

Privacy, HIV Testing, and AIDS: College Students' Versus Parents' Perspectives

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This study examines privacy, HIV testing, and AIDS from the perspective of social judgment theory to provide insights to AIDS campaign planners. Participants ($N = 367$) were surveyed concerning (a) perceptions that release of information about HIV testing violates privacy, (b) contact with persons who have tested HIV positive or have died from AIDS, (c) attitude toward homosexuality, (d) religious intensity and ideology, and (e) sex-role instrumentality and expressiveness. Results indicate that individuals' perceptions of privacy predict willingness to disclose results of HIV tests and specific knowledge of who has been tested. These findings may be especially important to policymakers and campaign planners as issues surrounding HIV testing become more prevalent.

A tremendous amount of resources is currently being expended to educate Americans about AIDS. Researchers have recently reported a sharp reduction in the incidence of AIDS in the homosexual community (e.g., Stall, Coates, & Hoff, 1988). Some link this reduction to increased knowledge, reduced risky behavior, and voluntary HIV testing (e.g., Witte, 1989). For other groups, however, AIDS education campaigns have been less successful (see Edwards & Hiday, 1987; Hirschorn, 1987). Ross and Rosser (1989) concluded that the effectiveness of AIDS campaigns lies in their ability to modify attitudes and beliefs about AIDS. This may support social judgment theory's proposition that involvement in a message topic affects the message's effectiveness (Petty, Cacioppo, & Schumann, 1983; Sherif, Sherif, & Nebergall, 1965), and it will be important to see if this holds

true for AIDS campaigns. This article examines attitudes toward privacy and release of information about HIV testing from the perspective of social judgment theory to provide insight to AIDS campaign planners.

HIV TESTING

HIV testing has generated controversy in response to AIDS as a potential threat to public health. Options discussed to address this potential threat have included both voluntary HIV testing and mandatory HIV testing. Gunderson, Mayo, and Rhame (1989) viewed HIV testing proposals as having three distinct dimensions, including who will be targeted, whether testing will be voluntary or mandatory, and what the distribution or use of test results will be. One societal goal of HIV testing is to identify the incidence of the disease, which will help determine its potential threat to public health; HIV testing does provide significant individual and societal health data. This goal may be achieved, however, by giving public agencies access to information about results of HIV tests without providing personally identifiable information regarding who has been tested for HIV. Based on this reasoning, it is predicted that individuals will perceive access to information about results of individuals' HIV tests to be more important than access to information regarding who has been tested for HIV (Hypothesis 1).

Persons living with AIDS (PLWAs), even those tested for HIV, face a wide range of potential discrimination. As Gunderson et al. (1989) noted, AIDS spreads panic, as well as death. Individuals tested for HIV, therefore, may not want this information released. Release of personal information regarding HIV testing relates most directly to the informational component of privacy, or what data regarding an individual are accessible to others (see J. Burgoon, 1982).

Informational privacy is often referred to as *confidentiality* in medicine (Parrott, J. Burgoon, M. Burgoon, & Le Poire, 1989). Patient-physician interactions are conceived of generally as containing confidential or privileged information (Weiss, 1982). A person's medical records ordinarily may be considered confidential. A number of states, however, have classified AIDS as a reportable condition, and this could require disclosure of HIV testing information (Gunderson et al., 1989; Hermann & Schurgin, 1991). The legal rights and responsibilities of physicians are affected by a patient's likelihood of transmitting HIV (Bullock & Faber, 1989; Dickens, 1988; Wood, 1988). Dilemmas may arise when individuals test HIV positive and physicians or others perceive that release of information regarding the identity of those individuals promotes the public good or the good of other individuals. Thus, access to information regarding HIV tests may be perceived as a violation of privacy, and it is predicted that individuals' perceptions that access to information about HIV testing violates privacy directly relate to support for restrictions on access to information about (a) results of individuals' HIV tests and (b) who has been tested for HIV (Hypothesis 2).

Individuals' perceptions that access to information about HIV testing violates privacy may hamper efforts to promote voluntary HIV testing, and social judgment theory may provide a framework for understanding this phenomenon. Social judgment theorists propose that to be most effective, messages should fit within an audience's latitude of acceptance (Sherif et al., 1965). Some individuals' latitudes of acceptance may be quite narrow, as predicted by their ego involvement with the topic. High ego involvement suggests that a topic (e.g., AIDS) is personally relevant and that an individual is already committed to a point of view. Higher ego involvement increases the likelihood of assimilation and contrast effects, which inhibit persuasive effectiveness. Assimilation occurs when individuals judge a message to be closer to their own point of view than the message actually is, whereas a contrast effect refers to the judgment that a message is more discrepant than it actually is (Granberg, 1982). The isolation of variables likely to lead to assimilation and contrast effects promotes a campaign planner's ability to effectively tailor messages for audiences. Several variables have been shown to affect attitudes toward HIV testing, and we review these in the context of social judgment theory.

Contact With PLWAs

One variable that may predict high ego involvement and a contrast effect regarding access to information about HIV tests is personal contact with PLWAs. Personal contact with PLWAs may increase awareness of the discrimination associated with AIDS/HIV. In fact, revelation of the harm associated with the release of information regarding HIV testing and AIDS contributed to the recommendation by the Presidential Commission on the Human Immunodeficiency Virus Epidemic (1988) for stronger legal protection of the privacy of HIV-infected persons. Therefore, it is predicted that individuals personally acquainted with PLWAs are more likely to perceive that access to information regarding HIV testing violates privacy and are more likely to support restrictions on access to information about results of individuals' HIV tests and who has been tested for HIV (Hypothesis 3).

Attitude Toward Homosexuality

Access to information regarding HIV testing is particularly sensitive because it may suggest information regarding sexual behavior. Perceptions of AIDS as a predominantly sexually transmitted disease have focused attention on the homosexual community (Cleveland, Walters, Skeen, & Robinson, 1988; Morin, Charles, & Maylon, 1984). "Because gay men were initially considered to be the primary group for contracting AIDS, attitudes about homosexuality have greatly influenced attitudes toward AIDS as a disease process and toward people with AIDS" (Cleveland et al., 1988, p. 150). Not all homosexuals are at risk for contracting AIDS, only those who participate in high-risk activities. Nevertheless, the general

public continues to associate AIDS with homosexuality. In fact, some (e.g., Cline & Johnson, 1992) have argued that one of the consequences of the AIDS epidemic has been to exacerbate an already high level of homophobia.

Attitudes toward homosexuality and AIDS have been shown to be closely related, with many researchers confirming general negative attitudes toward homosexuality and AIDS (e.g., Larsen, Long, & Serra, 1987; Morin et al., 1984; Triplet, 1988). Cohen and Grace (1988) found negative biases in dental school faculty both toward individuals with AIDS and toward homosexuals, and Kelly (1987) found similar results with a medical student population. Attitude toward homosexuality may also relate to awareness of the discrimination associated with AIDS and sensitivity regarding issues that threaten homosexuals' rights. A positive attitude toward homosexuality may result in the acceptance of fewer messages advocating access to information regarding HIV testing. Therefore, it is predicted that individuals who have positive attitudes toward homosexuality will perceive that access to information regarding HIV testing violates privacy, and they will support restrictions on access to information about results of individuals' HIV tests and who has been tested for HIV (Hypothesis 4).

Religiosity

Release of information about HIV testing may also invoke evaluations of a religious nature because some people conceptualize AIDS as a moral rather than a health issue. Researchers have shown that religiosity is a significant predictor of attitudes toward PLWAs (e.g., Cowell, 1985; Rudolph, 1989). The concept of religiosity comprises two dimensions (Glock, Ringer, & Babbie, 1967; Price, Terry, & Johnston, 1980): religious intensity and religious ideology. Religious *intensity* relates to an individual's level of involvement in religious activities (i.e., active or inactive), whereas *ideology* relates to the direction of one's conviction (i.e., conservative or liberal), such as the belief that school teachers should believe in God (Glock et al., 1967). Rudolph (1989) found that AIDS and the revival of fundamental religiosity have both had a negative effect on counselors' attitudes toward homosexuals. Cowell (1985) concluded that perceptions of AIDS as a moral and religious issue detract from the ability to perceive AIDS as a health issue.

If individuals perceive themselves to be active, traditionally conservative Christians, messages associated with AIDS that recommend abstinence, for example, may be assimilated. This process should be similar for any religious group that has strong views about this context. AIDS campaign planners should consider, however, that the problem likely to be associated with certain audiences' responses to AIDS-related messages is the audiences' conclusion that such messages do not concern them. Agreement with the message may not promote changes in risk-related behavior. Therefore, it is predicted that individuals high in religious intensity and conservative religious ideology will be less likely to perceive that access to information about HIV testing violates privacy and less likely to support

restrictions on access to information about results of individuals' HIV tests and who has been tested for HIV (Hypothesis 5).

Androgyny

Sex-role socialization also may affect individuals' perceptions of messages associated with HIV testing. The construct of androgyny refers to individuals' psychological sex as opposed to their biological sex (see Bem, 1974). Traditional people more often accept sex-role stereotypes associated with their biological sex. For example, Greene and Rubin (1991) found that androgyny predicts individuals' responses to gender-inclusive language use, such that more androgynous participants respond more positively to use of gender-inclusive language. Among people responding to questions regarding AIDS and policies associated with HIV testing, individuals with the most traditional sex-role stereotypes may simply regard such messages as closer to their own views than the messages actually are. Thus, it is predicted that individuals high in instrumentality and expressiveness will be less likely to perceive that access to information regarding HIV testing violates privacy and less likely to support restrictions on access to information about results of individuals' HIV tests and who has been tested for HIV (Hypothesis 6).

METHOD

Participants

Participants ($N = 367$) in this study included three groups: undergraduate students ($n = 191$) in attendance at a large Southeastern university, parents whose oldest child was under the age of 6 years ($n = 88$), and parents whose youngest child was currently in college ($n = 88$). Data were collected in late fall of 1990 and early winter of 1991. These groups represented roughly three distinct life stages: young adults, parents with preschool children, and parents with young adult children. For the young adult sample, participants ranged in age from 18 to 29 years ($M = 21.04$), and 67% ($n = 129$) were women. For the parents with preschool children sample, participants ranged in age from 20 to 57 years ($M = 30.81$), and 54% ($n = 48$) were women. For the parents with young adult children sample, participants ranged in age from 39 to 70 years ($M = 48.77$), and 51% ($n = 45$) were women.

Measurement Instruments

Participants' perceptions that access to information about HIV testing violates privacy were measured with five 5-point Likert statements with responses ranging from *strongly agree* (5) to *strongly disagree* (1). Stimulus statements included the

following: "Access to information about AIDS testing violates individuals' right to privacy"; "Public good should come before individuals' right to privacy with regard to AIDS testing" (recoded); "If I were tested for AIDS, I believe that the information would remain confidential"; "I would feel that my privacy had been invaded if I were asked if I had been tested for AIDS"; and "I would feel that my privacy had been invaded if I were asked if I had tested HIV positive for AIDS." These five items were summed and averaged. A higher score indicated agreement that access to information about HIV testing violates privacy; the reliability (Cronbach's alpha) was .78.

Access to information about results of HIV tests was measured by nine 5-point Likert statements with responses ranging from *strongly agree* (1) to *strongly disagree* (5). Stimulus statements included, for example, "Employers should have access to information about *results* of employees' AIDS tests." The items were manipulated by changing the target (employers in the example) to potential employers, co-workers, community leaders, teachers, classmates, spouses, family members, and lovers. These nine items were summed and averaged. A higher score indicated more support for restrictions on access to information about the results of HIV tests; the reliability (Cronbach's alpha) was .83.

Access to information about who has been tested for HIV was also measured by nine 5-point Likert items. One statement read, "Employers should have access to information that employees *have had* AIDS tests." Again, the target was manipulated to include potential employers, co-workers, community leaders, teachers, classmates, spouses, family members, and lovers. These nine items were summed and averaged. A higher score indicated more support for restriction on access to information about who has been tested for HIV; the reliability (Cronbach's alpha) was .86.

Two items measured personal contact with PLWAs and asked respondents about personal acquaintance with someone who had tested HIV positive or had died from AIDS or complications due to AIDS. From this information, two groups were formed: (a) no personal contact ($n = 279$) and (b) personal contact ($n = 87$), and these were scored 0 and 1, respectively.

Attitude toward homosexuality was measured by six 5-point Likert statements adapted from Cleveland et al. (1988). These asked participants if they thought homosexuality was a sign of sickness, acceptable, normal for some, sinful, and so forth. These six items were summed and averaged, with a higher score indicating more positive attitude toward homosexuality; the reliability (Cronbach's alpha) was .84.

The religiosity scale included six items from Glock et al. (1967) to measure intensity and eight items adapted from Price et al. (1980) designed to measure ideology. Items measuring religious intensity were forced choice, for example, statements about frequency of attendance at worship services and importance of religion in one's life. Scores were summed, with a higher score indicating more religious intensity or activity; the reliability (Cronbach's alpha) was .88. The eight

items for the ideology instrument were 5-point Likert-type statements such as "I agree with what the Bible teaches about separate roles for men and women," and "School teachers should believe in God." These scores were summed and averaged, with a higher score indicating agreement with more traditionally conservative religious beliefs; the reliability (Cronbach's alpha) was .90.

The androgyny scale was taken from Wheelless and Dierks-Stewart (1981), a short form derived from Bem's (1974) Sex-Role Inventory. This self-assessment instrument contains 20 stimulus adjectives rated on a scale of 1 to 7, asking participants to describe themselves by responding to the statement "how much this characteristic [stimulus adjective] is true of me" (e.g., aggressive, competitive, sensitive). This instrument yields two dimensions by forming composite scales, and the two subscales (instrumental and expressive) were formed by summing and averaging the items. A high score on either subscale indicated more agreement that the adjectives described the participant. For the instrumental dimension, the reliability (Cronbach's alpha) was .88; for the expressive dimension, the reliability (Cronbach's alpha) was .92.

Analyses. The level of significance was set at $p \leq .05$ for all tests. At the univariate level, analyses consisted of *t* tests, Pearson product-moment correlations, and one-way analyses of variance (ANOVAs). To better understand the relations among the variables, stepwise multiple regression models were constructed.

RESULTS

Access to Information

To examine the first hypothesis, a paired sample *t* test was conducted. Results demonstrated, $t(366) = 8.66$, $p < .001$, that participants supported access to information about results of individuals' HIV tests ($M = 2.96$, $SD = 0.73$) more often than they supported access to information about who has been tested for HIV ($M = 3.21$, $SD = 0.76$), as was predicted. A higher mean score indicated greater agreement with restrictions on access to information regarding HIV tests.

To further understand these relations, differences by sample group were compared. One-way ANOVAs demonstrated significant differences among young adults, parents with preschool children, and parents with young adult children in support of both access to information regarding results of HIV tests, $F(2, 364) = 6.30$, $p < .01$, $\eta^2 = .03$, and access to information regarding who has been tested for HIV, $F(2, 364) = 3.47$, $p < .05$, $\eta^2 = .02$. Neither young adults nor parents with preschool children differed significantly from parents with young adult children on either access to results of HIV tests or information about who has been tested for HIV. Young adults ($M = 3.07$, $SD = 0.66$), however, sup-

TABLE 1
Partial Correlation Matrix for Young Adults

<i>Variables in the Models</i>	<i>Access to Results of HIV Tests</i>	<i>Access to Who Has Been Tested</i>	<i>Access Violates Privacy</i>
Access to results of HIV tests			
Access to who has been tested	.67**		
Access violates privacy	.57*	.45**	
Attitude toward homosexuality	.29**	-.16	.26**
Religious intensity	-.19*	-.13	-.09
Religious ideology	-.25**	-.15	-.11
Expressiveness	-.03	-.09	.01
Instrumentality	-.06	-.08	-.20*

* $p < .01$. ** $p < .001$.

ported restrictions on access to information for results of HIV tests more often, $t(278) = 3.58$, $p < .001$, than did parents with preschool children ($M = 2.74$, $SD = 0.81$). Young adults ($M = 3.30$, $SD = 0.75$) also supported restrictions on access to information about who has been tested for HIV more, $t(278) = 2.50$, $p < .05$, than did parents with preschool children ($M = 3.06$, $SD = 0.82$).

Privacy

The second hypothesis, which predicted a direct relation between perceptions that access to information about HIV testing violates privacy and support for restrictions on access to results ($r = .64$, $p < .001$) and on who has been tested for HIV ($r = .52$, $p < .001$), was also supported. Tables 1 through 4 report the correlation matrices overall and separately by group. Additionally, a one-way ANOVA demonstrated significant differences among the three sample groups, $F(2, 364) = 15.28$, $p < .001$, $\eta^2 = .08$, on perceptions of privacy. Young

TABLE 2
Partial Correlation Matrix for Parents With Preschool Children

<i>Variables in the Models</i>	<i>Access to Results of HIV Tests</i>	<i>Access to Who Has Been Tested</i>	<i>Access Violates Privacy</i>
Access to results of HIV tests			
Access to who has been tested	.77**		
Access violates privacy	.67**	.58*	
Attitude toward homosexuality	.32*	.33**	.17
Religious intensity	-.17	-.14	-.04
Religious ideology	.19	.20	-.10
Expressiveness	.12	.13	.13
Instrumentality	-.16*	-.24	-.16

* $p < .01$. ** $p < .001$.

TABLE 3
Partial Correlation Matrix for Parents With Young Adult Children

<i>Variables in the Models</i>	<i>Access to Results of HIV Tests</i>	<i>Access to Who Has Been Tested</i>	<i>Access Violates Privacy</i>
Access to results of HIV tests			
Access to who has been tested	.75*		
Access violates privacy	.69*	.57*	
Attitude toward homosexuality	.05	-.06	.12
Religious intensity	.05	.04	.01
Religious ideology	.01	.11	.01
Expressiveness	.02	-.01	.05
Instrumentality	-.15	-.21	-.04

* $p < .001$.

adults ($M = 3.55$, $SD = 0.73$) viewed access to information about HIV testing to violate privacy more strongly than did either parents with preschool children, $t(278) = 5.43$, $p < .001$, or parents with young adult children, $t(278) = 2.32$, $p < .05$. Parents with young adult children ($M = 3.17$, $SD = 0.68$) viewed access to information about HIV testing as more of a violation of privacy, $t(175) = 2.68$, $p < .05$, than did parents with preschool children ($M = 3.05$, $SD = 0.82$).

Contact With PLWAs

To examine the third hypothesis, independent sample t tests were conducted. Individuals having personal acquaintance with persons who have tested HIV positive or died from AIDS were compared with individuals who had no such acquaintance to predict perceptions of HIV testing as a violation of privacy and support for access to information about results of individuals' HIV tests and about who has been tested for HIV. This hypothesis was not supported for the overall sample.

TABLE 4
Partial Correlation Matrix for Entire Sample

<i>Variables in the Models</i>	<i>Access to Results of HIV Tests</i>	<i>Access to Who Has Been Tested</i>	<i>Access Violates Privacy</i>
Access to results of HIV tests			
Access to who has been tested	.72**		
Access violates privacy	.64**	.52*	
Attitude toward homosexuality	.25*	.17*	.22**
Religious intensity	-.12*	-.09	-.05
Religious ideology	-.17**	-.11	-.09
Expressiveness	-.01	-.02	.05
Instrumentality	-.11	-.15*	-.16*

* $p < .01$. ** $p < .001$.

Examination of the three groups independently revealed significant differences by contact with PLWAs only for parents with young adult children. Those parents with young adult children who had personal contact with PLWAs ($M = 3.20$, $SD = 0.61$) more often supported restrictions on access to information about results of HIV tests, $t(86) = -1.94$, $p < .05$, than did parents without personal contact with PLWAs ($M = 2.86$, $SD = 0.76$). Parents with young adult children who had contact with PLWAs ($M = 3.45$, $SD = 0.50$) also more often supported restrictions on access to information about who has been tested for HIV, $t(86) = -2.52$, $p < .05$, than did parents with young adult children without personal contact with PLWAs ($M = 3.06$, $SD = 0.71$). Parents with young adult children who had contact with PLWAs ($M = 3.62$, $SD = 0.71$) also more often viewed access to information about HIV testing as a violation of privacy, $t(86) = -2.37$, $p < .05$, than did parents without personal contact with PLWAs ($M = 3.22$, $SD = 0.73$).

Attitude Toward Homosexuality

The fourth hypothesis predicted individuals' positive attitudes toward homosexuality would be directly associated with perceptions that HIV testing violates privacy and also directly related to desire to have restrictions on access to information about HIV tests. Tables 1 through 4 summarize the correlations obtained for this prediction for the overall sample and separately for the three sample groups. For the entire sample, attitude toward homosexuality was directly associated with perceptions that access to information about HIV testing violates privacy and was also directly related to support for restrictions on access to information about results of HIV tests and about who has been tested for HIV (see Table 4). This variable, however, affected sample groups differently, with the strongest relationship between attitude toward homosexuality and support for restrictions on access to information about results of HIV tests occurring for parents with preschool children (see Table 2). Young adults had the only significant relation between attitude toward homosexuality and perceptions that access to information about HIV testing violates privacy (see Table 1).

Religious Intensity and Ideology

The fifth hypothesis predicted that participants' religious intensity and conservative religious ideology would be inversely related to support for restrictions on access to information about HIV tests and perceptions that access to information about HIV testing violates privacy. As summarized in Tables 1 through 4, religious intensity and religious ideology were weakly and negatively related to support for restrictions on access to information about results of HIV tests in the overall sample, but had no relation to perceptions regarding access to information about who has been tested for HIV or perceptions that access violates privacy

(see Table 4). Thus, people with more liberal religious ideology and less religious intensity were more likely to support restrictions on access to information about results of HIV tests. Although parents with preschool children and parents with young adult children did not (see Tables 2 and 3), young adults demonstrated a significant relation between both intensity and ideology for support for restrictions on access to results of HIV tests (see Table 1).

Androgyny

The sixth hypothesis, which posited that individuals' acceptance of stereotypical sex roles predicts perceptions that HIV testing violates privacy and support for restrictions on access to results of HIV tests and to who has been tested for HIV, received some support as summarized in Tables 1 through 4. A weak inverse relation between instrumentality and support for restrictions on access to information about who has been tested for HIV and perceptions that access to information about HIV testing violates privacy were obtained for the overall sample (see Table 4). Thus, individuals who scored low in instrumentality were more likely to support restrictions on access to information about HIV testing. By group, the relation between instrumentality and support for restrictions on access to who has been tested for HIV appeared only in the young adult sample (see Table 1). The relationship between instrumentality and privacy appeared in the parents with preschool children sample (see Table 2), who also demonstrated a weak inverse relation between instrumentality and restrictions on support for access to information about results of HIV tests.

The expressive dimension was not significantly related to perceptions that access to information about HIV testing violates privacy or support for restrictions on access to results of HIV tests or to who has been tested for HIV in the overall sample (see Table 4). Expressiveness also did not relate to these variables in any of the three sample groups when considered independently (see Tables 1 through 3).

Proposed Models for Message Design

To promote understanding of these data's potential utility for AIDS campaign planners, stepwise multiple regression models were constructed. For each of the three sample groups, models were constructed to determine what predicted support for restrictions on access to information about results of HIV tests and about who has been tested for HIV, as well as for perceptions that access to information about HIV testing violates privacy. Only variables that were significant at the univariate level were entered in the separate models.

Young adults. Message designers who want to promote voluntary HIV testing among young adults should consider that two variables significantly affected young adults' desire to restrict access to results of HIV tests. First, strong sup-

port for privacy rights increased young adults' desire to restrict access to results of HIV tests, $F(1, 189) = 89.36, p < .001, b = .51$, adjusted $R^2 = .32$. Additionally, young adults' religious ideology entered the model, F change = 9.73, $p < .001, b = -.02, R^2$ change = .03. More liberal or less conservative religious ideology predicted desire for restrictions on access to results of HIV tests for young adults. Young adults' support for restrictions on access to information about who has been tested for HIV was significantly predicted by one variable, the perception that access to information about HIV testing violates privacy, $F(1, 189) = 47.45, p < .001, b = .46$, adjusted $R^2 = .20$.

For young adults, perception that access to information about HIV testing violates privacy was the biggest predictor of failure to support access to information not only about who has been tested for HIV but for access to results of HIV tests as well. Given this information, it would be important for AIDS education planners to know what affects perceptions that access to information about HIV testing violates privacy. The strongest indicator of perceptions that access to HIV testing information violates privacy was attitude toward homosexuality, $F(1, 189) = 14.16, p < .01, b = .21$, adjusted $R^2 = .07$. The second significant indicator was individuals' instrumentality, F change = 5.71, $p < .01, b = -.13, R^2$ change = .02. The two variables affected young adults' perceptions differently. Young adults who had positive attitudes toward homosexuality were more likely to perceive access to HIV test information as a violation of privacy, but those who scored higher on instrumentality were less likely to perceive this access as a violation of privacy.

Parents with preschool children. For parents with preschool children, two variables were found to predict desire to restrict access to information about results of individuals' HIV tests. First, perceptions that access to HIV testing violates privacy entered the model, $F(1, 86) = 68.82, p < .001, b = .60$, adjusted $R^2 = .44$. Second, attitude toward homosexuality entered the model, F change = 6.97, $p < .01, b = .23, R^2$ change = .04. The more parents with preschool children perceived access to violate privacy and the more positive attitude toward homosexuality they had, the more they supported restrictions on access to information about results of HIV tests. The same two variables predicted these parents' support of access to information about who has been tested for HIV. Again, perceptions that access violates privacy entered the model first, $F(1, 86) = 42.96, p < .001, b = .53$, adjusted $R^2 = .33$, and attitude toward homosexuality also entered the model, F change = 7.78, $p < .01, b = .26, R^2$ change = .05. With regard to predicting likelihood of perceiving access to information about HIV testing to be a privacy violation, none of the variables examined in this study contributed to significant differences for parents with preschool children.

Parents with young adult children. The perception of privacy for parents with young adult children was the only predictor to enter the model associated with support for restrictions on access to results of HIV tests, $F(1, 86) = 79.70$,

$p < .001$, $b = .70$, adjusted $R^2 = .48$. Similarly, perception that access violates privacy was the only predictor to enter the model for access to information about who has been tested for HIV, $F(1, 86) = 40.65$, $p < .001$, $b = .52$, adjusted $R^2 = .31$, for parents with young adult children.

The only significant predictor for perceptions of parents with young adult children that access to HIV test information violates privacy was personal contact with PLWAs, $F(1, 86) = 5.62$, $p < .05$, $b = .40$, adjusted $R^2 = .06$. Thus, those parents with no personal contact with PLWAs were relatively neutral regarding the topic. Parents with young adult children who had personal contact with PLWAs, however, agreed that access to information about HIV testing violates privacy.

DISCUSSION

Participants in this study demonstrated more support for access to information about results of HIV tests than for access to information about who has been tested for HIV. Given the severity of AIDS as a threat to health and to life itself, it is understandable that people may want access to results of HIV tests as one indicator of the prevalence of this health problem in society and as a potential indicator of personal risk. To truly represent the risk factor, as well as to mitigate the possibility of infected persons unknowingly passing the virus to others, voluntary HIV testing may be increasingly promoted by AIDS campaign planners. The likelihood of individuals being voluntarily tested for HIV, however, appears to be inhibited for all three sample groups by the perception that access to information regarding HIV tests violates privacy.

Implications for AIDS Campaigners

Campaign developers who want to increase individuals' willingness to be voluntarily tested must be aware that access to information about HIV tests may be seen as a violation of privacy. Privacy was found to be a significant indicator of individuals' support for restrictions on access to information about results of individuals' HIV tests and about who has been tested for HIV. In practical terms, participants felt that access to information about HIV testing violates privacy. Participants, however, were more inclined to support access to information regarding results of HIV tests and less inclined to support access to information about who has been tested for HIV. This suggests that individuals may want others to be tested for HIV and to have access to information about the results of those tests, at least in a general overall sense. However, individuals do not appear likely to be voluntarily tested for HIV, perhaps because they fear that access to results of tests may also lead to access regarding who has been tested for HIV, despite the fact that anonymous testing generally guarantees confidentiality. The poten-

tial negative repercussions of access to information that someone has been tested for HIV (let alone that someone tested HIV positive) for certain groups, such as employers, may explain participants' concerns.

Implications for Message Design With Social Judgment Theory

In this study, models for restrictions on access to information about results of HIV tests and access to knowledge of who has been tested for HIV were different among the three groups, and this information may be interpreted within the framework of social judgment theory. Such an interpretation provides further insight for AIDS message designers targeting these specific groups. For all three groups, perception of privacy was the best predictor, but the groups differed in what, if any, other variables entered the models.

For young adults, a greater association with traditional religious ideology reduced support for restrictions on access to sample results and may represent an assimilation effect. Young adults with traditionally religious beliefs may not perceive that messages promoting HIV testing are directed at them, so perceived risk to their privacy would not exist. Promotion of HIV testing among fundamentally religious young adults may first require construction of messages to make the issue personally salient.

Results of these data indicate that AIDS campaigns directed toward parents with preschool children must be constructed differently. A positive attitude toward homosexuality increases the perception that access to HIV testing information violates privacy and may, in the language of social judgment theorists, reflect a contrast effect. For parents with preschool children, message designers should consider introducing the topic of privacy into efforts to promote voluntary HIV testing and should directly address the issue of protecting the rights and privacy of homosexuals and PLWAs.

For parents with young adult children, personal acquaintance with PLWAs contributed significantly to differences in desire to restrict access to information about HIV tests and perceptions of privacy. The fact that personal contact with PLWAs increased willingness to restrict access to information about HIV tests may again be evidence of a contrast effect. Messages designed to reflect consideration of the rights and privacy of PLWAs may meet with less resistance for parents with young adult children, ultimately leading to greater willingness to be tested and to recommend testing.

In sum, message designers should consider promoting HIV tests in ways that reflect sensitivity to protecting rights, particularly with regard to privacy. How privacy is protected may need to be explicitly stated along with highlighting the advantages of being tested for HIV. Otherwise, individuals may be likely to contrast the message. For a successful promotion of voluntary HIV testing and support for access to information about results of HIV tests, audiences must understand

that confidentiality is guaranteed. With growing awareness of the need for HIV testing, recently highlighted, for example, by Magic Johnson's and Arthur Ashe's announcements that they are HIV positive, the task of promoting voluntary testing may become easier. However, with medical advances leading to the creation of more sensitive and diverse testing procedures (e.g., saliva tests), clearly privacy and HIV testing will continue to be a salient issue.

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