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Minorities and HIV

Christy Lee Miller

University of Tennessee - Knoxville

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EXECUTIVE SUMMARY

Objective The home medical test kit industry is very dynamic. There are constantly new products that are being introduced, and the industry is projected to grow at 13.5% through 1996. Sales of home diagnostic products reached \$426.9 million in 1992, and the introduction of a home HIV test kit could cause an even greater increase in this industry.

The FDA is currently reviewing three home HIV test kits. The tests will be distributed in drug stores and pharmacies. Distribution will also be directed at other not so traditional outlets, such as public health departments and college health centers.

Ultimately, the goal of this paper was to find out how receptive the college market, and specifically minority students, are to a home HIV test kit. Since 18-24 year olds are a high risk group, college health centers are a possible distribution site. The main purpose of this survey is to determine if there are significant differences between white and minority students concerning HIV/AIDs and the prospect of home HIV test kit. From this information, a targeted message strategy can be developed if applicable.

Results The primary method of collecting information was through a survey which is included in Appendix 1. After the surveys were collected, there was a total of 51 usable surveys. The data was then entered into a statistical program, SAS, where several different tests were run on the data.

Almost 80% of students are at risk; however, their actual perceived risk averaged only 3.32 on a 7-point scale. Their average likelihood of being tested within the next year is very low (2.91), and the main reason for not being tested is that they do not perceive themselves at risk for HIV. Sexually active and lifestyle are the main reasons why students would prefer to be tested at the doctor's office (5.24). The home test kit rated fourth behind the doctor's office, the university

clinic, and the hospital. However, they gave the home test kit a slightly negative rating of 3.22.

Conclusions and Recommendations From the results , it can be concluded that the entire sample of students are not aware of their actual risk for HIV/AIDS. However minority students are more aware of the risks associated with their behavior. In order for students to realize that they are at risk for HIV, they must be educated about the behaviors and factors that increase the risk. When they are convinced that they are engaging in risky behavior, then they will realize the importance of being tested. There are enough statistically significant differences to justify a separate message strategy for minorities.

Introduction

The home medical test kit industry can be characterized by strong competition, constant development of new products and innovative technology. A recent national survey conducted by Fleishman-Hillard Research, Inc. found that consumers readily support the various home tests that are currently available. Eighty percent of Americans believe that home tests are more convenient than the traditional screenings done in the doctor's office; 84% believe that home tests allow people to take greater responsibility for their health care and consider these tests to be vital tools in the early diagnosis of medical conditions. According to this survey, 60% of American households have used some sort of home medical test (PR Newswire). Due to this widespread consumer support, a home HIV test kit could potentially earn several hundred million dollars a year if approved by the FDA.

Today the only way to find out if you are infected with HIV is to take a test at a doctor's office or a clinic. Even though these tests are often available free of charge, it is estimated that only 8% of Americans intend to get tested by the methods presently available; presently two out of three people at risk for HIV have never been tested. Supporters of home testing believe that far more people would be tested for HIV if they could do so at home. Research suggests that if the home HIV test reaches the market, it could triple the number of adults to get tested; the National Center for Health Statistics found that nearly half of the people with a high chance of having HIV would use the home test (Mann E3).

Research also indicates that home testing would specifically appeal to members of some minority groups who otherwise might be hesitant to be tested; in fact both the NAACP and the National Council of La Raza, an umbrella organization for over 160 Hispanic organizations, have asked the FDA to approve the home test (McGinley B1). A home HIV test will also provide wider access to

people living in rural areas, to single mothers, and to others who might have difficulty getting time off from work and from family obligations to get tested. The FDA's approval of a home test is a significant step in fighting the AIDS epidemic because HIV-positive people who might not otherwise have gotten tested could obtain treatment and avoid spreading the infection to others.

The FDA is reviewing three HIV home test kits. Confide which is manufactured by Johnson & Johnson, and two others manufactured by Anonymous Testing Services of Rolling Meadow, Illinois, and Coonan Clinical Laboratories (Health Test, Inc.) of Costa Mesa, California. Each kit includes a lancet that the consumer uses to shed a few drops of blood onto a test strip and a preaddressed envelope for sending the sample to the company's laboratory. Several days later, testers call the lab's toll free number and use an ID number to obtain their confidential results. If results are negative, consumers get a recorded message saying so. If the results are positive, the callers are switched to a counselor who can provide counseling as well as any other information requested, such as where to get legal, medical, and emotional support.

There are several issues surrounding a home HIV test that have delayed its acceptance by the FDA, including concerns of packaging and mailing and apprehension over the lack of face-to-face counseling. HIV is a bloodborne pathogen and, according to CDC regulations, is not dangerous enough to require special labeling during shipment; however, the CDC is presently drawing up new regulations requiring HIV labeling to calm the public's fears. Even though there is concern over the counseling issue, the home tests will in fact increase counseling for consumers if counseling is given for both positive and negative results; currently only 56% of people receive pre-test counseling, and 68% get no post-test counseling. Experts suggest, however, that the counseling objection may miss the point, and that the real issue is between people receiving telephone counseling

after a home test and not getting tested at all. A joint statement by doctors and leading AIDS advocates states that "as long as we require face-to-face confrontation as a condition of getting tested, a significant number of Americans will continue to avoid getting tested or will not return for the results" (Mann E3).

AIDS is the leading cause of death among all adults aged 25 to 44. Currently one in every 250 people in the United States is infected with the HIV virus (Amatenstein 124). At the current rate, by the end of 1994, over 1.5 million people will have been infected with HIV, and over 442,000 AIDS cases will have been reported in the U.S. alone. When AIDS was first discovered, 60% of those infected were gay men, with the rest of the population accounting for the other 40%. By the year 2000, it is projected that 90% of all people with AIDS will be heterosexual (Henggeler 13). The infection rate among non-drug using heterosexuals has increased at such a pace that the number of heterosexual AIDS cases has doubled since 1990 (Allen and Setlow 1695).

College-age individuals are at a higher risk for HIV than the general population, possibly due to an increased amount of sexual activity. It is not surprising, therefore, that the number of reported cases of AIDS in persons ages 13 to 21 is doubling every 14 months. This accounts for a rate of HIV infection 10 times higher than that of the general, heterosexual population (Henggeler 21). Home HIV tests will be distributed through college health centers as well as the traditional distribution channels because of this group's particular risk level.

Minorities are also at a higher risk for HIV, and the infection rate in this segment is rising much faster than in the population as a whole. Race and ethnicity serve as risk markers not risk factors for HIV infection. These markers can assist in identifying groups who are at the highest risk for HIV and may help target prevention efforts.

Purpose Statement

The ultimate purpose of this survey is to find out how receptive the college market is for a home HIV test kit. My paper focuses specifically on minority college students. I wanted to assess the overall evaluation of the general prospect of a home test among minority college students, and ascertain if there are any communications and/or awareness barriers that will have to be overcome in advertisements. The main purpose of this paper is to determine if there are significant differences between white and minority students concerning HIV/AIDS and the prospect of a home HIV test kit. From this information, a targeted message strategy can be developed if applicable.

Methodology

Research Design Primary data was collected by a survey which is included in Appendix 1. This study was a descriptive, cross-sectional study. Data from cross-sectional studies tend to produce more representative samples of the population of interest and allow for the investigation of a variety of relationships. This design is appropriate because it allows me to describe characteristics of the target market and estimations of the proportion of people who behave and believe in a certain manner.

Sampling The population for this survey consists of black college students aged 18 to 24. The sampling frame was University of Tennessee students from within the population. To acquire the sample, I used a nonprobability sample where the respondents were chosen at the interviewer's discretion; therefore the probability of each person being selected was unknown. A quota sampling method was used to obtain an equal number of male and female respondents. The mall intercept approach of convenience sampling and the snowballing approach were used to acquire the samples.

Analysis The total sample size for this survey was 443 respondents. I collected a minority sample of 51 respondents. The overall sample profile can be seen in Table 1. The minority sample consists of 52.9% men and 47.1% women. One hundred percent of the minority sample is African American. The respondents were fairly equally divided between rural areas, small town such as Johnson City, small to medium size cities such as Knoxville, and major metropolitan areas such as Los Angeles. The respondents range from 18 to 24 years old with the average age being 20.6 (Table 2).

RESULTS

Overall Sample

The results for the overall sample can be found in Tables 3-6. These results will not be discussed specifically, however, since the focus of this paper is minorities' attitudes and behaviors.

Minority Sample

Attitudes Toward General Health The students were fairly confident in their ability to cure themselves and averaged a 4.88. Students disagreed with the statement that "taking care of yourself" has no relationship to whether or not you get sick (2.80), and they believe that in the long run people who take care of themselves will stay healthy and get well quickly (5.69). This indicates an internal health locus of control, which means that the students feel they have control over, or at least can influence, their personal well-being. The students perceived themselves to be in good physical health with a mean of 5.61. Their current health compared to the health of their peers was a slightly lower 5.06. Students reported that their past problems were not serious with an average of 1.96 (Table 7).

Home Medical Test Kit Familiarity and Usage The students were not very familiar with the home medical test kits that are on the market. They were most

familiar with the pregnancy tests (4.06); this correlates with the fact that pregnancy tests are the most heavily advertised. The other tests in order of familiarity are: blood glucose monitor (2.24), blood cholesterol (2.08), ovulation (2.04), urinary tract infection (1.82), and colon cancer screen (1.22). Many of these tests may have a low familiarity level because college students are not in the target market for these products. Also, there may be gender differences in the awareness of home test kits because many of the kits are directed primarily toward women. The test most often used by minority students was the pregnancy test which had a 32.0% usage rate. The average age of first use for this test was 17.5; this indicates that many of the students may have used the test as minors. The other tests were used by 13.8% of the students, collectively. Students who have already used a home test kit are more likely to use one again. Also, the blood glucose monitor and the home cholesterol tests are of a similar nature to the home HIV test so the students who have used these tests would not be hesitant to use the finger-pricking HIV test. These results indicate that the college market is favorable and conducive to a new test kit that corresponds with their needs (Table 8).

Main Reason for Home Pregnancy Test Usage The main reasons for using a home pregnancy kit were identified because this is the test that students most often use, and these reasons can be extrapolated and applied for other tests. The predominant reason students used a home pregnancy test was because they wanted privacy; about 44% percent of the students reported this. A quarter of the students reported that they used the test because it was cheaper than having the test done by a doctor or a clinic. Nearly 20% said that it was quicker to do the test themselves rather than wait for a doctor's appointment. About 6% answered that it was more convenient to do the test themselves, and another 6% used a home test because they did not want to visit the doctor unnecessarily (Table 9).

Attitudes Toward HIV and Testing Overall Overall, minority students considered themselves to be fairly knowledgeable about HIV; the average response was 5.43. On average, students considered themselves to be more knowledgeable about HIV than their peers with a score of 5.04. The average perceived risk of students was 3.32, which indicates that they do not really consider themselves to be at risk; due to this, the average likelihood of being tested within the next year was also very low--2.91. Of the people who said they would get tested this year, the main reason was because of their lifestyle and being sexually active; almost 57% gave this answer. Almost 21% responded they would get tested just because want to know and/or peace of mind. The other reasons are more routine and do not necessarily have to do with risk factors: donating blood (15.46%), as part of a routine physical (14.29%), and various other reasons (7.14%) (Table 10).

The most frequent reason that students will not be tested within the next year is that they do not see a reason because they are not at risk (40.43%). Reasons for not getting tested include not being in a sexual relationship (21.28%), practicing safe sex (10.64%), being in a monogamous relationship (6.38%), and not wanting to know or being afraid (12.77%). Only 6.38% of the students responded that they had already been tested. These results indicate that students need to be educated about what makes them at risk for HIV. Being in a monogamous relationship does not ensure that either partner cannot acquire HIV because it does not take into account the partners' sexual histories or other possible risk factors. Also, students not currently involved in a sexual relationship should still be tested if they have had past sexual partners with an unknown HIV status. The 12.77% who reported being afraid to get tested for HIV need to be reached; these students need to know that by finding out their HIV status early more can be done for them if they test positive (Table 10).

The students evaluated how likely they would be to use several test site options if they had to get tested for HIV. The highest score, 5.24, was given to a private doctor's office; the university clinic and the hospital received a 3.79 and 3.51, respectively. The other two options, the county health department and a free-standing HIV test site were not viewed as likely test site options by the student possibly due to the social stigma associated with these two. This is slightly contradictory to the reported main factors influencing test site selection. The primary determinant was confidentiality; almost 40% of the students reported this as the most important factor. Following this was low cost which was reported by 20.59%. This seems to conflict with their likelihood of using certain test sites; it would seem if price was that important to students, they would be more likely to get tested at either the health department or the free-standing HIV test site where the test are available either free or nominal charge. This information reveals where the key competition for a home test lies (Table 10).

Almost 28% of the students answered that they did know someone with HIV/AIDS, and it should make HIV seem more real to them. These students now have a fact to put with the disease, and it should make HIV seem more real to them. These students may be more likely to be tested since they know the disease can happen to them (Table 10).

Current HIV Test Rates Nearly 40% of the students surveyed had already been tested for HIV. The most frequent reason that the students had been tested was because of personal choice and curiosity (23.44%). Second was donating blood (17.19%). The first group of students are the only ones who actively sought out their HIV status, and this is the type of student who will spend money on a home HIV test; for the others, knowledge of their sero-status was only incidental. Other reasons that the students were tested for HIV include: part of a routine physical (10.94%), for an athletic physical (9.38%), because of surgery (6.25%),

for insurance purposes (1.56%), and other reasons (3.13%). If students have already had their blood tested for HIV, then currently know their sero-status and should not be in the market for a home test kit unless they continue to engage in risky behavior or if they are still in the virus' incubation period (Table 10).

HIV Risk Behaviors This is the section where students revealed their actual risk for HIV. These responses can be compared with their responses from the section on Attitudes Toward HIV and Testing to see how and if they correspond. The number of sex partners a student has had can indicate if the person is at risk for HIV. In this sample, 16.92% of the students reported having no sex partners; if these students participate in no other risky behaviors then they are at no risk for HIV. Almost 11% of students reported having had only one sex partner; these students are not at risk if their partner has not had multiple partners and they do not engage in other risky behaviors. The majority of the students are automatically at risk for HIV because they have had more than one sex partner; about 72% of the students fall into this category. About 14% of the students reported having two partners, 9.23% had three partners; 10.77% had four partners; and 38.46% reported having five or more sex partners (Table 10).

Under the risk groups profile, almost 80% of the students surveyed responded that they are at risk for HIV for one reason or another. Seventy-two percent of the students responded that they are at risk due to having more than one sex partner, and 43.28% responded that they had a sex partner whose HIV status was unknown. About eight percent of the students are at risk because of sharing needles during injectable drug use, and 5.97% are at risk because they are men who have had sex with other men. People who are at risk for uncontrollable reasons include 4.48% of the students who have hemophilia or another blood disease and have received blood products prior to 1985 and 2.99% of the students who received a blood transfusion between 1985 and 1987. Almost 22% of the

students are at risk for HIV simply from having sex partners who are at risk. Only 20.9% of the students are at no risk for any reason at all (Table 10).

Even though almost 80% of the students are actually at risk for HIV, the average perceived risk is fairly low, 3.32. Since people do not think that they are at risk but admit they are involved in high risk behaviors, this indicates that the population needs to be educated about HIV and the situations that put them at risk. If the students do not think that they are at risk for HIV, then they are not going to be tested at any of the sites. Because of this, students have only a slightly positive attitude to the importance of being tested (5.06) (Table 10).

Honesty in Answering Survey Overall, the students were very honest in reporting their behavior and attitudes (6.82). This ensures that the information derived from the results is very valuable and is a true representation of the target market (Table 10).

Race Differences

Attitudes Toward HIV and Testing Statistically, there were several differences between minorities and whites in this area. The results show that minorities have a greater perceived risk of HIV, 3.32 compared to 2.74; both scores are still low, however. The minority segment may be more aware of risk because there is a considerable amount of information publicizing minorities' increased rate of HIV infection. This is another indication that the students need to be educated about HIV and their actual rate (Table 11).

There is also a difference between the groups concerning reasons for not getting tested. Whites were three times more likely to not get tested because of involvement in a monogamous relationship. In comparison, minorities were more likely to not get tested because they were not involved in any sexual relationship. On a darker note, minorities were three times as likely to avoid getting tested

because they did not want to know or were afraid. This may be related to their higher average perceived risk. Understandably, no one wants to know they have an incurable disease; however, it is people like this 12% who help spread the epidemic of HIV/AIDS (Table 11).

A statistically significant difference also exists concerning the likelihood of using a free-standing HIV test site as a testing option. Whites were more likely to be tested at this site; however both groups rated the site negatively and below all other options. While this figure is statistically significant, it does not seem to have practical significance (Table 11).

Current HIV Test Rates The two groups differed in their reasons for having been previously tested for HIV. Whites were 13% more likely to have been incidentally tested by donating blood, whereas minorities were almost twice as likely to have been tested because of personal choice and/or curiosity. This is another indication that minorities would be more likely to purchase a home test kit because they have previously actively sought out their sero-status (Table 11).

HIV Risk Behaviors Significant results were also found between two groups in the profile of risk groups of people who are actually at risk for HIV. Whites were 13% more likely to consider themselves not at risk. There could be several reasons for this. Minorities stated that they had two or more sex partners more frequently than whites, and whites stated they are more likely to be in a monogamous relationship. Another reason may lie in the fact that minorities have a higher perceived risk also; therefore, they may have a more realistic perception. Minorities were also almost six times as likely to have shared needles during injectable drug use. This may be related to the fact that almost 7% more of the minority sample hails from a major metropolitan area such as New York or Los Angeles where drug use may be more prevalent. Minorities were also four times as likely to have received blood products prior to 1985; this information is not

practical to use in a message strategy, however. There was also a significant difference in sex partners of anyone at risk; minorities were 10% more likely to respond to this category. Whites may have been reluctant to admit this because of vulnerability (Table 11).

Because minorities actually responded that they were at a higher risk for HIV, they rated the importance of being tested for HIV more positively than whites. Therefore, it seems as if minorities may be more likely candidates for a home HIV test kit with the appropriate advertising (Table 11).

Attitudes Toward Proposed Home HIV Test Kit Despite all indications that minorities would be more likely consumers of the home HIV test, whites rated the kit more positively, 4.07 compared to 3.22. The reason for this difference can be found several questions later in the survey. Minorities were over three times as likely to respond that the home test was too expensive. Even though minorities are more likely candidates to get tested for HIV in general, they are more likely to choose an option that includes a low or nominal charge (Table 11).

RECOMMENDATIONS

Overall Evaluation

Overall, the college market seems conducive to the introduction of a home HIV test kit. These students are supporting the test kits that are currently on the market, many of which are similar in nature to the home HIV test. However, the students perceive their risk for HIV to be very low; therefore, if they do not think they are at risk, they are not going to spend their hard-earned money to buy a home HIV test. In order for college students to realize they are at risk for HIV, they must be educated about the factors that cause HIV. They have to be convinced that the behavior they are engaging in is risky. Most students consider themselves fairly knowledgeable about HIV; however, they feel it could never happen to them.

Segmentation and Market Strategy

College Market College students are one of the highest risk groups for HIV; however, they are more likely to get tested at a private doctor's office rather than use a home test kit. The main factor influencing the test site selection is confidentiality where only the doctor would know the results; this coincides with the main reasons students would use a home HIV test kit: confidentiality, privacy, and anonymity. Their primary concern regarding the home test is the accuracy of the results; only a small percent of the students as a whole perceived the test as too expensive relative to the other options. The advertisements should stress the attributes of a home test that are most influential in the decision process of college students. If the advertisements emphasize the anonymity and privacy of the product, this will compensate for the higher price. An example of an ad that employs this strategy can be seen in Appendix 2. Advertisements intended to reach the college market as a whole should be placed in magazines such as Rolling Stone and Spin.

Market Segments There are enough statistically significant differences between whites and minorities to justify separate message strategies. Since minorities are more likely to acknowledge their risk for HIV, there does not need to be as much education in advertisements for this group. A primary component in advertisements aimed at minorities should emphasize the benefits of being tested early since minorities are more likely to avoid being tested because of fear. An example of an ad to appeal to this group can be seen in Appendix 3. To reach a concentrated number of minorities, ads should be placed in magazines such as Ebony and Jet, and television ads could be placed on BET.

LIMITATIONS

Every project has its shortcomings, but keeping these to a minimum is the key; there are very few limitations to this project. One unavoidable constraint involves our use of a convenience sample and the snowballing method, which are both non-probability sampling methods. By definition, in these methods the respondents are chosen at the interviewer's discretion and by recommendation. The major problem with this is that the sample may not be representative of our population because people tend to solicit respondents who are similar to themselves. This problems could have been avoided by conducting a census or a probability sample, both of which would have been impractical for this particular survey. Although there are a few limitations, these results and analyses are very valuable. Information derived from this survey can be extrapolated from the sample to the entire college population .

Table 1
Sample Profile
(N=443)

<u>Gender</u>	<u>%</u>
Men	49.9
Women	50.1
<u>Race</u>	
White	80.6
African American	15.5
Hispanic	1.1
Native American	0.2
Asian American	1.4
Other	1.1
<u>Home Town</u>	
Rural	23.5
Small Town	24.8
Small to Medium Size City	33.4
Major Metro	18.3
<u>Age</u>	
Range	18 - 24
Average (years)	20.6

Table 2
 Minority Profile
 (N=51)

<u>Gender</u>	<u>%</u>	
Men	52.9	
Women	47.1	
<u>Race</u>		
African American	100.0	
<u>Home Town</u>		
Rural	23.5	
Small Town		21.6
Small - Medium Size City	27.5	
Major Metro Area	27.5	
<u>Age</u>		
Range	18 - 24	
Average	20.6	

Table 3
General Health Attitudes
(Overall Sample)

	<u>Average</u>
Health Locus of Control	
Scale: 1 (strongly disagree) to 7 (strongly agree)	
I have confidence in my ability to cure myself once I get sick.	4.94
"Taking care of yourself" has little or no relationship to whether you get sick.	2.55
In the long run, people who take care of themselves stay healthy and get well quickly.	5.67
There is little one can do to prevent illness.	2.52
Current Health	
Scale: 1 (poor) to 7 (excellent)	5.57
Current Health Compared to Peers	
Scale: 1 (much worse) to 7 (much better)	5.04
Seriousness of Health Problems	
Scale: 1 (not at all serious) to 7 (very serious)	2.25

Table 4
Home Medical Test Kit Familiarity and Usage
(Overall Sample)

<u>Test Kit First Use</u>	<u>Familiarity</u>	<u>% Usage</u>	<u>Average Age of</u>
Pregnancy	4.21*	26.9	18.4
Blood Glucose Monitor	2.14	4.3	
Blood Cholesterol	2.21	1.6	
Ovulation	1.87	0.9	
Urinary Tract Infection	1.82	1.6	
Colon Cancer Screen	1.40	0.0	

* 1 (very unfamiliar) to 7 (very familiar)

Table 5
Main Reason for Home Pregnancy Test Usage
(Overall Sample)

<u>Reason</u>	<u>Percent</u>
I wanted privacy.	45.0
It was more convenient to do the test myself than go to the doctor/clinic.	18.0
It was quicker for me to do the test myself than wait for an appointment.	18.0
I didn't want to go to the doctor unnecessarily.	12.6
It was cheaper than having the test done by a doctor or clinic.	6.3

Table 6
HIV Attitudes, Testing, and Risk Behavior
(Overall Sample)

<u>Attitudes Toward HIV and Testing</u>	<u>Response</u>
Average Perceived Knowledge Scale: (1) Not Very Knowledgeable - (7) Very Knowledgeable	5.43
Average Comparative Knowledge Scale: (1) Less Knowledgeable - (7) More Knowledgeable	5.10
Average Perceived Risk Scale: (1) Not at all at Risk - (7) Highly at Risk	2.83
Average Likelihood of Being Tested Within Next Year Scale: (1) Very Unlikely - (7) Very Likely	2.95
Reasons for Getting Tested	
Just want to know/ Curious/ Peace of Mind	27.9%
Sexually active/ Lifestyle	27.0%
Donate blood	13.5%
Other	13.5%
Part of physical	9.9%
Getting married	7.2%
Insurance	0.9%
Reasons for Not Getting Tested	
Don't see the reason/ Not at risk	43.2%
In a monogamous relationship	17.0%
Not in a sexual relationship	13.9%
Other	8.8%
Safe sex/ Protection/ Condoms	8.2%
Don't want to know/ Afraid	5.4%
Already been tested	3.4%
Likelihood of Using Each of the Following Test Sites: Scale: (1) Very Unlikely - (7) Very Likely	
Private Doctor's Office	5.48
University Clinic	4.10
Hospital	3.99
County Health Department	3.20
Free-Standing HIV Test Site	3.11
Main Factor Influencing Test Site Location	
Confidentiality (only the doctor would know my test results)	45.0%
Low cost (either free or nominal charge)	17.0%
Anonymity (I would get results over the phone by using an identification number)	11.8%
Personal face-to-face counseling when I received my results	10.7%
Convenience or easy access to testing	9.3%
Speed (how quickly I could get an appointment and test results)	6.6%

Table 6 (Continued)

	<u>Response</u>
Knows Someone with HIV/AIDS	29.4%
<u>Current HIV Test Rates</u>	
Already Tested for HIV	46.5%
Reasons for Having Been Tested	
Donate blood	28.2%
Personal choice/ Curiosity	13.8%
Part of a routine physical	13.8%
Because of surgery	10.2%
For an athletic physical	8.7%
Other	4.1%
For insurance purposes	1.5%
As part of prenatal care	0.7%
<u>HIV Risk Behaviors</u>	
Number of Sex Partners	
Zero	17.3%
One	16.9%
Two	14.1%
Three	10.2%
Four	7.2%
Five or more	34.4%
Risk Groups Profile	
Anyone who has had more than one sex partner	64.7%
Anyone who has had a sex partner where s/he doesn't know the partner's HIV status	41.2%
Not at risk	31.4%
Sex partners of anyone at risk	13.6%
Anyone who has received a blood transfusion between 1985-1987	3.2%
Men who have had sex with other men	3.2%
Anyone who has shared needles during injectable drug use	2.3%
Hemophiliacs or anyone with a blood disease who received blood products prior to 1985	0.9%
Anyone who has practiced prostitution	0.7%
Average importance of being tested for HIV	4.47
Scale: (1) Not very important - (7) Very important	

Table 6 (continued)

	<u>Response</u>
<u>Attitudes Toward Proposed Home HIV Test Kit</u>	
Average Likelihood of Using Home HIV Test Kit Scale: (1) Very unlikely - (7) Very likely	3.94
Reasons for Using Home HIV Test	
Confidential/ Privacy/ Anonymity	54.2%
Convenient/ Easy access	25.0%
Speed/ quicker than doctor	9.4%
Other	7.8%
Cost-perceived to be less expensive	2.6%
Test done in familiar surroundings	1.0%
Reasons for not Using Home HIV Test	
Concerns about accuracy	33.6%
Would prefer doctor do the test	13.1%
Don't see the need	12.7%
Other	12.2%
Cost- too expensive	11.8%
Impersonal counseling	11.4%
Might mix up results	4.4%
Consumers shouldn't be doing medical tests	0.9%
Honesty in Answering Survey Scale: (1) Not at all honest - (7) Completely honest	6.82

Table 7
 General Health Attitudes
 (Minority Sample)

	<u>Average</u>
Health Locus of Control Scale: 1 (strongly disagree) to 7 (strongly agree)	
I have confidence in my ability to cure myself once I get sick.	4.88
"Taking care of yourself" has little or no relationship to whether you get sick.	2.80
In the long run, people who take care of themselves stay healthy and get well quickly.	5.69
There is little one can do to prevent illness.	2.69
Current Health Scale: 1 (poor) to 7 (excellent)	5.61
Current Health Compared to Peers Scale: 1 (much worse) to 7 (much better)	5.06
Seriousness of Health Problems Scale: 1 (not at all serious) to 7 (very serious)	1.96

Table 8
Home Test Kit Familiarity and Usage
(Minority Sample)

<u>Test Kit</u>	<u>Familiarity</u>	<u>% Usage</u>	<u>Average Age of First Use</u>
Pregnancy	4.06	26.9	18.4
Blood Glucose Monitor	2.24	4.3	
Blood Cholesterol	2.08	1.6	
Ovulation	2.04	0.9	
Urinary Tract Infection	1.82	1.6	
Colon Cancer Screen	1.22	0.0	

* 1 (very unfamiliar) to 7 (very familiar)

Table 9
Main Reason for Home Pregnancy Test Usage
(Overall Sample)

<u>Reason</u>	<u>Percent</u>
I wanted privacy.	43.8
It was cheaper than having the test done by a doctor or clinic.	25.0
It was quicker for me to do the test myself than wait for an appointment.	18.8
It was more convenient to do the test myself than go to the doctor/clinic.	6.3
I didn't want to go to the doctor unnecessarily.	6.3

Table 10
HIV Attitudes, Testing, and Risk Behavior
(Minority Sample)

<u>Attitudes Toward HIV and Testing</u>	<u>Response</u>
Average Perceived Knowledge Scale: (1) Not Very Knowledgeable - (7) Very Knowledgeable	5.34
Average Comparative Knowledge Scale: (1) Less Knowledgeable - (7) More Knowledgeable	5.04
Average Perceived Risk Scale: (1) Not at all at Risk - (7) Highly at Risk	3.32
Average Likelihood of Being Tested Within Next Year Scale: (1) Very Unlikely - (7) Very Likely	2.91
Reasons for Getting Tested	
Just want to know/ Curious/ Peace of Mind	21.43%
Sexually active/ Lifestyle	57.14%
Donate blood	15.46%
Other	7.14%
Part of physical	14.29%
Reasons for Not Getting Tested	
Don't see the reason/ Not at risk	40.43%
In a monogamous relationship	6.38%
Not in a sexual relationship	21.28%
Other	2.13%
Safe sex/ Protection/ Condoms	10.64%
Don't want to know/ Afraid	12.77%
Already been tested	6.38%
Likelihood of Using Each of the Following Test Sites: Scale: (1) Very Unlikely - (7) Very Likely	
Private Doctor's Office	5.24
University Clinic	3.79
Hospital	3.51
County Health Department	3.33
Free-Standing HIV Test Site	2.59
Main Factor Influencing Test Site Location	
Confidentiality (only the doctor would know my test results)	39.71%
Low cost (either free or nominal charge)	20.59%
Anonymity (I would get results over the phone by using an identification number)	7.35%
Personal face-to-face counseling when I received my results	19.12%
Convenience or easy access to testing	7.35%
Speed (how quickly I could get an appointment and test results)	5.88%

Table 10 (Continued)

	<u>Response</u>
Knows Someone with HIV/AIDS	27.94%
<u>Current HIV Test Rates</u>	
Already Tested for HIV	39.71%
Reasons for Having Been Tested	
Donate blood	17.19%
Personal choice/ Curiosity	23.44%
Part of a routine physical	10.94%
Because of surgery	6.25%
For an athletic physical	9.38%
Other	3.13%
For insurance purposes	1.56%
<u>HIV Risk Behaviors</u>	
Number of Sex Partners	
Zero	16.92%
One	10.77%
Two	13.85%
Three	9.23%
Four	10.77%
Five or more	38.46%
Risk Groups Profile	
Anyone who has had more than one sex partner	71.64%
Anyone who has had a sex partner where s/he doesn't know the partner's HIV status	43.28%
Not at risk	20.90%
Sex partners of anyone at risk	22.39%
Anyone who has received a blood transfusion between 1985-1987	2.99%
Men who have had sex with other men	5.97%
Anyone who has shared needles during injectable drug use	7.46%
Hemophiliacs or anyone with a blood disease who received blood products prior to 1985	4.48%
Average importance of being tested for HIV	5.06
Scale: (1) Not very important - (7) Very important	

Table 10 (continued)

	<u>Response</u>
<u>Attitudes Toward Proposed Home HIV Test Kit</u>	
Average Likelihood of Using Home HIV Test Kit Scale: (1) Very unlikely - (7) Very likely	3.22
Reasons for Using Home HIV Test	
Confidential/ Privacy/ Anonymity	44.44%
Convenient/ Easy access	27.78%
Speed/ quicker than doctor	11.11%
Other	16.67%
Reasons for not Using Home HIV Test	
Concerns about accuracy	27.27%
Would prefer doctor do the test	15.91%
Don't see the need	15.91%
Other	6.82%
Cost- too expensive	25.00%
Impersonal counseling	9.09%
Honesty in Answering Survey	6.84
Scale: (1) Not at all honest - (7) Completely honest	

Table 11
HIV Attitudes, Testing, and Risk Behavior
(Race Differences)

	<u>White</u>	<u>Minority</u>
Attitudes Toward HIV and Testing		
Average Perceived Knowledge Scale: (1) Not Very Knowledgeable - (7) Very Knowledgeable	5.45	5.34
Average Comparative Knowledge Scale: (1) Less Knowledgeable - (7) More Knowledgeable	5.11	5.04
Average Perceived Risk Scale: (1) Not at all at Risk - (7) Highly at Risk *statistically significant	2.74*	3.32*
Average Likelihood of Being Tested Within Next Year Scale: (1) Very Unlikely - (7) Very Likely	2.96	2.91
Reasons for Getting Tested		
Just want to know/ Curious/ Peace of Mind	28.87	21.43%
Sexually active/ Lifestyle	22.68	57.14%
Donate blood	15.46	15.46%
Other	14.43	7.14%
Part of physical	9.28	14.29%
Getting married	8.25	0.0%
Insurance	1.03%	0.00%
Reasons for Not Getting Tested*		
Don't see the reason/ Not at risk	43.72	40.43%
In a monogamous relationship	19.03	6.38%
Not in a sexual relationship	12.55	21.28%
Other	10.12	2.13%
Safe sex/ Protection/ Condoms	7.69	10.64%
Don't want to know/ Afraid	4.05	12.77%
Already been tested	2.83	6.38%
*statistically significant		
Likelihood of Using Each of the Following Test Sites: Scale: (1) Very Unlikely - (7) Very Likely		
Private Doctor's Office	5.53	5.24
University Clinic	4.16	3.79
Hospital	4.08	3.51
County Health Department	3.18	3.33
Free-Standing HIV Test Site	3.20*	2.59*

*statistically significant

Table 11 (Continued)

	<u>White</u>	<u>Minority</u>
Main Factor Influencing Test Site Location		
Confidentiality (only the doctor would know my test results)	45.97	39.71%
Low cost (either free or nominal charge)	16.40	20.59%
Anonymity (I would get results over the phone by using an identification number)	12.10	7.35%
Personal face-to-face counseling when I received my results	9.14	19.12%
Convenience or easy access to testing	9.68	7.35%
Speed (how quickly I could get an appointment and test results)	6.72	5.88%
Knows Someone with HIV/AIDS	29.65	27.94%
Current HIV Test Rates		
Already Tested for HIV	47.73	39.71%
Reasons for Having Been Tested		
Donate blood	30.17*	17.19%*
Personal choice/ Curiosity	12.07*	23.44%*
Part of a routine physical	14.37	10.94%
Because of surgery	10.92	6.25%
For an athletic physical	8.62	9.38%
Other	4.31	3.13%
For insurance purposes	1.44	1.56%
As part of prenatal care	0.86	0.00%
* statistically significant		
HIV Risk Behaviors		
Number of Sex Partners		
Zero	17.39	16.92%
One	17.93	10.77%
Two	14.13	13.85%
Three	10.33	9.23%
Four	6.52	10.77%
Five or more	33.70	38.46%
Risk Groups Profile		
Anyone who has had more than one sex partner	63.47	71.64%
Anyone who has had a sex partner where s/he doesn't know the partner's HIV status	40.8*	43.28%*
Not at risk	33.33*	20.90%*
Sex partners of anyone at risk	12.0*	22.39%*
Anyone who has received a blood transfusion between 1985-1987	3.20	2.99%
Men who have had sex with other men	2.67	5.97%
Anyone who has shared needles during injectable drug use	1.33*	7.46%*
Hemophiliacs or anyone with a blood disease who received blood products prior to 1985	0.27*	4.48%*
Anyone who has practiced prostitution	0.80%	0.00%
*statistically significant		

Table 11 (Continued)

	<u>White</u>	<u>Minority</u>
Average importance of being tested for HIV Scale: (1) Not very important - (7) Very important	4.37	5.06
Attitudes Toward Proposed Home HIV Test Kit		
Average Likelihood of Using Home HIV Test Kit Scale: (1) Very unlikely - (7) Very likely *statistically significant	4.07*	3.22*
Reasons for Using Home HIV Test		
Confidential/ Privacy/ Anonymity	55.17	44.44%
Convenient/ Easy access	24.71	27.78%
Speed/ quicker than doctor	9.20	11.11%
Other	6.90	16.67%
Cost-perceived to be less expensive	2.87	0.00%
Test done in familiar surroundings	1.15	0.00%
Reasons for not Using Home HIV Test*		
Concerns about accuracy	35.14	27.27%
Would prefer doctor do the test	12.43	15.91%
Don't see the need	11.89	15.91%
Other	13.51	6.82%
Cost- too expensive	8.65	25.00%
Impersonal counseling	11.89	9.09%
Might mix up results	5.14	0.00%
Consumers shouldn't be doing medical tests	1.08	0.00%
*statistically significant		
Honesty in Answering Survey Scale: (1) Not at all honest - (7) Completely honest	6.82	6.84

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Appendix

Group _____

Survey _____

This survey is for a class project dealing with college students' attitudes toward health issues. Please answer honestly. All responses are anonymous and will be summarized over the entire sample of approximately 400 students who are being asked to participate. If you find any questions uncomfortable to answer, just leave that question blank and continue to the next question.

Thank you for your help.

Section 2: Home Medical Test Kits

The following section asks you questions about a variety of home medical test kits which are available for consumers to buy. Even though some of the questions may not directly apply to you, please answer each section. **Where appropriate, mark the number that best reflects your answer.**

1. Blood Glucose Monitor

How familiar are you with home blood glucose monitors?

<i>Very Familiar</i>							<i>Very Unfamiliar</i>
7	6	5	4	3	2	1	

Have you ever used a home blood glucose monitor? 1 No 2 Yes

If yes, about how old were you when you first used one? _____ years old

If yes, what was the main reason you used this home test? **Please circle only one.**

- 1 It was cheaper than having the test done by a doctor or clinic.
- 2 I wanted privacy.
- 3 It was more convenient to do the test myself than go to the doctor/clinic.
- 4 I didn't want to go to the doctor/clinic unnecessarily.
- 5 It was quicker for me to do the test myself than wait for an appointment.
- 6 I could do the test just as well as the doctor/clinic.

2. Home Blood Cholesterol Test

How familiar are you with home blood cholesterol tests?

<i>Very Familiar</i>							<i>Very Unfamiliar</i>
7	6	5	4	3	2	1	

Have you ever used a home blood cholesterol test? 1 No 2 Yes

If yes, about how old were you when you first used one? _____ years old

If yes, what was the main reason you used this home test? **Please circle only one.**

- 1 It was cheaper than having the test done by a doctor or clinic.
- 2 I wanted privacy.
- 3 It was more convenient to do the test myself than go to the doctor/clinic.
- 4 I didn't want to go to the doctor/clinic unnecessarily.
- 5 It was quicker for me to do the test myself than wait for an appointment.
- 6 I could do the test just as well as the doctor/clinic.

5. Urinary Tract Infection

How familiar are you with home urinary tract infection tests? *Very Familiar* 7 6 5 4 3 2 1 *Very Unfamiliar*

Have you ever used a home urinary tract infection test? 1 No 2 Yes

If yes, about how old were you when you first used one? _____ years old

If yes, what was the main reason you used this home test? **Please circle only one.**

- 1 It was cheaper than having the test done by a doctor or clinic.
- 2 I wanted privacy.
- 3 It was more convenient to do the test myself than go to the doctor/clinic.
- 4 I didn't want to go to the doctor/clinic unnecessarily.
- 5 It was quicker for me to do the test myself than wait for an appointment.
- 6 I could do the test just as well as the doctor/clinic.

6. Colon Cancer Screen

How familiar are you with home colon cancer screen? *Very Familiar* 7 6 5 4 3 2 1 *Very Unfamiliar*

Have you ever used a home colon cancer screen? 1 No 2 Yes

If yes, about how old were you when you first used one? _____ years old

If yes, what was the main reason you used this home test? **Please circle only one.**

- 1 It was cheaper than having the test done by a doctor or clinic.
- 2 I wanted privacy.
- 3 It was more convenient to do the test myself than go to the doctor/clinic.
- 4 I didn't want to go to the doctor/clinic unnecessarily.
- 5 It was quicker for me to do the test myself than wait for an appointment.
- 6 I could do the test just as well as the doctor/clinic.

7. Do you know or have you known someone infected with HIV/AIDS? 1 No 2 Yes

8. Assume that you had to get tested for HIV within the next month. How likely would you be to use each of the following locations?

	<i>Very Likely</i>					<i>Very Unlikely</i>	
A private doctor's office	7	6	5	4	3	2	1
The University clinic	7	6	5	4	3	2	1
A Hospital	7	6	5	4	3	2	1
A free-standing HIV testing site	7	6	5	4	3	2	1
The County Health Department	7	6	5	4	3	2	1

9. Assuming that you had to get tested for HIV within the next month, what factor would have the biggest impact deciding where you would get tested? **Mark only one.**

- 1 Low cost (either free or nominal charge)
- 2 Confidentiality (only the doctor would know my test results)
- 3 Personal face-to-face counseling when I received my results
- 4 Anonymity (I would get my results over the phone by using an identification number)
- 5 Convenience or easy access to testing
- 6 Speed (How quickly I could get an appointment and test results)

10. The FDA is currently evaluating a home test kit for HIV. This kit would cost between \$20 to \$50. The purchaser pricks a finger with a lancet in the kit, puts a few drops of blood on a test card, and then mails the card to manufacturer. A few days later, the purchaser calls a 1-800 number for the results. If the test is negative, the purchaser hears a recorded message, but has the option of talking to a counselor. If the result is positive, the person is automatically transferred to a counselor.

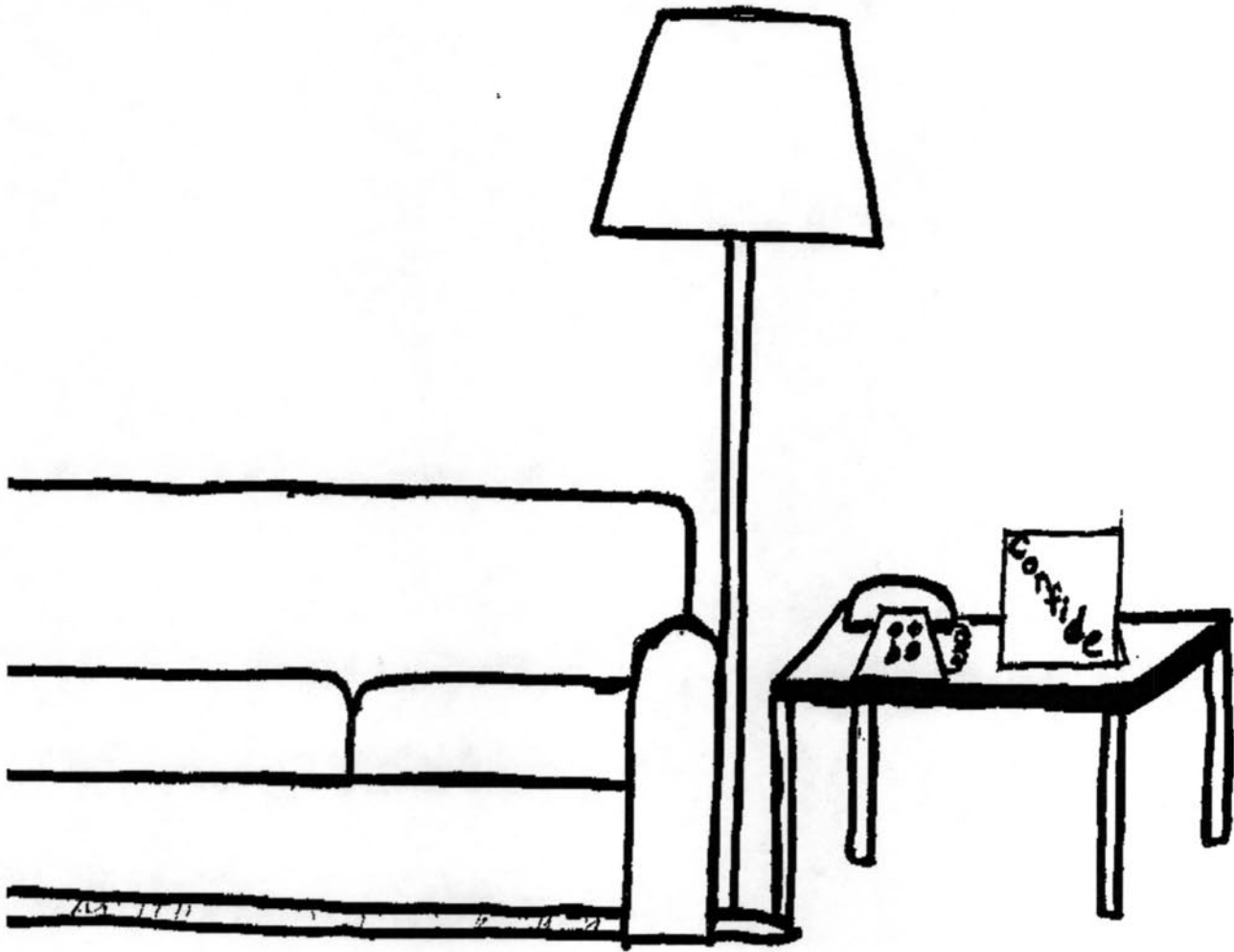
Assuming that this product were available and that you needed to get tested for HIV within the next month, how likely would you be to use a home HIV test kit?

Very Likely 7 6 5 4 3 2 1 Very Unlikely

If you marked 7, 6, or 5, what is the main reason you would consider using a home HIV test?

If you marked 4, 3, 2, or 1, what is the main reason you would not consider using a home HIV test?

Convenience and Accuracy In The Privacy of Your Own Home.



AIDS is a serious disease that affects almost every individual in this country. Confide is an HIV test kit that can be used conveniently in your own home. Results are ##% accurate and can be received anonymously over the telephone. Counseling is available to everyone.

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One in every 250 people are infected with HIV, the virus that causes AIDS. The number of reported cases of AIDS in persons age 13 to 24 is doubling every 14 months. Diagnosis can allow for early treatment programs and help stop the spread of this disease. Confide is an HIV test kit that can be used in the privacy of

your own home. Results are 99% accurate and can be obtained anonymously over the telephone. Counseling is also available to everyone. Confide is available at drug and discount stores, health departments and college health centers.

Confide

For More Information Call 1-800-555-1234