

REASONS FOR HIV DISCLOSURE/NONDISCLOSURE IN CLOSE RELATIONSHIPS: TESTING A MODEL OF HIV-DISCLOSURE DECISION MAKING

VALERIAN J. DERLEGA AND BARBARA A. WINSTEAD
Old Dominion University

KATHRYN GREENE
Rutgers University

JULIANNE SEROVICH
Ohio State University

WILLIAM N. ELWOOD
Center for Public Health and Evaluation Research

This research examined the relative importance of reasons for HIV disclosure/nondisclosure with a friend, intimate partner, and parents. Participants were 145 men and women with HIV. Overall, catharsis, a will to duty/educate, and having a close/supportive relationship were endorsed as reasons that influence HIV disclosure. Privacy, self-blame, fear of rejection, and protecting the other were endorsed as reasons that influence nondisclosure. Both men and women endorsed testing the other's reaction as a reason for disclosing more for an intimate partner, whereas they endorsed privacy more as a reason for not disclosing to a friend. Men (mostly self-identified as homosexuals or bisexuals), but not women (mostly self-identified as heterosexuals), endorsed similarity as a reason for disclosing more to a friend or intimate partner than to a parent. The results are consistent with a Model of HIV-Disclosure Decision Making that indicates how cultural attitudes

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Please address correspondence to Valerian J. Derlega, Department of Psychology, Old Dominion University, Norfolk, VA 23529-0267; E-mail at vderlega@odu.edu.

(about HIV, close relationships, and self-disclosure) and contextual factors (relational, individual, and temporal factors) influence reasons for and against HIV disclosure.

Individuals with an HIV-seropositive diagnosis face many stressors. They must cope with the physical aspects of the disease, including having a life-threatening condition, physical ailments, regular medical check-ups, and strict adherence to drug regimens (e.g., Bartlett & Galant, 2001). They also deal with psychological and social stressors associated with HIV, including concerns about dying, risk of transmission of HIV to sexual or needle-sharing partners, seeking and obtaining social support, initiating and maintaining close relationships, and the stigmatizing reactions of others (Derlega & Barbee, 1998; Kalichman, 1995, 2000).

Coping with the physical, psychological, and social aspects of HIV may be affected, in part, by decisions made about whether, when, and how to disclose the HIV diagnosis to significant others (Greene, Derlega, Yep, & Petronio, 2003; Holt et al., 1998; Serovich, 2000). For instance, perceptions of social support are positively associated with the percentage of friends, family members, and sexual partners to whom the diagnosis has been disclosed (Perry et al., 1994; Serovich, Brucker, & Kimberly, 2000), whereas negative emotional reactions, including depression and HIV-related worries, are inversely related to HIV disclosure (Armistead, Morse, Forehand, Morse, & Clark, 1999; Bennetts et al., 1999). Of course, there may be negative consequences of HIV disclosure: loss of employment; discrimination, rejection, and isolation by loved ones; shame to oneself and significant others from divulging about behaviors disapproved by society; and burdening of support providers (Alonzo & Reynolds, 1995; Castro et al., 1998; Fife & Wright, 2000; Haas, 2002; Leary & Schreindorfer, 1998; Parkenham, Dadds, & Terry, 1996; Song & Ingram, 2002; Winstead et al., 2002). Hence, individuals with HIV must weigh the pros and cons of disclosure and nondisclosure. We will present an integrative model of HIV-disclosure decision making. Then we will examine how reasons endorsed for HIV disclosure/nondisclosure (including perceptions of benefits and costs) are linked with the type of close relationship participants have with significant others—including a friend, an intimate partner, and parents.

MODEL OF HIV-DISCLOSURE DECISION MAKING

An integrative model of HIV-disclosure decision making describes the factors that contribute to the decision about whether or not to disclose

the HIV-positive diagnosis to significant others.¹ The first factor in the model focuses on the social environment in which the participant lives, including cultural attitudes about HIV, close relationships, and self-disclosure. For instance, HIV disclosure may be inhibited if individuals live in neighborhoods and/or ethnic communities that stigmatize someone with HIV (Castro et al., 1998; Mason, Marks, Simoni, Ruiz, & Richardson, 1995) or if cultural rules discourage the disclosure of distressful facts and feelings (Argyle, Henderson, Bond, Iizuka, & Contarello, 1986; Szapocznik, 1995). Also, communities have “rules and scripts for appropriate conduct” (Cupach & Metts, 1994, p. 40) that influence HIV disclosure/nondisclosure.

The second factor in the integrative model focuses on the relational, individual, and temporal contexts in which someone with HIV lives (Greene, Frey, & Derlega, 2002; Ickovics, Thayaparan, & Ethier, 2001; Revenson, 1990). These contexts include: her or his social network (e.g., based on the availability and supportiveness of friends, intimate partners, family of origin, extended family, co-workers, and health providers); progression and length of time living with HIV; and personal and network members’ characteristics (physical health, sexual orientation, drug use, age, gender, and temperament).

The nature of the social environment and of the relational, temporal, and personal contexts, in turn, affect the endorsement of reasons for and against HIV disclosure. Besides assessing one’s reasons for and against HIV disclosure to various network members, individuals must consider the proximate conditions that affect immediate decisions about whether or not to disclose. For instance, HIV disclosure may not occur if the prospective disclosure recipient is unavailable physically or emotionally (being at work, living in a distant city, or appearing depressed), circumstances do not permit talking face-to-face (e.g., too many people around, or talking on the phone seems impersonal), or an HIV-related “incremental disclosure” is associated with topic avoidance by the disclosure target (e.g., someone with HIV says to his father, “Dad, I have something important to tell you”; father replies, “Talk to me later, son. I have to walk the dog now”) (Petronio, Reeder, Hecht, & Mon’t Ros-Mendoza, 1996).

Behavioral disclosure or nondisclosure may have consequences for self, the other, and one’s relationship with the other that influence the

1. Omarzu (2000) has developed a general framework for studying self-disclosure decision making across a variety of situations. Our model focuses on disclosure issues uniquely associated with HIV and similar conditions.

preceding factors that we have described (see Dunne & Quayle, 2002; Greene et al., 2003; Serovich, 2001). For instance, disclosure about one's HIV diagnosis to neighbors may influence a community's attitudes about HIV disease. If people in a community are aware that they personally know someone with HIV, they may talk more about the disease and perhaps discard misperceptions about HIV. Disclosure also may affect the quality of close relationships depending on whether the disclosure target reacts with concern or disinterest (Barbee, Derlega, Sherburne, & Grimshaw, 1998; Haas, 2002).

There is considerable variability among targets who are told about the HIV diagnosis. Although someone with HIV is likely to disclose to sexual partners about the diagnosis (Schnell et al., 1992), disclosure is more likely to an intimate as opposed to multiple sexual partners (Stein et al., 1998). There is evidence, particularly among gay men, that someone with HIV is more likely to disclose about the diagnosis—at least early in disease progression—to sexual partners and friends (especially gay friends) than to members of their family of origin (Hays et al., 1993; Mansergh, Marks, & Simoni, 1995). Gay men also are more likely to disclose to other gay persons, as well as to friends and family who know about their sexual orientation (Marks et al., 1992; Mason et al., 1995; Simoni, Mason, & Marks, 1997). In the African-American community, particularly among women with HIV, there is evidence of high rates of HIV disclosure to sexual partners and to parents, especially to mothers (Armistead et al., 1999; Greene & Faulkner, 2002; Sowell et al., 1997).

RATIONALE FOR THE PRESENT STUDY

Despite the extensive work on disclosure targets, research is needed on the reasons why individuals decide to disclose or not to disclose their HIV diagnosis. Relying on our model of HIV-disclosure decision making, we examined the reasons endorsed by someone with HIV for disclosing or not disclosing to significant others. Our prior qualitative and quantitative research, based on interviews and questionnaires (Derlega, Lovejoy, & Winstead, 1998; Derlega, Winstead, & Folk-Barron, 2000; Winstead et al., 2002), as well as the research of other investigators (e.g., Dunne & Quayle, 2002; Mason et al., 1995; Schrimshaw & Siegel, 2002; Simoni et al., 1995), suggests that reasons for HIV disclosure/nondisclosure can be divided into three categories: self-, other-, and relationship-related benefits and risks. Self-focused reasons for disclosure include catharsis and seeking help. Other-focused reasons for disclosure include duty to inform and the desire to educate others about HIV. Relationship-focused reasons for disclosure include being in an emotionally close and supportive relationship, similarity with the

other person, and desire to test someone's reactions. On the other hand, self-focused reasons for nondisclosure include the right to privacy, self-blame/self-concept difficulties, and fear of rejection. Other-focused reasons for nondisclosure include protecting the other person, whereas relationship-focused reasons for nondisclosure include being in a superficial relationship. Communication difficulties are another reason for HIV nondisclosure, but it may involve self ("I don't know how to disclose"), other ("I don't know how to tell this person"), or relationship ("We don't know how to talk with one another") considerations.

In earlier research (Derlega et al., 2000), we developed and tested scales to tap the different reasons for and against HIV disclosure to a sexual partner after learning about one's seropositive diagnosis. The research was conducted among both men and women with HIV in southeastern Virginia. Duty to inform and desire to educate were endorsed significantly more as reasons for disclosing the desire to test the other's reactions, need for help, or similarity with the other person. Catharsis and being in an emotionally close and supportive relationship were also endorsed as reasons for disclosure, especially in contrast to the desire to test the other's reactions. The desire for privacy and self-blame/self-concept concerns also were endorsed highly as reasons for not disclosing, especially in contrast to being in a superficial relationship.

The first goal in this study was to investigate the relative importance of self-, other-, and relationship-focused reasons for HIV disclosure and nondisclosure after finding out about the seropositive diagnosis. The second goal was to examine the endorsement of HIV disclosure and nondisclosure in various types of relationship (with a close friend, an intimate partner, and parents).

Let us consider how the type of relationship with a possible disclosure recipient may moderate the effects of reasons for HIV disclosure and nondisclosure. We found in a qualitative study (Derlega et al., 1998) that forewarning and loyalty were cited more often as reasons for HIV disclosure to parents, whereas a desire for honesty and health concerns were cited more often as reasons for disclosure to intimate partners. Hence, we predict that the duty to disclose would be endorsed more as a reason for HIV disclosure to parents and intimate partners than to friends, reflecting the importance of obligation as a factor in disclosure to parents and intimate partners. Also, relationships with friends and intimate partners, as compared to relationships with parents, are more likely to be voluntary and based on similarity, mutual attraction, and common interests (Fehr, 1996; Gaines, 2001; Rawlins, 1992). Given that someone may perceive that friends and intimate partners have more

common interests with them than their parents, we predicted that the perception of similarity would be endorsed more as a reason for disclosing to close friends and intimate partners than to parents. We expected that testing the other's reactions would be endorsed more with intimate partners than with close friends or parents, particularly given the risk of infection incurred by the intimate partner in beginning or sustaining a sexual relationship. We had no rationale to predict that catharsis and close/supportive relationship as reasons for HIV disclosure would be weighed differently in the various types of close relationships.

On the other hand, individuals might endorse privacy less as a reason for nondisclosure with parents and intimate partners than with close friends if a sense of duty defines relations with parents and sexual partners. Also, there might be a greater endorsement of protecting the other as a reason for not disclosing to parents in comparison to friends and intimate partners, which reflects a strong desire to protect older parents from getting embroiled with one's health problems and from the taint of a stigmatizing condition (Derlega et al., 1998; Mason et al., 1995; Szapocznik, 1995). There also might be a greater concern for self-blame/self-concept difficulties and fear of rejection as reasons for not disclosing to parents than to close friends or intimate partners if parents (but not friends and intimate partners) are perceived as judgmental (Castro et al., 1998; Winstead et al., 2002). There was no rationale to predict that the endorsement of communication difficulties and superficial relationship as reasons for HIV nondisclosure would be weighed differently with close friends, intimate partners, and parents.

METHOD

PARTICIPANTS

There were 145 participants in the study, comprising 105 men and 39 women. One person did not provide information about their gender. The participants were recruited from HIV/AIDS service organizations and research settings in Virginia ($n = 45$), North Carolina ($n = 17$), Ohio ($n = 45$), and Texas ($n = 37$).² Geographic information was not available for one participant. The participants were reimbursed \$5 or its equiva-

2. Collecting data in different geographic regions of the U.S. extends the generalizability of the findings. However, there were some demographic differences in the sample based on the site of data collection. There was a larger percentage of heterosexual and female participants in Virginia, compared to the other sites, and participants in North Carolina and Virginia were more likely to be African American, as compared to participants in Texas and Ohio.

lent (e.g., grocery coupons) for participating in the study. The data were collected in 1998 as part of a related study on HIV stigma and HIV disclosure (Derlega, Winstead, Greene, Serovich, & Elwood, 2002).

The average age of the participants was 36.83 ($SD = 7.62$). Most of the participants ($n = 111$) reported that they acquired the HIV infection from sexual contact, seven from injection drug use, three from a blood transfusion, and 21 did not know.

Among the male participants who described their ethnic/racial identity, a majority (59) were Caucasians, 38 were African Americans, two were Hispanics/Latinos, and three were "other." Among the female participants, a majority were African Americans, nine were Caucasians, two were Hispanics/Latinos, and one was "other." There was a significant association of gender with race/ethnicity, $\chi^2(3) = 14.34, p < .01$.

A majority (79) of the male participants who identified their sexual orientation described themselves as homosexual, five as heterosexual, and 19 as bisexual. Among the female participants, a majority (30) described themselves as heterosexual, four as homosexual, and one as bisexual. There was a significant association of gender with sexual orientation, $\chi^2(2) = 90.23, p < .001$.

Participants had known about their HIV diagnosis for an average of 79.77 months ($SD = 51.56$). But the male participants ($M = 86.54, SD = 51.47$), on average, knew about their HIV diagnosis longer than the female participants ($M = 62.57, SD = 48.32$), $t(122) = 2.37, p < .05$.

PROCEDURES

The study was described individually to prospective participants either by case managers at HIV and AIDS service organizations in Virginia, Texas, and North Carolina or by investigators at HIV and AIDS research sites in Texas and Ohio. The prospective participants were given an explanation of our questionnaire, which was entitled, "Weighing the pros and cons of disclosing about the HIV diagnosis to a relationship partner." The rationale for the questionnaire indicated, "We are conducting a study to find out how people decided whether or not to tell significant others (including a romantic or sexual partner, a friend, and a parent) about being HIV seropositive. We think knowing how these decisions are made will assist individuals with HIV to better understand the personal issues in deciding who to tell about the diagnosis versus who not to tell about the diagnosis."

If prospective participants agreed to participate, they completed several questionnaires (with a close friend, an intimate partner, and a parent as the target) that tapped how much various reasons influenced their interest in disclosing or not disclosing their HIV diagnosis after they

learned about it themselves. Participants were given the following instructions to identify the various types of relationship targets: for the close friend, "Think of a friend whom you knew very well when you learned about your diagnosis;" For the intimate partner, "Think of the first person with whom you started a romantic or dating or sexual relationship after you learned about the diagnosis or someone with whom you were in a romantic or dating or sexual relationship when you learned about your HIV diagnosis;" for the parent, "Think of one of your parents at the time when you learned about the HIV diagnosis."

The participants completed two separate questionnaires for each target person that focused on reasons for and against disclosing their HIV diagnosis. The order of presentation of the questionnaires with each of the target persons was counterbalanced. For a fuller description of the items in the questionnaire and psychometric information, see Derlega et al. (2002). The participants also completed a questionnaire that tapped perceptions of HIV social stigma (i.e., stigmatizing beliefs about HIV held by the general public). For the results about the association of HIV stigma and HIV-disclosure decision making in close relationships, see Derlega and colleagues' findings (2002).

The Reasons for Disclosure Questionnaire contained 24 items and tapped five reasons for disclosing. Participants rated on 5-point scales (from 1= "not at all," to 5 = "very likely") how much various reasons might have influenced their interest in disclosing their HIV diagnosis to the target person. These reasons focused on catharsis (e.g., "I would be able to get the information off my chest"), duty to inform/educate (e.g., "This person has the right to know what is happening to me"), desire to test the other person's reactions (e.g., "I wanted to see how my friend would react when I told him or her the information"), a close/supportive relationship (e.g., "We had a close relationship"), and similarity (e.g., "We tended to think alike about things"). We originally created separate scales to distinguish "closeness and emotional support" and "help" as reasons for disclosure. We also started with separate scales for "duty to inform" and "desire to educate." We combined the close/supportive and the help scales because these scales correlated highly with one another. Likewise, we combined the duty to inform and the desire to educate scales because they correlated highly.

The Reasons for Nondisclosure Questionnaire contained 23 items and tapped six reasons for nondisclosing the HIV diagnosis. Participants again made their ratings on 5-point scales. These reasons focused on privacy (e.g., "Information about the diagnosis is my own private information"), self-blame/self-concept difficulties (e.g., "I felt ashamed about being HIV positive"), communication difficulties (e.g., "I didn't know how to start telling my friend about the diagnosis"), fear of rejection

(e.g., "I was concerned about how my friend would feel about me after hearing the information"), protecting the other (e.g., "I didn't want my friend to worry about me"), and superficial relationship (e.g., "We weren't very close to one another"). (The statements above refer to a friend as "target." Based on the type of relationship, however, the "target" could be a "friend," "[intimate] partner," or "parent.")

The Cronbach's alphas were generally satisfactory for the scales measuring reasons for and against HIV disclosure (mostly in the .70s and .80s). The lowest alphas (.60s) were for the similarity scales. See Derlega and colleagues' (2002) study for details about reliabilities, means, and standard deviations for all of the scales.

RESULTS

DATA ANALYSES

The endorsement of reasons for and against HIV disclosure were analyzed with mixed-design analyses of variance. First, we report the results of a 2 (gender of participants: male and female) \times 3 (type of close relationship: close friend, intimate partner, and parent) \times 5 (type of reasons: catharsis, test other's reactions, duty/educate, similarity, close/supportive relationship) mixed-design ANOVA about ratings of importance of reasons for self-disclosure. The between-subjects independent variable was the gender of the participants, whereas the within-subjects independent variables were type of relationship and type of reasons for HIV disclosure. Second, we report the results of a 2 (gender of participants) \times 3 (type of relationship) \times 6 (type of reasons: privacy, self-blame, fear of rejection, communication difficulty, protecting the other, and superficial relationship) mixed-design ANOVA of ratings of importance of reasons for nondisclosure. We used modified *F* tests in these analyses based on the Greenhouse-Geisser correction (Stevens, 1996, p. 460).

RESULTS ON REASONS FOR HIV DISCLOSURE

We first examined the endorsement of reasons for HIV disclosure. There was a significant main effect on the reasons-for-self-disclosure independent variable, $F(3.11, 708.59) = 16.60, p < .001, \eta^2 = .13$. We followed up this finding with post hoc tests (using paired samples *t* tests with a Bonferroni correction) to assess the relative importance of reasons for disclosing the HIV diagnosis (see Table 1). Catharsis (a self-focused reason for disclosure), duty/educate (an other-focused reason), and having a close/supportive relationship (a relationship-focused reason)

TABLE 1. Endorsement of Reasons for HIV Disclosure

Variable	Mean	SD
Catharsis	3.41 _a	1.08
Test Other's Reactions	2.95 _b	1.15
Duty/Educate	3.53 _a	.90
Similarity	2.98 _b	.88
Close/Supportive Relationships	3.52 _a	.85

Note. Post hoc tests used a Bonferroni correction (10 comparisons/.05 = .005). Within the column of means, numbers that do not share a letter are significantly different from one another.

played a significantly greater role in influencing one's interest in disclosing than the desire to test the other's reactions (an other-focused reason) or perceptions of similarity with the other person (a relationship-focused reason). These findings replicate our earlier results on the relative importance of reasons for disclosure (Derlega et al., 2000).

Consistent with the model of HIV decision making, there was an interaction effect between the reasons for self-disclosure and the type of close relationship with the relationship target, $F(6.11, 708.59) = 9.05, p < .001, \eta^2 = .07$. This two-way interaction was in turn moderated by the gender of the research participants, $F(6.11, 708.59) = 3.16, p < .01, \eta^2 = .03$. We summarize below the simple effects of type of relationship on the endorsement of each reason for HIV disclosure for the male and female participants, respectively. If these simple effects were significant, we followed up with paired samples *t* tests (with a Bonferroni correction).

There were three simple effects of type of relationship on reasons for HIV disclosure for the male participants (see Table 2). As expected, men endorsed duty to disclose/educate as a reason for disclosing more with an intimate partner or a parent than with a close friend, simple effect $F(1.74, 145.86) = 6.05, p < .001, \eta^2 = .07$. Male participants also endorsed similarity as a reason for disclosure more for a close friend and an intimate partner than for a parent, simple effect $F(1.68, 140.90) = 33.28, p < .001, \eta^2 = .28$. The male participants endorsed a desire to test the other's reactions more as a reason for HIV disclosure with an intimate partner than with either the friend or the parent, simple effect $F(1.82, 152.77) = 5.15, p < .01, \eta^2 = .06$.

For the female participants, there was only one relationship simple effect: the endorsement of testing the other's reactions as a reason for HIV disclosure, $F(1.76, 56.21) = 3.80, p < .05, \eta^2 = .11$. Women endorsed testing the other's reactions significantly more for an intimate partner ($M = 3.59, SD = 1.20$) than for a parent ($M = 3.01, SD = 1.41$). The endorsement of

TABLE 2. Endorsement of Reasons for HIV Disclosure as a Function of Type of Reason and Relationship Target for Male Participants

	Friend	Intimate Partner	Parent	Relationship Target Simple Effects
Catharsis	3.33 (1.34)	3.07 (1.30)	3.22 (1.36)	<i>ns</i>
Test Other's Reactions	2.69 _a (1.35)	3.07 _b (1.10)	2.60 _a (1.41)	Intimate Partner > Friend or Parent
Duty/educate	3.21 _a (1.12)	3.65 _b (1.10)	3.52 _b (1.22)	Intimate Partner or Parent > Friend
Similarity	3.32 _a (1.28)	3.30 _a (1.20)	2.26 _b (1.17)	Friend or Intimate Partner > Parent
Close/Supportive Relationships	3.52 (1.00)	3.47 (1.23)	3.53 (1.31)	<i>ns</i>

Note. Means and standard deviations (in parentheses) are presented in each column. Means that differ from one another in each row are represented by different subscripts. For the post hoc tests on the Bonferroni correction, three comparisons / .05 = .017.

TABLE 3. Endorsement of Reasons for HIV Nondisclosure

Variable	Mean	SD
Privacy	2.80 _a	1.07
Self-Blame	2.76 _a	1.31
Fear of Rejection	2.66 _a	1.04
Communication Difficulty	2.44 _b	1.10
Protecting the Other	2.91 _a	1.12
Superficial Relationship	2.34 _b	.96

Note. Post hoc tests used a Bonferroni correction (15 comparisons/.05 = .003). Within the column of means, numbers that do not share a letter are significantly different from one another.

testing the other's reactions as a reason for HIV disclosure to a close friend ($M = 3.53$, $SD = 1.43$) was not significantly different from the ratings for an intimate partner or a parent. Akin to the finding for the male participants, HIV disclosure was viewed by the women as a way to ascertain how the intimate partner would react to their having HIV. It is interesting that, unlike the men, women did not draw distinctions among a close friend, an intimate partner, and a parent in endorsing the duty to disclose/educate and similarity as reasons for HIV disclosure.

For both the male and the female participants, there was no effect of type of relationship on endorsement of catharsis and close/supportive relationship as reasons for HIV disclosure. Relations with a close friend, an intimate partner, and a parent seem to be interchangeable in HIV decision-making based on the desire to release pent-up feelings or the perception of the level of emotional closeness and support.

RESULTS ON REASONS FOR HIV NONDISCLOSURE

There was a significant main effect on the reasons-against-self-disclosure independent variable, $F(3.60, 802.89) = 9.52$, $p < .001$, $\eta^2 = .08$ (see Table 3). The results of the post hoc tests indicated that privacy, self-blame, and fear of rejection (self-focused reasons) and protecting the other (other-focused reason) played a significantly greater role in influencing one's interest in not disclosing than superficial relationship (a relationship-focused reason) or communication difficulty (which might be self-, other-, or relationship-focused). These results are generally consistent with results in our earlier study (Derlega et al., 2000).

There was an interaction of reasons for HIV nondisclosure and the type of relationship with the target person, $F(7.11, 802.89) = 7.01$, $p < .001$,

$\eta^2 = .06$. But this finding was moderated by an interaction of reasons-against-self-disclosure by type of relationship by gender of the participant, $F(7.11, 802.89) = 2.01, p = .05, \eta^2 = .02$. We summarize the results of the simple effects of type of relationship on endorsement of each reason for HIV disclosure for the male and female participants in Table 4, including the pairwise comparisons if the simple effects were significant.

The male participants endorsed privacy more as a reason for nondisclosure to a close friend than to an intimate partner or a parent, simple effect $F(1.87, 153.15) = 6.97, p < .01, \eta^2 = .08$. Male participants also endorsed protecting the other as a reason for not disclosing more to a parent than to a close friend, simple effect $F(1.91, 157.32) = 4.22, p < .05, \eta^2 = .05$. Concern about protecting an intimate partner as a reason for nondisclosure was not significantly different from ratings for a parent or a close friend. There were no relationship simple effects for the male participants associated with self-blame, fear of rejection, communication difficulty, or superficial relationship as reasons for nondisclosure.

The female participants also endorsed privacy as a reason more for not disclosing to a close friend than to a parent, simple effect $F(1.82, 56.36) = 3.54, p < .05, \eta^2 = .10$. There was no difference, however, in the endorsement of privacy as a reason for nondisclosure in the comparison between the intimate partner versus the close friend and parent.

Female participants endorsed fear of rejection as a reason for not disclosing more to a close friend and an intimate partner than to a parent, simple effect $F(1.76, 54.63) = 4.19, p < .01, \eta^2 = .12$. They also were more concerned about protecting a parent than an intimate partner as a reason for nondisclosure, simple effect $F(1.78, 55.15) = 5.13, p < .05, \eta^2 = .14$. Concern about protecting a friend as a reason for nondisclosure was not significantly different from the ratings for a parent or an intimate partner. The women also endorsed a superficial relationship as a reason for nondisclosure more to a friend or an intimate partner than to a parent, simple $F(1.87, 58.03) = 7.50, p < .05, \eta^2 = .20$. Akin to the findings for the male participants, there were no simple effects of type of relationship on self-blame or communication difficulty as reasons for nondisclosure.

DISCUSSION

The decision to share information about an HIV diagnosis may be difficult and stressful for persons with this disease. The quantitative data in the present study document how people grapple with these issues as they weigh the importance of reasons for and against HIV disclosure.

TABLE 4. Endorsement of Reasons for Nondisclosure Based on the Interaction of Type of Reason, Relationship Target and Gender

	Friend	Intimate Partner	Parent	Relationship Target Simple Effects
Male Participants				
Privacy	3.04 _a (1.34)	2.70 _b (1.37)	2.49 _b (1.30)	Friend > Intimate Partner or Parent
Self-Blame	2.72 (1.43)	2.65 (1.55)	2.54 (1.44)	<i>ns</i>
Fear of Rejection	2.53 (1.20)	2.63 (1.18)	2.45 (1.26)	<i>ns</i>
Communication Difficulty	2.18 (1.25)	2.22 (1.24)	(2.24) (1.16)	<i>ns</i>
Protecting the Other	2.53 _a (1.28)	2.68 _{ab} (1.35)	2.96 _b (1.50)	Parent > Friend
Superficial Relationship	2.45 (1.22)	2.33 (1.24)	2.16 (1.27)	<i>ns</i>
Female Participants				
Privacy	3.16 _a (1.04)	2.85 _{ab} (1.08)	2.73 _b (1.36)	Friend > Parent
Self-blame	3.06 (1.43)	2.88 (1.33)	3.27 (1.42)	<i>ns</i>
Fear of Rejection	3.00 _{ab} (1.22)	3.21 _a (1.25)	2.73 _b (1.21)	Intimate Partner > Parent
Communication Difficulty	3.17 (1.33)	2.97 (1.31)	2.92 (1.26)	<i>ns</i>
Protecting the Other	3.34 _{ab} (1.03)	3.13 _a (1.11)	3.74 _b (1.24)	Parent > Intimate Partner
Superficial Relationship	2.52 _a (1.02)	2.66 _a (1.00)	2.04 _b (.99)	Friend and Intimate Partner > Parent

Note. Means and standard deviations (in parentheses) are presented in each column. Means that are different from one another in each row are represented by different subscripts. For the post hoc tests with the Bonferroni correction, three comparisons / .05 = .017.

IMPORTANCE OF REASONS FOR AND AGAINST HIV DISCLOSURE

The results on the endorsement of types of reasons per se for and against HIV disclosure indicate how individuals juxtapose personal benefits for themselves and obligations to significant others in deciding whether or not to disclose the HIV diagnosis. We found that catharsis, duty/educate, and close/supportive relationship were endorsed overall as important reasons for HIV disclosure. Catharsis and close/emotional support indicate possible benefits of HIV disclosure to the discloser. But there are duties and obligations to significant others that also are rated highly as reasons for HIV disclosure, such as loyalty to significant others, a desire to have an honest relationship, educating loved ones about a confusing disease, and making sure that loved ones do not hear about the diagnosis first from unwanted third parties.

Reasons for HIV nondisclosure suggest personal benefits as well as reflect one's obligations to others. The participants endorsed privacy, fear of rejection, and self-blame as reasons for nondisclosure. These reasons were aimed at reducing negative consequences to oneself. But participants also endorsed protecting the other as a reason for HIV nondisclosure. Participants were concerned about how to minimize possible harm to loved ones in making the decision not to disclose to them.

IMPORTANCE OF REASONS FOR AND AGAINST HIV DISCLOSURE IN DIFFERENT RELATIONSHIPS

Our results also document how balancing the pros and cons of HIV disclosure is affected by the type of relationship (close friend, intimate partner, parent) and one's gender. We will consider the possible impact of relationships for and against HIV disclosure, respectively.

Men and women endorsed testing the other's reactions as a reason for HIV disclosure to an intimate partner more than to a friend or parent. This finding reflects uncertainty about how an intimate partner will react to news about the diagnosis. There may be a concern about whether the intimate other (who may be a romantic, dating, or a sexual partner) will remain in the relationship, which makes HIV disclosure a way to test and verify the other's commitment. Interestingly, the female and male participants were least likely to rate the desire to test the other's reactions as a reason to disclose to parents, and, in the case of male participants, as a reason to disclose to a close friend. There may be a sense of security in relations with parents (and with a close friend for the males) that is not available with an intimate partner.

The male participants made distinctions between an intimate partner and parents versus a close friend in terms of the endorsement of duty to disclose/educate as a reason for HIV disclosure. This finding supports the view that obligation underlies disclosure to parents and intimate partners, based probably on loyalty to parents and concern for one's sexual partner. We found similar results in our qualitative study (Derlega et al., 1998). Loyalty was cited most frequently for disclosure to family members, whereas a need for honesty and health concerns were cited most frequently for HIV disclosure to an intimate partner. In the qualitative study, we also found that forewarning (including preparing someone for what might happen in the future, including possible medical problems the person with HIV may have or that others might gossip about the person's HIV-positive status) was cited as a reason for disclosure to family. Hence, in addition to concern about having an honest relationship with parents regarding one's disease status, there also might be the recognition that parents must be forewarned about the HIV diagnosis in case they should be called upon for help if the disease progresses or in case they should hear about their child's disease from a third party. Differences in the endorsement of duty to disclose/educate, based on the type of relationship, as a reason for HIV disclosure were not made by the female participants. Perhaps women do not make the same distinctions as men do among relationship partners about "owing" information to family versus lovers or friends. In the view of women, relationship obligations may include friends. But this finding deserves further study, particularly since the size of the sample for the women, compared to the men, was relatively small.

As expected, men endorsed similarity as a reason for HIV disclosure more to a friend or intimate partner than to a parent. This finding did not occur for women. Given that the men in the sample were mostly homosexual or bisexual, the endorsement of similarity as a reason to disclose to a friend or intimate partner may reflect a greater sense of social unity or belonging with others who share the same sexual orientation (Collins, 1998) or, perhaps paradoxically, pride in the HIV diagnosis as an emblem of gayness.

Type of relationship also provided a context for weighing reasons *not* to disclose. Both the male and female participants endorsed the right to privacy least with a parent and most with a close friend as a reason for not disclosing. Men and women may perceive a lower sense of "ownership" of personal information with a parent and this also may be the case for the males in relations with their intimate partners. The sense of a greater right to privacy as a reason for not disclosing to a friend is consistent with the notion that relations with friends are based less on duty and obligation and more on voluntary features such as mutual acceptance

(cf. Fehr, 1996; Gaines, 2001; Rawlins, 1992). One should be able to exert a right to privacy in a relationship (such as a friendship) that does not incur obligations. With a parent (because of a sense of loyalty to the family of origin) or, as occurred for the male participants, with an intimate partner (because of a common household, sexual relations, or romantic love), the perceived right to privacy may be diminished.

Both the male and the female participants endorsed protecting the other as a reason for not disclosing particularly to a parent. This finding undoubtedly reflects a desire not to worry parents, but it also may reflect an unwillingness to confront parents with information about a disease that was contracted by stigmatized behaviors (Leary & Schreindorfer, 1998). We did expect that there might be a greater endorsement of self-blame as a reason for not disclosing with parents than with a close friend or intimate partner, but this finding did not occur. Perhaps self-blame is not weighed differently in various close relationships unless there is reason to believe that certain people stigmatize someone with HIV (see Derlega et al., 2002).

Women distinguished between parents and friends or intimate partners when endorsing superficial relationship as a reason for nondisclosure (endorsing this reason as significantly less important for parents), whereas men did not. It may be that women (more than men) calculate how little friends and intimate partners know them in deciding not to disclose.

CONCLUSIONS

Consistent with the model of HIV-disclosure decision making, male and female participants balanced the benefits and costs to themselves and to loved ones in deciding whether or not to disclose the HIV diagnosis. We were able to replicate findings from an earlier study (Derlega et al., 1998) about the overall importance of reasons for and against HIV disclosure, as well as to show how decision making about HIV disclosure occurs in the context of various relationships. We also showed that women and men evaluate close relationships somewhat differently in deciding whether or not to disclose. Since most of the men in our sample identified themselves as homosexuals or bisexuals and most of the women identified themselves as heterosexuals, sexual orientation as well as gender may play a role in decision making about HIV disclosure. We also demonstrated the usefulness of our rating scales, which tapped reasons for HIV disclosure/nondisclosure. These scales may be useful in quantitative research on HIV disclosure, complementing the qualitative techniques that have been used to study HIV decision making in prior studies (see Greene et al., 2003).

LIMITATIONS

Some limitations of the present research should be noted. First, individuals were asked to recall from memory events that occurred several years ago for many participants. It would be advisable to replicate this study with participants who have just learned about their HIV-positive diagnosis. Then we could examine prospectively HIV decision making. Second, we had a relatively small number of female participants, which indicates the need to replicate the research with a larger sample of women. Third, the male and the female participants differed on several characteristics, such as race/ethnicity, sexual orientation, and length of time living with HIV so the study requires follow-up research to disentangle the effects of gender versus these other variables on HIV-disclosure decision making.

COUNSELING AND RESEARCH IMPLICATIONS

While individuals weigh the importance of reasons for and against HIV disclosure *per se*, they also consider the type of relationship in deciding whether or not to disclose. Testing reactions to one's HIV status is especially important in disclosing to intimate partners, the perceived need for privacy is considered a more legitimate excuse for nondisclosure for friends than for parents or intimate partners, and the desire to protect the other may be in conflict with feelings of obligation in deciding to disclose to parents. For men, especially homosexual men, a feeling of difference may be a barrier in disclosure to parents. Homosexual men may face additional complications if they have not disclosed or discussed their sexual orientation with their parents. These observations can help service providers and their clients with HIV to understand the types of relationships in which HIV-disclosure decision making occurs. Hopefully, disclosure decisions can be made that maximize clients' well-being and minimize feelings of guilt, shame, or distress.

The integrative model of HIV-disclosure decision making offers promise for future research. We have examined how persons with HIV are influenced by their own and others' needs, as well as by other contextual factors, in deciding whether or not to disclose. The model also may be useful in understanding the behavior of a potential disclosure recipient. For instance, how do cultural attitudes, individual and relational variables, and situational exigencies affect someone's willingness or unwillingness to be a disclosure recipient? In turn, how do these factors influence the disclosure recipient's willingness to divulge or conceal what they were told in interactions with other persons (see Greene et al., 2003; Petronio, 2002)? In addition, the model may illuminate subsequent so-

cial interactions that occur between the person with HIV and the disclosure/nondisclosure recipient. For instance, *how much* someone with HIV discloses (e.g., saying “I have lots of HIV drug side effects” or “I am uncomfortable seeking help because everyone in the family will know about my HIV diagnosis”) and what kinds of interactions occur afterward (e.g., seeking or receiving help) between the discloser and the disclosure recipient are likely to be affected by the consequences of the initial disclosure as well as the antecedent factors in the model.

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