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How Patient Interactions With a Computer-Based Video Intervention Affect Decisions to Test for HIV

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Abstract

The current study examines predictors of HIV test acceptance among emergency department patients who received an educational video intervention designed to increase HIV testing. A total of 202 patients in the main treatment areas of a high-volume, urban hospital emergency department used inexpensive netbook computers to watch brief educational videos about HIV testing and respond to pre–postintervention data collection instruments. After the intervention, computers asked participants if they would like an HIV test: Approximately 43% ($n = 86$) accepted. Participants who accepted HIV tests at the end of the intervention took longer to respond to postintervention questions, which included the offer of an HIV test, $F(1, 195) = 37.72, p < .001$, compared with participants who did not accept testing. Participants who incorrectly answered pretest questions about HIV symptoms were more likely to accept testing $F(14, 201) = 4.48, p < .001$. White participants were less likely to accept tests than Black, Latino, or “Other” patients, $\chi^2(3, N = 202) = 10.39, p < .05$. Time spent responding to postintervention questions emerged as the strongest predictor of HIV testing, suggesting that patients who agreed to test spent more time thinking about their response to the offer of an HIV test. Examining intervention usage data, pretest knowledge deficits, and patient demographics can potentially inform more effective behavioral health interventions for underserved populations in clinical settings.

Keywords

behavior; emergency department; HIV; knowledge; technology; video

Health care providers generally acknowledge the importance of HIV testing education in high-volume clinical settings, but staff may lack the time or training to provide patients with

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the necessary information (Merchant, 2007). Computer-based video interventions offer a solution that can increase both knowledge and testing rates, including testing by people who initially decline to learn their HIV status, without overburdening staff or interfering with patient care (Aronson & Bania, 2011). Computer-based video interventions have been shown to be effective in promoting health behavior change in a variety of settings, including interventions to increase HIV testing among underserved populations in clinical environments (Aronson & Bania, 2011; Carey, Coury-Doniger, Senn, Vanable, & Urban, 2008; Merchant, 2007, 2009).

However, few studies have examined how individual patients' interactions with computer-based video may relate to behavioral outcomes. While studies frequently examine postintervention test rates and mean knowledge scores, other routinely collected data (e.g., time spent with an intervention, pretest knowledge deficits, and participant demographics) may collectively yield important findings that can potentially inform more effective future interventions for populations in greatest need.

Because people with undiagnosed HIV will not receive treatment and may unknowingly infect others, the Centers for Disease Control and Prevention (CDC) recommend routine testing for patients aged 13 to 64 years in all health care settings, with limited exceptions, unless a patient specifically declines an HIV test (Branson et al., 2006). New York State similarly requires hospital and primary care staff to offer an HIV test to all patients aged 13 to 64, with some exceptions (New York State Department of Health, n.d.). Furthermore, the CDC recommends enhanced efforts to increase HIV test rates, especially among high-risk groups, including Black people, who tend to test less frequently and are more likely to be diagnosed with HIV the first time they have an HIV test compared to other population groups (CDC, 2012).

In light of the above, questions of how to design and deliver interventions that increase HIV test rates take on particular significance in high volume, urban health care settings, including hospital emergency departments (EDs), that often serve vulnerable populations who may have limited access to health care providers and, correspondingly, to health education. Interventions must not only be brief enough to offer while patients are receiving treatment; they must also be effective enough to reach patients who decline voluntary HIV testing because they (sometimes) falsely believe they are not at risk (Swenson, Hadley, Houck, Dance, & Brown, 2011) or because they fear a positive result (CDC, 2003). Content and intervention design must also help learners recognize gaps in their knowledge, including misconceptions (Rotheram-Borus, Ingram, Swendeman, & Flannery, 2009). If participants believe they already know all they need to know about HIV, they may not attend to intervention content and may remain unlikely to test. Much remains unknown as to how these interventions can be optimized for patients who could benefit most and how time to completion, baseline knowledge, and participant race may contribute to postintervention behavior in a given setting.

Prior Relevant Research and Rationale for the Current Analysis

The present study was conducted to systematically examine what factors are associated with decisions to test for HIV following a computer-based intervention. As detailed below, although several studies have examined some aspects of patients' use of computer-based video interventions, a systematic analysis of how factors such as time to completion of the computer-based intervention, participant baseline knowledge, and participant race may contribute to postintervention behavior has not been conducted. These data may be critical for understanding how these interventions can be optimized for patients who may need them the most.

Merchant et al. (2007, 2009) measured postintervention knowledge of HIV testing among ED patients who received an in-person presentation or watched a 9.5-minute video and found that the video was an acceptable substitute for information delivered in person. Because these two studies examined postintervention knowledge, but did not employ a pre-post comparison, it may be hard to determine what participants learned from the intervention and what they knew beforehand. Calderon et al. (2009) examined pre-post knowledge change among ED patients who received a computer-based video intervention, but like Merchant et al. (2007, 2009), delivered the intervention only to participants who had already agreed to HIV testing, and therefore did not report behavioral outcomes or examine how using video to address specific knowledge deficits might lead to changes in behavior. Conversely, Gilbert et al. (2008) found significant reductions in drug and sexual-risk behaviors among patients at outpatient HIV clinics who participated in a computer-based video intervention designed to decrease risk behaviors and encourage more honest risk reporting, but the study did not examine participant knowledge.

Carey et al. (2008) recruited sexually transmitted disease clinic patients who declined HIV testing and randomized them to view a DVD or receive stage-based behavioral counseling. Carey et al. found pre-post knowledge increases among both groups and found that significantly more patients in the stage-based counseling group accepted an HIV test following the intervention. Calderon et al. (2011) examined pre-post intervention knowledge change and HIV testing rates among ED patients who were randomized to watch a 4-minute educational video or to receive in-person HIV counseling. Calderon et al. reported that mean postintervention HIV knowledge scores were higher for the video group than for the group that met with an HIV counselor and that participants in the video group were more likely to accept an HIV test.

Although the above studies provided important results, they did not report what specific knowledge may have been lacking among participants at baseline or how effective the video was at increasing correct answers to specific items, or groups of related items.

To examine how social cognitive theory (SCT; Bandura, 1986, 1994) and the information, motivation, behavioral skills model (IMB; Fisher & Fisher, 1992, 2000) could be more effectively applied to computer-based video interventions, Aronson and colleagues (Aronson & Bania, 2011; Aronson, Plass, & Bania, 2012) randomized ED patients into four groups and showed each a different video guided by IMB and SCT, designed to increase

knowledge and test rates. The videos depicted either a White health care provider speaking with a White patient or a Black provider speaking with a Black patient. Additionally, the health care providers either spoke in positive terms, emphasizing the benefits of testing or in negative terms, stressing the dangers of not testing. SCT extensively discusses educational modeling and vicarious learning. IMB emphasizes that effective interventions must not only impart knowledge but also must motivate people to act. However, although both sets of theories make extensive recommendations that can be applied to intervention videos, neither conclusively addresses fundamental questions the producers of any intervention video must answer: whether the people appearing onscreen in a video should be racially matched to the viewer and how they should frame their messages (Aronson et al., 2012). The study found that participants first offered an HIV test after watching a video were significantly more likely to test compared to participants who were offered a test by a triage nurse before watching a video (Aronson & Bania, 2011; Aronson et al., 2012). However, no single video emerged as significantly more effective in terms of increasing test rates or pre-post knowledge change.

Although Aronson and colleagues (Aronson & Bania, 2011; Aronson et al., 2012) reported pretest knowledge scores, the study did not examine how baseline knowledge deficits may have related to decisions to test following the intervention. Additionally, none of the above studies (Aronson & Bania, 2011; Aronson et al., 2012; Calderon et al., 2011; Carey et al., 2008) examined potential relationships between time spent with an intervention and participants' decisions to test. Furthermore, Carey et al.'s (2008) and Aronson and colleagues' (Aronson & Bania, 2011; Aronson et al., 2012) studies both report the racial breakdown of their samples but do not report whether some racial groups were more likely to test following the intervention compared to others. As mentioned earlier, given the CDC's recent call to increase HIV test rates among specific population groups, including Black people, it may prove worthwhile to examine an intervention's effectiveness by participant race.

Building on these earlier findings, it may emerge that a more comprehensive examination of how long participants spend with an intervention, what knowledge they lacked at baseline, and demographic data, including race, can provide a more detailed understanding of data from a clinical trial. First, item-by-item analyses can enable more fine-grained examinations of how incorrect responses to specific pretest questions may be related to behavioral outcomes after watching an educational video. For example, would a video that successfully addresses misconceptions about HIV symptoms lead to increased HIV testing among participants who incorrectly answered related preintervention questions? Second, how does the length of time a participant requires to complete an intervention relate to decisions to test, and does it make a difference if participants spend longer on one part of the intervention than on another? Third, is an intervention more effective among specific population segments, or is the intervention equally effective among all participants in a given setting? Does an intervention designed to increase test rates among hard to reach populations work for participants who, as a group, test less frequently? Last, which of these factors will emerge as the strongest predictor of HIV testing following the intervention? Answering the above questions may help us develop more effective interventions for high-need populations in challenging environments, such as high-volume EDs.

Method and Sample

This article reports on a secondary analysis of patient response to Aronson and colleagues' (Aronson & Bania, 2011; Aronson et al., 2012) computer-based intervention designed to increase HIV testing among ED patients. Our current analyses examine whether participants who lacked knowledge in specific subject areas were more likely to accept a test after watching a video. Additionally, our current article examines how patients' decision to test at the end of the intervention may vary by race and how details of participant interaction with the intervention, for example, how long patients spent on each section of the intervention (pretest, video, posttest), may relate to participants' decision to learn their HIV status. Last, our current article examines which of the factors listed above most strongly predict whether patients in the ED accepted an HIV test after watching a very brief video.

Participants

A total of 202 adult patients in a large, high volume, urban hospital ED were recruited in the summer of 2008. Participants self-identified as Black or African American ($n = 74$, 36.6%), White ($n = 60$, 29.7%), Latino ($n = 49$, 24.3%), and other ($n = 19$, 9.4%). Approximately 56% of patients in the sample ($n = 113$) self-identified as female and roughly 44% ($n = 89$) as male.

Procedure

After providing written consent, participants were handed inexpensive netbook computers (approximately \$400 at time of purchase) running custom-designed software developed specifically for Aronson and colleagues' (Aronson & Bania, 2011; Aronson et al., 2012) study. The software integrated data collection instruments with brief educational video segments. All consent materials were approved by all governing institutional review boards. Patients who were younger than 18 years, who did not speak English, who were unconscious, or who otherwise could not provide informed consent were excluded from the study.

The video segments were roughly 2.5 minutes long and played automatically when patients completed the preintervention data collection items. The videos appeared onscreen accompanied by standard controls enabling patients to pause, fast forward, and rewind. After the video, the application automatically presented the posttest questions. At the end of the intervention, the application asked participants if they would like an HIV test. Possible responses were either "Yes" or "No."

The intervention recorded how long each participant spent answering pretest questions, watching the video segments, and responding to posttest questions, including the offer of an HIV test. All data were transmitted to an offsite, password-protected server via mobile broadband connection. On average, the entire process took slightly more than 10 minutes.

If patients accepted an HIV test, the researchers informed the patients' physician. All HIV testing was performed by hospital staff separate from this research. To protect patient privacy, the Aronson and colleagues (Aronson & Bania, 2011; Aronson et al., 2012) study did not record HIV test results or other personal health information as part of this research.

Measures

Data collection instruments included basic demographic questions, such as age, race, and gender; five-item pre–post knowledge tests; pre–post questions asking the participants how likely they were to accept an HIV test if one were offered; and pre–post questions measuring intent to use a condom during future sexual activity. The pre–post intervention knowledge test items asked participants to agree or disagree with a set of statements about HIV testing and prevention, using 5-point Likert-type multiple choice scales with responses ranging from “completely disagree” to “completely agree.” For example, participants were asked to agree or disagree with the following statements about HIV symptoms:

- When people first get infected with HIV they feel sick right away.
- You can tell from looking at someone if they have HIV/AIDS.

We judged a response correct when participants selected “completely agree” or “somewhat agree” for a true statement or “completely disagree” or “somewhat disagree” for a false statement. A full list of questions appears in Table 1.

HIV test acceptance was operationalized in two ways. Data on likelihood of HIV testing were collected at both pre- and post-intervention, using a Likert-scale response format. Data on whether a participant actually accepted an HIV test immediately post-intervention were collected and recorded as a separate dichotomous outcome variable.

Analysis

For the analyses described in the current article, we ran multiple chi-squares to examine relationships between time spent with the intervention, preintervention knowledge, participant race/ethnicity, and HIV test rates. We also used analysis of variance to compare means across groups and subsequently examine the relationship between preintervention knowledge and HIV test acceptance, while controlling for self-reported preintervention likelihood of HIV testing. We calculated knowledge test performance item-by-item, rather than by mean test scores. This enabled us to conduct analyses by specific knowledge test questions as well as by construct. We used binary logistic regression models to examine the relative strength of multiple predictor variables. We present post hoc effect size and confidence intervals where appropriate.

The length of time that participants spent with the intervention was recorded by the intervention in milliseconds. During analysis, we converted these data from milliseconds to minutes and removed extreme outliers. Because we collected data in the main treatment areas of a high-volume hospital emergency department, there were occasions when patient care required participants to put the intervention aside for extended periods of time. For example, participants could pause a video while they spoke with their doctor or while the doctor administered treatment. In some cases, these delays resulted in much longer intervention times. A total of 6 participants who took longer than 28 minutes to complete the intervention were considered outliers and were not counted in this analysis of time spent on the posttest questions. Participants included in the analysis required a minimum of 2.62 minutes and a maximum of 25.72 minutes to respond to all posttest questions.

Results

Likelihood of HIV Testing

Self-reported likelihood of HIV test acceptance at baseline is as follows: highly unlikely = 27.2% ($n = 55$), somewhat unlikely = 6.9% ($n = 14$), neutral = 21.8% ($n = 44$), somewhat likely = 13.9% ($n = 28$), and highly likely = 30.2% ($n = 61$).

Baseline Knowledge and Decisions to Test for HIV

Participants who incorrectly answered one or both of the pre-test questions about HIV symptoms were significantly more likely to accept a test after watching a video segment compared with participants who answered both items correctly, $F(14, 201) = 4.48, p < .001$. The corresponding effect size for this result is $d = 0.25$. Please see Tables 1 and 2 for more detail.

Among participants who indicated they would be likely to accept an HIV test at pretest, those who then incorrectly answered one or both of the pretest questions about HIV symptoms were also significantly more likely to accept an HIV test after watching a video segment compared with those participants who answered both items correctly, $F(2, 58) = 3.15, p < .05$. This trend also holds among participants who indicated they were unlikely to accept an HIV test at pretest. Specifically, among this group, participants who incorrectly answered one or both of the pretest questions about HIV symptoms were also significantly more likely to accept a test after watching a video segment compared with those participants who answered both items correctly, $F(2, 52) = 4.39, p < .05$.

No significant relationships were found between incorrect answers to pretest items about knowledge of HIV testing procedures and results or about condom knowledge and accepting an HIV test after watching a video segment, $\chi^2(1, N = 202) = 0.635$; $\chi^2(1, N = 202) = 0.127$, respectively.

After running a binary logistic regression using two predictor variables—(1) which video participants saw and (2) number of preintervention symptoms questions incorrectly answered—baseline knowledge deficits about HIV symptoms were a significant predictor of HIV test acceptance, regardless of which of the four videos they watched (Wald statistic = 7.077, $p = .035$). The corresponding effect size for this result is reflected in the following odds ratio: 1.6 (95% confidence interval [CI] = 0.568–3.877).

Results by Demographic

White participants were significantly less likely to accept a test at the end of the intervention, compared to Black, Latino, or Other patients, $\chi^2(3, N = 202) = 10.39, p < .05$. The corresponding measure of association for this analysis is Cramer's $V = 0.227 (p < .05)$. Please see Table 3 for more detail.

White participants were also significantly less likely to incorrectly answer one of the two symptoms questions at baseline compared with Black, Latino, or Other patients, $\chi^2(6, N = 202) = 18.16, p < .05$. No significant differences in answering both symptom items incorrectly at baseline were observed by racial group, $\chi^2(3, N = 202) = 0.834$.

The results of a binary logistic regression model using three predictor variables—(1) which video participants saw, (2) number of pretest symptom questions incorrectly answered, and (3) participant race—indicated that the number of pretest symptom questions incorrectly answered and participant race (defined as White, Black, Latino, or Other) are significant predictors of HIV testing, while controlling for type of video (Wald statistic = 6.563, $p = .038$; Wald statistic = 9.685, $p = .021$, respectively). The corresponding effect sizes for these results are reflected in the following odds ratios: (a) 1.317 (95% CI = 1.035–1.808 and (b) 2.595 (95% CI = 1.159–5.811), respectively.

Separate analyses indicated that neither participant age (Wald statistic = 2.459, $p = .117$) nor participant gender (Wald statistic = 1.958, $p = .162$) significantly predicted HIV testing after watching a video.

Time Spent on the Intervention

Participants who accepted an HIV test at the end of the intervention took longer to respond to postintervention questions, which included the offer of an HIV test, $F(1, 195) = 37.72$, $p < .001$, than participants who did not accept a test. The corresponding effect size for this result is $d = 0.28$. Please see Table 4 for further detail.

Independent-sample t tests were subsequently conducted to determine if there were significant differences in time spent answering pretest questions or time spent watching a video by HIV test acceptance. This analysis did not yield significant results for either test, $t(195) = 0.190$, $p = .849$; $t(196) = 1.347$, $p = .179$, respectively.

Relative Strength of Predictors

The results of a binary logistic regression model using four predictor variables—(1) which video participants saw, (2) number of pretest symptom questions incorrectly answered, (3) participant race, and (4) length of time spent answering postintervention questions—indicate that the length of time participants spent answering postintervention questions significantly predicts HIV test acceptance while controlling for type of video, performance on pretest questions, and participants' race (Wald statistic = 20.118, $p = .006$). It should be noted that video type, preintervention symptom construct score, and participant race were not found to be statistically significant variables in this final model. Using the results of the Cox and Snell and Nagelkerke Pseudo- R^2 test statistics, we then provide a rough comparison of the explanatory power of the models looking at the relationship between these key predictors and HIV test acceptance. Length of time spent answering postintervention questions was found to have a stronger relationship to HIV test acceptance in comparison to baseline knowledge or participant race. The corresponding effect size for this result is reflected in the following odds ratio: 1.247 (95% CI = 1.152–1.409). This odds ratio represents the contrast between White participants and non-White participants. Please see Table 5 for more details. The estimates of effect size for the three nonsignificant variables are also reported here—(1) video type: 0.464 (95% CI = 0.175–1.229), (2) preintervention symptom construct score: 1.127 (95% CI = 0.593–2.141), and (3) participant race: 1.302 (95% CI = 0.391–4.337).

Discussion

Our analyses enabled us to examine how the length of time participants spent with an intervention, their baseline HIV-related knowledge, and their race may have contributed to their decisions to accept an HIV test. Although we describe other studies that previously examined the use of computer-based video interventions to increase HIV testing in clinical settings (Aronson & Bania, 2011; Aronson et al., 2012; Calderon et al., 2011; Carey et al., 2008), none examined how the above factors may collectively influence postintervention test rates. As mentioned earlier, computer-based interventions frequently collect the types of data we used in this analysis: participant time spent with an intervention (including time on each section), correct/incorrect answers to pretest knowledge questions, and participant demographics including race. We suggest that examining these data in conjunction with primary outcome measures (i.e., HIV test rates and correct knowledge test answers following the intervention) may provide a better understanding of what makes an intervention successful.

We found that participants who accepted an HIV test after watching a video spent significantly longer responding to the postintervention questions, which included the offer of an HIV test. We also found that the time participants spent responding to the posttest questions was the strongest and the only significant predictor of whether a participant tested for HIV at the end of the intervention, while controlling for video type, preintervention symptom construct score, and participant race. This may indicate that people who ultimately accepted a test were more engaged at the end of the intervention and perhaps took more time to complete the intervention because they were deliberating whether or not to learn their HIV status. In terms of the information motivation behavioral skills model (Fisher & Fisher, 1992, 2000), our findings may indicate that patients who spent more time responding to the posttest questions were better motivated to attend to our intervention and take action. These findings also underscore the value of examining how participant usage data, including time to completion, may predict outcomes. Studies of computer-based behavioral health interventions delivered in clinical settings frequently report the mean time participants require to complete an intervention and separately report demographic factors that may predict behavioral outcomes (e.g., how race is associated with decisions to accept an HIV test). However, potential relationships between how long people spend on an intervention and their postintervention behavior remain underexplored. Thus, our findings suggest that analyzing participant usage data may yield a richer quantitative examination of what makes an intervention effective, and we therefore suggest additional research exploring how the ways people use technology-based interventions may influence primary outcomes, such as test rates (Aronson, Marsch, & Acosta, 2013).

Analyzing not only what participants knew at the end of the intervention but also at the start enabled us to examine what knowledge was lacking among our sample, and potentially, how baseline knowledge gaps may relate to decisions to test after watching a video. The finding that approximately 17% ($n = 35$) of participants incorrectly answered at least one of two basic pretest questions about HIV symptoms indicates that a substantial proportion of the people in our sample had fundamental health knowledge deficits that potentially placed them at risk. As noted earlier, the intervention software asked participants to agree or

disagree with statements that people infected with HIV immediately feel sick and that they could tell from looking at someone if the person had HIV/AIDS. People who believed at baseline that someone infected with HIV would immediately feel sick might incorrectly, but logically, conclude that if they did not feel ill then they had no need to take an HIV test, because an absence of symptoms could be interpreted as evidence of good health. Similarly, people who believed they could ascertain from looking at someone whether that person had HIV/AIDS might incorrectly believe they had no need to take an HIV test because none of their sexual partners displayed visible symptoms. It therefore appears that addressing these misconceptions may have been a key step to helping patients understand the importance of HIV testing.

Similarly examining pretest responses can help researchers and clinicians develop interventions optimized to provide information lacking among a specific sample: item-by-item examinations offer detailed assessments of what participants do not know at baseline. Likewise, if analyses establish that a sample already has a strong preintervention understanding of specific knowledge points before beginning an intervention, developers can focus on other content that may prove more needed. Similar analyses can be applied in an iterative process and can also be applied to interventions on subjects other than HIV and in settings far beyond the ED.

Last, analyses of participant demographics indicate that White participants were significantly less likely to accept an HIV test regardless of which video they were shown as part of the intervention. The finding that participants responded differently by demographic appears to underscore the need for better understanding of how specific groups may respond to the same intervention, especially in light of CDC recommendations emphasizing the need to increase test rates among populations that frequently do not test (CDC, 2012). Why these between group differences emerged remains unclear, but we suggest that our preliminary results are encouraging. Health disparity populations are in need of effective interventions, especially in high-volume, urban clinical environments where available resources may not always accommodate patient education. It may emerge that our methodology can be used to adapt, or tailor, other intervention materials for greater effectiveness among high-risk, underserved populations.

It is also possible that between group differences may emerge by behavioral characteristics, in addition to demographics. For example, in a separate study, ED patients who reported specific types of substance use appeared more likely to test for HIV following an intervention compared with other ED patients (Aronson, Rajan, Koken, Marsch, & Bania, 2013). Additional comparative trials of differently configured video segments combined with qualitative interviews of patients who complete interventions may provide valuable data about what participants found most, or least, effective and how subsequent iterations can be optimized for greater effectiveness.

Although our analyses examine differences in intervention effectiveness among different population groups by race, we do not have the data to control this analysis for possible confounders of racial differences (e.g., socioeconomic status, education level) and did not have the sample size to control for the demographic variables we do have (age, gender). The

study's overall sample size of 202 participants creates another limitation as we attempt to compare subsections of the population that contain fewer subjects per cell (e.g., Black/African American participants compared with White participants or participants who incorrectly answered a symptoms question at baseline compared with participants who answered symptoms correctly.) Additional research with larger samples is warranted to further examine how these factors may influence the intervention's effectiveness and how future iterations can be refined to further increase HIV test rates among high-need, high-risk populations.

We suggest that similarly fine-grained examinations exploring how intervention usage data, baseline knowledge, and participant characteristics (demographic or behavioral) can lead to more effective computer-based interventions for participants who may otherwise not be reached.

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Table 1

Knowledge Items Descriptive Statistics (Pretest).

Item	Percentage Correct	Percentage Incorrect
Any type of condom (male or female) will protect you from HIV.	54.5	45.5
You are automatically tested for HIV anytime your doctor gives you a blood test.	70.8	29.2
When people first get infected with HIV they feel sick right away.	75.2	24.8
You can tell from looking at someone if they have HIV/AIDS.	91.1	8.9
Getting an HIV negative test result means I'm not infected.	52.5	47.5

Table 2

HIV Test Acceptance Rates by Pretest Symptoms Knowledge.

Responses to Preintervention Knowledge Test Questions About HIV Symptoms	<i>n</i>	<u>HIV Test Acceptance</u>	
		Yes (%)	No (%)
Both answers correct	167	32.7	50.0
One correct answer, one incorrect answer	26	5.9	6.9
No correct answers	9	4.0	0.5
Total	202	42.6	57.4

Table 3

HIV Test Acceptance Rates by Race/Ethnicity.

Race/Ethnicity	n	HIV Test Acceptance	
		Yes (%)	No (%)
Black	74	52.7	47.3
Latino	49	49.0	51.0
White	60	26.7	73.3
Other	19	36.8	63.2

Table 4

Posttest Length (Minutes) by HIV Test Acceptance.

	HIV Test Acceptance	
	Yes (<i>n</i> = 85)	No (<i>n</i> = 111)
Mean	10.4	6.76
Standard deviation	5.02	3.23
Standard error	0.55	0.31
Minimum	4.33	2.62
Maximum	25.7	24.7

Table 5

Binary Logistic Regression Analysis Summary.

Significant Predictor	Variables Controlled for	Outcome Variable	Wald Statistic	(Cox & Snell) R^2	Significance
Symptom construct score (preintervention)	Video type	HIV test acceptance	7.077	.046	$p = .035$
Symptom construct score (preintervention)	Video type, participant race	HIV test acceptance	6.563	.042	$p = .038$
Participant race	Video type, symptom construct score (preintervention)	HIV test acceptance	9.685	.087	$p = .021$
Length of time spent answering postintervention questions	Type of video, symptom construct score (preintervention), participant race	HIV test acceptance	20.118	.200	$p = .006$