from 2 to 23). Most of them seemed to answer without difficulty, although responses were probably less precise for those participants who had higher numbers of partners. They tended to arrive at their responses by subtracting the number of steady partners from their total number of partners. Obviously such responses can only be as accurate as these previous answers; an alternative approach would be to ask for total numbers of steady and non-steady

partners rather than asking for a breakdown of the total number of partners. Also, one participant may have had some difficulty in differentiating between the status (steady vs. non-steady) of a couple of partners, and lost track of his total.

3. Conclusions

Several issues are worth considering. First, while few respondents took issue with the definition of “steady partner” provided, it is possible that someone could have regular or even exclusive sex with a partner, but not really feel “committed.” Potentially ambiguous relationships are those that are monogamous but with little emotional investment, and those that are new and “becoming serious” but not well tested by time. We believe (partially based on interaction with other participants, and partially based on other interview studies we have conducted) that respondents’ own interpretation of steady partner might supersede the one provided if they differed. That is, respondents’ pre-conceived ideas about what qualifies as a “steady” relationship may be so strong that they overwhelm the definition provided. Some participants had strong opinions about what “steady” meant. When their interpretation clashed with the definition provided, they seemed to go with their interpretation, which could lead to over-counting of steady partners. Respondents’ over-reports of steady partners could affect the overall quality of data from the study: data collected from respondents who use their own definitions rather than the one provided could inaccurately classify “non-steady” behaviors as “steady.” We should note that most of the disagreements with the definition took were among the MSM sample, the group that had the most partners overall and the highest number of non-steady partners (however this is defined).

Second, we cannot infer the extent of these classification problems within the general population. What we have done instead is identified a potential classification error and attempted to illuminate situations that could lead to this error—specifically, respondents who are not in long-term committed and monogamous relationships, but who also have some partners who are relatively more “steady” than others. In our study, this situation was notable among MSMs, although it could certainly occur among other respondents (particularly those with a higher number of partners.) It would be useful to

have a better understanding of how people classify partners in other ambiguous circumstances (e.g., more than a one-night encounter but less than a “serious relationship.”) Our study only included three females, all of whom were IV drug users, and we did not have any female participants who had relatively casual (recreational) sex partners. Similarly, we had few young participants, and no young heterosexual participants. It would be useful to explore such respondents’ situations in greater detail.

In summary, if the intent of this question is to capture partners where there is both monogamy and a “commitment,” a stronger term than “steady” might be needed, as respondents may have deeply entrenched interpretations of this term. For example, questions might ask instead about “a partner in a committed relationship.” Undoubtedly there are other circumstances in other surveys where respondents’ previously-held definitions clash with those provided by researchers. Rather than attempting to “override” respondents’ own definitions, a better solution may be to choose terms with less pre-existing baggage.

References

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