

The AIDS Survey: Responses From a Community Sample

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AIDS Survey

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Running head: AIDS Survey

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Abstract

Although there is a need for research on attitudes about AIDS, few studies have concentrated on the issue. The purpose of this study is to describe the relationships among people's attitudes about AIDS, their knowledge about AIDS, and the degree to which they participate in certain behaviors related to AIDS. Using the AIDS Survey (Stevenson and DeBord, 1988), data were collected from a community sample and compared to data collected earlier from a sample of college students. The data collected from both groups were similar with the exceptions that within the community sample knowledge and attitudes about AIDS were slightly related, gender was related to knowledge about AIDS, and level of education was related to both knowledge and attitudes.

The AIDS Survey: Responses From a Community Sample

The general public and the news media have shown great interest in Acquired Immune Deficiency Syndrome (AIDS) and the transmission of HIV. Due to the lack of biological preventatives, education for behavior change appears to be the only available means of curtailing the epidemic. Agencies such as the American Red Cross and the Center for Disease Control have been attempting to educate the public since the disease was first diagnosed in 1981. The informative leaflets and public service announcements generated for public consumption attempt to change behavior through two avenues. Some use fear to convince people to change. Others assume that the more people know about AIDS, the less they will engage in high-risk behaviors. These assumptions, implicit in the available AIDS literature, necessitate empirical research into the issues surrounding AIDS.

Thus far, two different studies (Stevenson & DeBord, 1988a, 1988b) have explored the relationships among people's knowledge of AIDS, their attitudes about AIDS and about persons with AIDS, and the degree to which they participate in high-risk behaviors. Both of these studies were conducted with samples of college students using the AIDS Survey (Stevenson & DeBord, 1988a).

The results of both of these studies ran contrary to

expectations providing no evidence to suggest that knowledge and attitudes about AIDS were related. This is consistent with results from a recently published study by Morton and McManus (1986) which also used a student population. This is important in that it suggests to developers of AIDS education programs that simply presenting the facts about AIDS is not enough to promote attitude changes about AIDS and towards persons with AIDS.

Additionally, Stevenson and DeBord (1988a, 1988b) examined the relations among AIDS knowledge, AIDS attitudes, and a number of behaviors. Four of these are particularly relevant to the current study.

First, results indicated that people who had decreased the amount of blood they donate because of AIDS knew significantly less about AIDS than those who hadn't. This finding was significant in the first study but not in the second, although the trend was in the same direction. People who decreased the amount of blood they donate because of AIDS had also significantly lower attitude scores in both studies, signifying their low tolerance of the disease and of people with it.

Secondly, in the first study, those who always read newspaper or magazine articles they saw concerning AIDS were more knowledgeable than those who read about AIDS less often.

Third, in both studies those who said they would donate

money for AIDS research were more positive in their attitudes than those who would not donate.

The final behavior item of concern asked people how willing they would be to be tested for the AIDS virus. This was related to neither knowledge or attitudes in the past two studies.

These two studies are of particular importance because college students are often considered to be at high-risk for AIDS because of their sexual practices. Discovering how they relate their knowledge of the disease to their attitudes, and how they relate both to their behaviors is of value to all who hope to curtail the disease. Discovering how these different variables relate to one another in a broader population is also important. By having a sample of randomly selected adults complete the AIDS survey, the extent to which these findings are generalizable to the general public can be evaluated. This seems true especially since the sexual practices of an adult population are likely to differ from those of college students.

Method

The sample used in this study was generated for an earlier unrelated study (Socall, 1988). Using the 1988 Muncie Telephone Directory, 600 residences within Delaware County, Indiana were randomly selected. These residences were selected using a technique that allowed the sample to be

stratified by the population present within each community of the county. The AIDS Survey was mailed with a cover letter, a demographics questionnaire, and a prestamped business reply envelope. Each survey packet requested that the survey be completed and returned anonymously within ten days (see Appendix A). Half of the surveys requested female participation; the other half requested male participation. Important here is the fact that the ten item knowledge scale used in this study was different from the one used in the previous two studies. Soon after these surveys were mailed, the 600 residences were contacted by telephone. These telephone contacts were made in order to increase return rates. Over the phone individuals were told that they would soon be receiving a survey in the mail and were then asked to complete and return the survey as soon as possible (see Appendix B). Two weeks after the surveys were mailed, data were entered into a computer data file. Overall, 203 completed surveys or 33.8% were returned.

Of the 203 people who participated in this study, 84 were male and 111 were female, 8 failed to report their sex. Approximately 94% were white, 3% were black, and the rest were of various racial backgrounds. The ages ranged from 18 to 88 with a mean of 50.29. In terms of education, approximately 11% of the participants had not received a high school diploma, 41% had received only a high school diploma,

and the remainder had gone on to participate in some form of higher education. Approximately 64% were married.

Results

On the AIDS Survey, analyses of the data revealed that scores on the 10 item true-false knowledge test ranged from 6 items correct to 10 items correct. The mean of the knowledge score was 9.50. A little over 62% of the participants got all 10 items correct indicating that probably many adults know the basic facts about AIDS. The 21 item attitude portion of the survey asked subjects to respond to attitude statements on a five point likert-type scale. Responses ranged from strongly agree to strongly disagree. The attitude scale was scored by computing the mean of the numerical equivalents of participant responses. Higher scores indicated more accepting attitudes and lower scores, less accepting attitudes. Attitude scores ranged from 2.10 to 5.00 with a mean of 3.57.

A slight linear relationship between attitude and knowledge scores was revealed. The Pearson r was .18 ($p < .05$).

The behaviors significantly related to either attitudes or knowledge were as follows. Analysis of variance showed that sex ($F = 4.56$, $p = .03$) and the frequency with which one reads available AIDS articles ($F = 5.12$, $p = .007$) were related to how much one knows about AIDS; however, no

significant interaction between these variables was found. The Student Newman Keuls test showed that those who sometimes read articles they saw about AIDS knew significantly more than those who rarely or never did ($t > 3.35$, $p < .05$). The main effect for sex indicated that females knew significantly more about AIDS than males. Also, analysis of variance showed that the frequency with which one reads available AIDS articles ($F = 5.75$, $p = .004$) was related to one's attitudes about AIDS. The Student Newman Keuls test showed that those who sometimes read articles had significantly more positive attitudes than those who rarely or never did ($t > 2.81$, $p < .05$). Those who always read articles about AIDS had more positive attitudes than those who rarely or never did ($t > 3.35$, $p < .05$).

An additional analysis of variance showed that those who would be willing to donate money for AIDS research were significantly more positive in their attitudes than those who would not ($F = 24.39$, $p < .001$). A significant interaction was also found such that females who would not donate money were significantly more positive in their attitudes than males who would not donate ($F = 4.31$, $p < .05$).

Two stepwise multiple regression analyses were performed using first attitudes as a dependent variable and then knowledge as a dependent variable. The only two variables making a significant contribution to the total variance in

knowledge scores were level of education and sex. The following raw score regression equation was derived to predict knowledge scores: $\hat{Y} = .07x_1 + .23x_2 + 8.23$ where $Y =$ knowledge scores, $x_1 =$ level of education, and $x_2 =$ sex. This model accounted for about 7% of the variance in knowledge scores (adjusted $R^2 = .07$). The only variable making a significant contribution to the total variance in attitude scores was level of education. The following raw score regression equation was derived to predict attitude scores: $\hat{Y} = .05x + 2.90$ where $Y =$ attitude scores and $x =$ level of education. This model accounted for about 6% of the variance in attitude scores (Adjusted $R^2 = .06$).

Discussion

Attitude scores and knowledge scores were correlated slightly in this population whereas they were not in the previous two studies using college student samples (Stevenson & DeBord, 1988a, 1988b). It is important to stress again that the knowledge scale used in this study was different from the one used in the studies involving college students. Important, too, is the fact that the relationship found this time between attitude and knowledge scores is actually quite weak.

Using age, level of education, and sex in a stepwise multiple regression analysis as predictors of knowledge scores and attitude scores, level of education was found to

be significantly related to both attitudes and knowledge. This relationship indicated that, in general, the more education one had, the more positive his/her attitudes were and the more knowledgeable he/she was about AIDS. Gender was unrelated to attitude scores, yet it was significantly related to knowledge in a way that indicated females knew significantly more about AIDS than did males in this population. These findings differ from the results of the previous investigations using college student samples.

The behaviors studied in this investigation were the same ones mentioned earlier. Unfortunately, The number of people who had decreased their blood donations because of AIDS was so small that it was not worthwhile to analyze the responses to this question.

In examining how frequently one reads about AIDS, it was found that those who sometimes read articles about AIDS knew more than those who rarely or never read articles about AIDS. This is consistent with previous studies using college students. Also revealed was that those who always and sometimes read AIDS articles had significantly more tolerant attitudes than those who never read about AIDS.

In looking at one's likelihood of donating money for AIDS research, we found that those who would be willing to donate were significantly more positive in their attitudes than those who would not donate. This, too, is consistent

with previous findings using college student samples. An interaction effect was also found such that females who would not donate money were significantly more positive in their attitudes than males who would not donate money.

Finally, one's willingness to be tested for the AIDS virus was not significantly related to either knowledge or attitudes, a finding consistent with both previous studies.

Relating the previous studies which used college student samples to the current study which used an adult population was not a difficult task. Overall, there were few differences between the two samples. However, three exceptions should not be overlooked. First, knowledge and attitudes were slightly related in this study whereas they were not in previous ones. Second, females knew more about AIDS than males, and gender was not related to attitudes in this study. In contrast, the studies using college student samples found that females had more positive attitudes than males and gender was not related to knowledge. Finally, level of education was significantly related to both attitudes and knowledge in this investigation. It was related to neither in prior investigations.

Perhaps it is this final exception that should be emphasized most in this study. In the previous two studies which used college student subjects, level of education was not significantly related to either knowledge or attitudes.

This is understandable inasmuch as the variance in level of education among a college population is, by definition, small. Using a more typical population of adults, we were able to see that level of education was an important factor related to both attitudes and knowledge. This suggests that in order to gain valuable insights into factors affecting AIDS issues, we should explore populations beyond students. However, this study also suggests that information gained from a student population using the AIDS Survey can be generalized somewhat to a broader population. That is, the relationship between AIDS attitudes and AIDS knowledge is essentially rather weak whether one is dealing with an adult or student population. This finding could be of use to AIDS education programmers who too often attempt to teach only the facts about AIDS. We suggest that in order to deal more effectively with AIDS issues, the public should be made more aware of their attitudes concerning AIDS and how those relate to important behaviors. Ultimately, this approach could lead to a curtailing of the epidemic as well as to a higher level of tolerance of those who already have the disease.

References

- Morton, A. D., & McManus, I. C. (1986). Attitudes to and knowledge about the acquired immune deficiency syndrome: Lack of a correlation. *British Medical Journal*, 293, 1212.
- Socall, D. W. (1988). Public attitudes toward the mentally ill: The relationship of type and severity of mental illness on subjects' beliefs, social distance, and demographic variables. Unpublished masters thesis, Ball State University, Muncie, IN.
- Stevenson, M. R., & DeBord, K. (1988a). The AIDS Survey: facts, attitudes, and behaviors. Paper presented at the meetings of the Society for the Scientific Study of Sex, Midcontinent Region, Chicago.
- Stevenson, M. R., & DeBord, K. (1988b). AIDS awareness: Will knowledge of the facts change behavior. Paper presented at the meetings of the Society for the Scientific Study of Sex, National Conference, San Francisco.

Appendix A

What follows is a copy of the survey packet as received by 300 residences. The other 300 received packets with requests for male participation.



Ball State University

College of Sciences and Humanities
Department of Psychological Science

February 13, 1989

Not long ago, you probably received a pamphlet from the Surgeon General describing AIDS and the devastating effects it can have on one who contracts the virus. The great concern AIDS has stirred in this country has researchers curious as to how people have been affected by news of the disease. We would like to know how much you know about AIDS without consulting any references, what your opinions are about AIDS and people with AIDS, and what activities you engage in that are sometimes associated with the virus. Your responses to this questionnaire are especially important, as the results of this survey will help us better understand the way people feel about AIDS in Delaware County. This information can then be used by the coordinators of AIDS education programs to improve their services to the general public.

Your household is one of a small number in which people are being asked to give their reactions and opinions on this subject. Your name was drawn in a random sample of Delaware County, from the Muncie Telephone Directory. In order that the results will truly represent the thinking of people in Delaware County, it is important that each questionnaire be completed and returned. It is important that we have about the same number of men and women participating in this study. Thus, we would like the questionnaire for your household to be completed by an adult female. If none is present, then it should be completed by an adult male. It is also important that we ask only adults about their views.

You may be assured of complete confidentiality. There are no identifying marks on your questionnaire nor should any ever be put there. Please do not write your name or any other identifying marks on the questionnaire. Some of the questions are of a personal nature, so it is important that you be guaranteed complete confidentiality. If you find any question offensive, please feel free to skip that question and go on to the next one. On all of the true/false questions it is important that you answer without looking up any of the answers. We simply want to know what you know about this subject off the top of your head.

Please complete and return this survey within ten days of receiving it. Please place your completed questionnaire into the enclosed business reply envelope and mail it back to me. You do not need to pay for postage, as it is included on the envelope. Remember, do not place your name on any of the enclosed materials so that it remains anonymous.

Your participation is extremely important to me, as the results of this research will be written up as my Honor's Thesis at Ball State University. If you have any questions about the questionnaire, please feel free to contact me. You may write or call. The number is 285-1690. Thank you for your assistance!

Sincerely,

Kurt A. DeBord

THE AIDS SURVEY

Please answer the following by circling the answer that best applies to you.

1. Sex: Male Female

2. What is the highest grade (or year) of school you have completed? Please circle the number
 - a. Elementary School (Grades 1 2 3 4 5 6)
 - b. Junior High or Middle School (Grades 7 8 9)
 - c. High School (Grades 10 11 12)
 - d. College (13 14 15 16)
 - e. Graduate or Professional Degree (17 18 19 20 20+)

3. Age: _____ (fill in the blank)

4. Marital Status:
 - a. Single b. Married c. Divorced/Separated d. Widowed e. Other

5. Race:
 - a. White b. Black c. Asian d. Hispanic e. Other

The following is designed to assess your knowledge about AIDS. Please do not look up any of the answers. We are simply interested in finding out what is considered common knowledge about AIDS.

DECIDE WHETHER EACH OF THESE STATEMENTS IS TRUE OR FALSE AND CIRCLE YOUR RESPONSE.

- T F 6. Everyone infected with the AIDS virus has developed AIDS.

- T F 7. A person having the AIDS virus can pass it on even though there are no AIDS symptoms present.

- T F 8. During sexual activity, exchange of body fluids is a way of transmitting the AIDS virus.

- T F 9. Sharing IV drug needles and syringes puts a person at very high risk for getting the AIDS virus.

- T F 10. A person can get the AIDS virus from giving blood.

- T F 11. Only homosexual and bisexual men get AIDS.

- T F 12. Women can transmit the AIDS virus to sex partners.

- T F 13. The AIDS virus can be spread through casual contact, such as touching or being near a person with AIDS.

- T F 14. A person practicing sexual abstinence or partners practicing sexual fidelity who do not abuse drugs have almost no chance of getting the AIDS virus.

- T F 15. The proper use of condoms is a good way to reduce the chance of getting the AIDS virus.

The next section is designed to assess your attitudes about AIDS. There are no right or wrong answers to these items.

PLEASE USE THE SCALE BELOW TO RATE HOW MUCH YOU AGREE OR DISAGREE WITH EACH OF THE FOLLOWING STATEMENTS AND CIRCLE YOUR RESPONSE.

- | A | B | C | D | E | |
|----------|-------|-----------|----------|----------|---|
| STRONGLY | AGREE | UNCERTAIN | DISAGREE | STRONGLY | |
| AGREE | | | | DISAGREE | |
| A | B | C | D | E | 16. I would not be afraid for my child to have a teacher who was infected with the AIDS virus. |
| A | B | C | D | E | 17. I would refrain from joining a social club if I knew one or more of its members was infected with the AIDS virus. |
| A | B | C | D | E | 18. I think individuals with AIDS should not be allowed in public. |
| A | B | C | D | E | 19. If a person who works directly with the public is found to have AIDS, that person should be removed from that position. |
| A | B | C | D | E | 20. I would favor mandatory AIDS testing in almost any situation. |
| A | B | C | D | E | 21. AIDS is a punishment from God to homosexuals and bisexuals. |
| A | B | C | D | E | 22. I think insurance companies should have the right to deny coverage to any individual who tests positive for the AIDS virus. |
| A | B | C | D | E | 23. I would feel comfortable working in an office with someone I knew had AIDS. |
| A | B | C | D | E | 24. People with AIDS get what they deserve. |
| A | B | C | D | E | 25. AIDS is not as bad as the media portrays it. |
| A | B | C | D | E | 26. I would feel uncomfortable talking with a person who has AIDS. |
| A | B | C | D | E | 27. The AIDS virus is the fault of the gay population. |
| A | B | C | D | E | 28. I feel confident that nobody I know will contract AIDS. |
| A | B | C | D | E | 29. People with the AIDS virus should not be allowed to work in restaurants. |
| A | B | C | D | E | 30. Students with AIDS should be allowed to attend school. |
| A | B | C | D | E | 31. People with AIDS should not be allowed to work in day care centers for children. |
| A | B | C | D | E | 32. Anyone who tests positive for the AIDS virus should be forced to report monthly to health officials. |
| A | B | C | D | E | 33. There is little I can do to alter my chances of contracting AIDS. |

- A B C D E 34. I would look for a new place to live if I found out my neighbor had AIDS.
- A B C D E 35. If I knew someone had the AIDS virus, I would still develop a friendship with them.
- A B C D E 36. I would feel uncomfortable being at a party with a person with AIDS.

The next section is designed to obtain information concerning behaviors that relate to AIDS in some way. Circle the response for each that best applies to your behavior.

37. If you see newspaper or magazine articles about AIDS, do you read them?
a. always b. sometimes c. rarely d. never
38. Because of AIDS, have you decreased the amount of blood you donate?
a. yes b. no c. I have never donated blood
39. Would you donate money for AIDS research?
a. yes b. no
40. Would you be willing to be tested for the AIDS virus?
a. yes b. no

Appendix B

Phone Script

Hi, my name is _____ and I am a student at Ball State. As part of a research project, your name was randomly selected from the Muncie Telephone Directory. If you haven't already, you will soon receive a survey in the mail. Some of the questions on it are of a personal nature and deal with your knowledge and attitudes about AIDS. It would be very helpful if you would take 30 minutes to complete the survey and return it in the prestamped business reply envelope. I would like to stress that your participation is completely voluntary and that your responses will be strictly confidential. The survey does not require any information to identify you, that is you will not be asked to put your name or social security on it, so no one will know your responses. Your time and cooperation would be extremely appreciated. Do you have any questions?

Footnotes

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