

“Some of My Best Friends”: Intergroup Contact, Concealable Stigma, and Heterosexuals’ Attitudes Toward Gay Men and Lesbians

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Abstract

In a two-wave national AIDS telephone survey, a probability sample of English-speaking adults indicated their attitudes toward gay men at Wave 1 (1990-91; n = 538) and toward both gay men and lesbians approximately one year later (n = 382 at Wave 2). At Wave 1, heterosexuals reporting interpersonal contact (31.3%) manifested more positive attitudes toward gay men than did those without contact. Their attitudes were more favorable to the extent that they reported more relationships, closer relationships, and receiving direct disclosure about another’s homosexuality. At Wave 2, these findings were generally replicated for attitudes toward lesbians as well as gay men. Cross-wave analyses suggest a reciprocal relationship between contact and attitudes. Theoretical and policy implications of the results are discussed, with special attention to the role of interpersonal disclosure in reducing stigma based on a concealable status.

Psychologists have devoted extensive study to majority-group attitudes toward members of stigmatized minority groups. Much research in this area has been guided by the contact hypothesis which, as originally described by Allport (1954), asserts that many forms of prejudice can be reduced by equal status contact between majority and minority groups in the pursuit of common goals. A large body of empirical data supports Allport’s hypothesis,

albeit with qualifications (Amir, 1976; Brewer & Miller, 1984; Stephan, 1985).

The relationship between prejudice and intergroup contact inevitably is influenced by the concealability of the minority group’s stigma. When majority group members interact with someone who has a readily apparent stigma, they are likely from the outset to encode information about that person in terms of her or his minority status. Their preexisting attitudes and beliefs about the stigmatized minority group are likely to influence their evaluations of the individual exemplar. Someone with a successfully concealed stigma, in contrast, is evaluated on the basis of factors apart from her or his stigmatized status. Not surprisingly, therefore, a desire to be judged on their own merits and a wish to avoid discrimination and harassment motivate many minority individuals to hide their stigma, passing as a member of the majority (Goffman, 1963). Others selectively disclose their stigmatized status to majority group members. When such disclosure occurs after the majority-group member has already formed positive feelings toward the stigmatized individual, the former may respond to the new information by individuating and personalizing the minority group’s members, processes that are likely to reduce her or his prejudice against the minority (Brewer & Miller, 1984; Miller, Brewer, & Edwards, 1985). Indeed, Goffman (1963) described information management as the

principal challenge facing persons with a concealable stigma in social interactions.

Whereas an extensive body of social psychological research on attitudes and intergroup contact has focused on readily apparent stigmas such as race and physical disability, relatively little inquiry has been directed at concealable stigmas. In the present paper, we examine the relationship between majority group attitudes and intergroup contact with members of a minority group characterized by a concealable stigma: homosexual orientation.¹ Homosexuality represents an important aspect of human identity that is not readily evident in the course of routine social interaction. As members of a group that historically has been stigmatized in the United States (Bérubé, 1990; D'Emilio, 1983; Duberman, Vicinus, & Chauncey, 1989; Herek, 1991, 1992), many gay men and lesbians pass as heterosexual at least some of the time. Indeed, because lesbians and gay men often do not become aware of their own sexual orientation until adolescence or adulthood (e.g., Bell & Weinberg, 1978; Herdt, 1989), longstanding relationships with heterosexuals can predate even the gay individual's recognition of her or his own sexual orientation. Consequently, heterosexuals frequently learn that a friend or family member is gay or lesbian long after a relationship is first established and then only when told, either by the gay individual or a third party.

¹Although suggestions have been offered for standardizing usage of the terms *homosexual*, *gay*, and *lesbian* (Committee on Lesbian and Gay Concerns, 1991), no consensus yet exists. In the present article, *gay* is used adjectivally to describe both women and men whose personal and social identity is based on their homosexual orientation and identification with a community of like-minded individuals (e.g., gay people, the gay community). To emphasize that this category includes women, the term *lesbian* is frequently used as a counterpart to *gay man* or *gay male*, as in the phrase "lesbians and gay men." *Homosexual* is used primarily as an adjective to describe sexual behavior between individuals of the same gender.

Previous empirical research has demonstrated that heterosexuals who know someone who is gay are likely to hold more favorable attitudes toward gay people generally (Gentry, 1987; Herek, 1988; Herek & Glunt, 1993; Millham, San Miguel, & Kellogg, 1976; Schneider & Lewis, 1984; Weis & Dain, 1979). The methods employed in past studies, however, limit the generalizability of their findings in several respects. Many utilized convenience samples that were not representative of a larger population (e.g., Gentry, 1987; Herek, 1988; Millham et al., 1976; Weis & Dain, 1979). The studies conducted with probability samples used only a single-item measure of contact experiences (Herek & Glunt, 1993; Schneider & Lewis, 1984) or a measure of attitudes toward gay people that lacked demonstrated reliability and validity (Schneider & Lewis, 1984). None of the studies with probability samples directly assessed attitudes toward lesbians. Furthermore, because respondents' sexual orientation was not ascertained, an unknown (albeit probably small) number of lesbians, gay men, and bisexuals were included in those samples, and so the data do not describe intergroup attitudes in a strict sense.

The research reported in the present paper was designed to address these limitations. Using a 2-wave national probability sample of self-identified heterosexual Americans, we sought in the first wave to replicate previous findings that self-reported interpersonal contact is strongly correlated with favorable attitudes toward gay men. We expected to observe more favorable attitudes toward gay men among heterosexuals who report contact than among those without contact. In the second wave, we sought to address a gap in the research literature by assessing the applicability of previous findings about contact to heterosexuals' attitudes toward lesbians. Although gay people of both genders are stigmatized because of their sexual orientation, American heterosexuals' attitudes toward gay men are more negative than their attitudes toward lesbians; this difference is especially pronounced among heterosexual men (Herek, 1988; Kite, 1984, 1994). Whether the psychological dynamics of heterosexuals' attitudes vary according to the gender of the

target group is not currently known, however, because most empirical research in this area has not differentiated between attitudes toward lesbians and attitudes toward gay men (Herek, 1988, 1994).

In addition to replicating the previously observed correlation and expanding the field of inquiry to include lesbians, we also wished to explore how various aspects of intergroup contact might differentially affect heterosexuals' attitudes. We formulated three hypotheses in this regard. First, we hypothesized that contact experiences with two or more minority individuals are associated with more favorable attitudes than are contact experiences with only one person. Because gay people inevitably differ on characteristics irrelevant to their category membership, heterosexuals with multiple contact experiences have increased opportunities for observing such variation and, consequently, individuating outgroup members. Such individuation is likely to reduce intergroup prejudice (Brewer & Miller, 1984; Wilder, 1978).

Second, we hypothesized that contact with gay close friends or immediate family members is more likely to be associated with favorable intergroup attitudes than is contact with mere acquaintances or distant family members who are gay. Close relationships with gay men or lesbians can provide heterosexuals with intimate, personally relevant information about gay people. They are likely to foster personalization of gay people, which helps to reduce prejudice (Brewer & Miller, 1984; Miller et al., 1985).

Third, we hypothesized that a lesbian or gay person's management of information concerning her or his (concealable) stigma has important implications for heterosexuals' attitudes (Goffman, 1963). We predicted that heterosexuals who have been told directly by another person that he or she is gay are more likely to have positive attitudes toward gay people generally than are heterosexuals who acquired such information about a friend or relative indirectly (e.g., from a third party). In part, this prediction is based on previous

findings that self-disclosure of personal information often leads to greater liking of an individual (e.g., Derlega & Berg, 1987). In addition, we assumed that most heterosexuals - as a consequence of living in a society in which homosexuality is stigmatized - possess relatively little knowledge about gay people and hold attitudes toward gay people that are more negative than favorable. Upon learning that a friend, relative, or acquaintance is homosexual, they are likely to follow one of three courses: (1) attach their preexisting antigay stereotypes and attitudes to that person, and possibly reinterpret past experiences with her or him in a way that is consistent with those prejudices (e.g., Snyder, 1981); (2) maintain positive feelings toward the person while regarding her or him as an atypical case that is not representative of the larger population of gay people (Rothbart & John, 1985); or (3) maintain positive feelings toward the person and, on the basis of those positive feelings, individuate and personalize the larger category of gay and lesbian people (Brewer & Miller, 1984; Miller et al., 1985; Wilder, 1978). Whereas many factors could determine which of these outcomes occurs, we assume that the third course - which involves changing longstanding beliefs and deeply-felt attitudes - requires the greatest cognitive effort and is therefore the least likely. We hypothesized, however, that one or more direct discussions with a friend or relative about the latter's homosexuality can help to motivate the heterosexual person both to maintain the relationship and to change her or his attitudes toward gay people generally. In addition, such conversations can provide the heterosexual person with information that will assist her or him in regarding the friend or relative as representative (or not atypical) of gay men or lesbians while also individuating the category of *gay people*.

Finally, because lesbians and gay men manage information about their stigma, we hypothesized that heterosexuals are more likely to report contact to the extent that they belong to demographic groups that (1) have more opportunities for contact (e.g., heterosexuals living in urban settings) and (2) are perceived by gay men and lesbians as more accepting of gay

people (e.g., women, the well educated) than is society as a whole. Replicating this finding from previous research (Herek & Glunt, 1993) could point to a reciprocal relationship between contact and attitudes and thereby suggest an important modification to the contact hypothesis, especially as it applies to attitudes toward groups with a concealable stigma. Not only might intergroup contact reduce prejudice, as predicted by the contact hypothesis, but individuals low in prejudice might also have more opportunities for contact.

SURVEY WAVE 1

Method

Respondents

The Wave 1 sample was drawn from the population of all English-speaking adults (at least 18 years of age) residing in households with telephones within the 48 contiguous states. Telephone numbers were generated using a stratified two-phase procedure for random-digit dialing, or RDD (see Herek & Capitanio, 1994, for a detailed description of the RDD procedure).

Procedures

Interviews were conducted by the staff of the Survey Research Center at the University of California at Berkeley between 12 September 1990 and 13 February 1991, using their computer-assisted telephone interviewing (CATI) system. Upon reaching an adult in the household, the interviewer enumerated the first name and race of each person 18 years or older living in the household. Based on this information, one household member was selected randomly to be the respondent.² Of the 768 households in the sample, 653 (85.0%) were

² Once the target respondent was identified, most interviews (66.2%) were completed within one or two attempts. Eighteen respondents, however, required more than seven attempts before the interview was successfully completed. The maximum number of attempts before completing an interview was 19. *Chi-square* analyses revealed no consistent response differences according to the number of contact attempts.

successfully enumerated. Of these, interviews were completed with 538 (82.4%), yielding a response rate (enumeration rate X completion rate) of 70.1%. The mean duration of the interview was 39 minutes. Additional information about the sample and the survey methodology are reported elsewhere (Herek & Capitanio, 1993, 1994).³

Measures

Attitudes toward gay men. Attitudes were measured with a 3-item short form of the Attitudes Toward Gay Men (ATG) scale, which has been shown to be a reliable and valid measure of heterosexuals' attitudes toward gay men when administered by telephone (Herek & Glunt, 1991, 1993) and in paper-and-pencil format (Herek, 1988, 1994). For each statement, respondents were provided with four response alternatives (*agree strongly, agree somewhat, disagree somewhat, disagree strongly*) which were scored on a 4-point scale. Item responses were reversed as necessary and summed to yield a scale score that could range from 3 to 12, with higher scale scores indicating more unfavorable attitudes ($\alpha = .70$).⁴

Contact experiences. Personal contact was assessed through a series of questions. First, respondents were asked whether they had "any male or female friends, relatives, or close acquaintances who are gay or homosexual" and,

³ Cases were weighted in a two-stage procedure. First, sample weights were computed proportional to the actual number of adults living in each household (range = 1 - 5, with the few households comprising 5 or more adults given a weight of 5) and inversely proportional to the number of different telephone numbers in each household (range = 1 - 3, with the few households containing 3 or more different numbers given a weight of 3). Second, the cases were post-stratified by gender and racial category (White, Black, Other), using 1990 Census Bureau data.

⁴ Attitudes toward lesbians were not assessed in the Wave 1 survey because of time constraints and because the survey focused on public perceptions of AIDS (which has disproportionately affected gay and bisexual men in the United States). They were, however, assessed in the Wave 2 survey (see below).

for those answering in the affirmative, how many. Respondents reporting only one relationship were asked to describe the gay person's gender, how she/he was related to the respondent (immediate family, other family, close friend, other friend, close acquaintance), and how the respondent first learned about the other person's sexual orientation (were told directly by her/him, were told by someone else, just guessed that the person is gay). Those who chose either of the last two alternatives were asked, "Has he/she ever told you directly that he/she is gay?" Respondents who reported knowing two or more gay people were asked the same series of questions about each of "the two gay people you feel closest to."

Results

Sample Characteristics

Of the 538 respondents with completed interviews, 45.9% were male and 54.1% were female. Racially, the sample was 81% White, 10.4% Black, 5% Hispanic, and 2.8% Asian (less than 1% of respondents did not use one of these labels). The mean age was 43.8 years ($sd = 15.97$); median annual household income was between \$30,000 and \$40,000; and the median level of educational attainment was "some college." Slightly more than one-third of the respondents (35.3%) labelled themselves Democrats; 31.6% were Republicans; 24.5% were Independents. The analyses reported below were restricted to self-identified heterosexuals ($n = 505$, or 93.9% of the sample).⁵

Attitudes Toward Gay Men

Most respondents expressed negative attitudes toward gay men, with a majority agreeing that "Sex between two men is just plain wrong" and that "I think male homosexuals are disgusting" (69.8% and 54.1%, respectively, agreed). Only 23.6% agreed that "Male homosexuality is a natural expression of sexuality in men." The overall mean score for

⁵ Excluded from the analysis were respondents who identified themselves as gay, lesbian, or bisexual, or who did not answer the sexual orientation question.

the 3-item ATG scale was 9.08 ($sd = 2.71$); the range was from 3 (extremely favorable attitudes) to 12 (extremely hostile attitudes)

Interpersonal Contact

Almost one-third of the sample (31.3%) reported that they knew at least one person who is gay or lesbian. Within this subgroup, roughly one-third knew one gay person whereas two-thirds knew two or more. Both male and female respondents were more likely to report that their closest relationships were with gay men than with lesbians.⁶ Of the 263 reported relationships (with 55 respondents describing one relationship and 104 describing two), only 27% were with a lesbian. Shifting the unit of analysis from the relationship to the respondent, only 34% of those who knew one or more gay people described at least one relationship with a lesbian.⁷ Female respondents were more likely than males to know a gay person (of those who knew any gay people, 67% were women; $chi-square = 18.309, p < .001$).⁸

⁶ A few individuals reported that they knew at least one gay man or lesbian in response to the initial screening question, but then declined to answer subsequent questions about the relationship(s). Consequently, the numbers described here do not total 100%.

⁷ Because respondents were asked to describe their two *closest* relationships with a gay/lesbian person (rather than all of their relationships), it is possible that more distant relationships manifested a different gender distribution. Respondents' closest relationships, however, tended to be with gay men.

⁸ Respondents' ATG scores did not differ significantly according to the gender of the gay person(s) they knew. This was assessed in two ways. First, we categorized respondents according to whether their reported relationships were exclusively with gay men, exclusively with lesbians, or with both. We then assessed differences in ATG scores using a 2 (respondents' gender) by 3 (lesbians/gay men/both) ANOVA. There were no significant effects (all $ps > .30$). Next we conducted a hierarchical regression analysis with variables entered in the following order: (1) number of relationships; (2) respondent's gender, number of lesbian contacts, and number of gay male contacts; (3) the multiplicative interaction terms for gender-by-

Respondents were more likely to describe contact with gay or lesbian friends than with relatives. Of the 263 reported relationships, 74.9% were with a friend or acquaintance (20.5% with a close friend, and 54.4% with an acquaintance or more distant friend), whereas only 22.4% were with a relative (3.8% with immediate family, and 18.6% with more distant relatives).⁹ In slightly more than one-third (38%) of the relationships, the heterosexual person learned directly from the friend or relative about the latter's homosexuality. In the other relationships, the heterosexual was told by a third party (32%) or guessed that the person was gay (30%). In one-fourth of the latter situations (told by third party, guessed), the heterosexual subsequently was told directly by the gay person about her or his sexual orientation. Thus 53.5% of the relationships described by respondents included direct disclosure, either initially or after the heterosexual person learned through another route that the person was gay.

Interpersonal Contact and Attitudes

Hypothesis 1.1: Interpersonal contact is strongly associated with favorable attitudes toward gay men. Contact with a gay person was associated with significantly more favorable attitudes toward gay men. The mean ATG score

number of lesbian contacts and gender-by-number of gay male contacts. There were no significant effects for gender.

⁹ It is noteworthy that very few respondents in the national sample described having an immediate family member who is gay or lesbian, and that most of those who did were female. This finding may have important implications for current research in behavioral genetics that attempts to identify family patterns in homosexuality (e.g., Hamer, Hu, Magnuson, Hu & Pattatucci, 1993). To the extent that such research relies on family members' knowledge about their gay and lesbian relatives, it should be recognized that disclosure within families appears to be relatively rare and may include a gender bias. For example, more maternal than paternal gay relatives may be identified by researchers because of the general tendency to disclose one's homosexuality to females more than to males.

for those reporting contact was 7.74 ($sd = 2.92$), compared to 9.69 ($sd = 2.38$) for those reporting no contact ($F(1,482) = 60.35, p < .001$).

Hypothesis 1.2: Contact experiences with multiple individuals are associated with more favorable attitudes than are contact experiences with only one individual.

Respondents manifested progressively more favorable attitudes to the extent that they knew more gay people ($F(3,480) = 29.66, p < .001$). The mean ATG scores were 8.98 ($sd = 2.62$) for respondents with one relationship; 7.82 ($sd = 2.79$) for those with two relationships; 6.66 ($sd = 2.84$) for those with three or more relationships; and, as noted above, 9.69 ($sd = 2.38$) for those reporting no contact. Post-hoc comparisons indicated that ATG scores were significantly lower (more favorable attitudes) for respondents who knew three gay persons versus those who knew none, one, or two ($p < .05$).¹⁰ Moreover, respondents reporting contact with two gay people had significantly lower ATG scores than did those who knew none or one. The difference between those who reported one relationship and those who reported none was in the expected direction but was not statistically significant.

Hypothesis 1.3: Intimate contact is more likely than superficial contact to be associated with favorable attitudes.

The association between type of contact and ATG scores was similar for respondents reporting one lesbian or gay contact and those reporting two or more. For clarity, we discuss the two groups separately. Among those reporting only one relationship, a significant difference was observed according to the type of relationship ($F(3,50) = 3.25, p < .05$), with ATG scores significantly lower (more favorable attitudes) for respondents having a close friend (mean = 6.65, $n = 7$), compared to those with a distant gay family member (mean = 9.97, $n = 17$). Scores for those with an immediate family member (mean = 8.39, $n = 6$) or gay acquaintance (mean = 9.07, $n = 23$) were intermediate and not significantly different from the other two means.

¹⁰ All post hoc comparisons reported in this paper used the Student-Newman-Keuls test with $p < .05$.

Respondents with two or more contacts often reported relationships in two different categories (e.g., a close friend and a distant relative). We categorized them according to the following hierarchy: (1) at least one relationship described as a close friend ($n = 33$); (2) at least one relationship with an immediate family member, but not a close friend ($n = 2$); (3) at least one relationship with an acquaintance or other friend, but not a close friend or immediate family member ($n = 55$); and (4) both relationships with a distant family member ($n = 6$). Mean ATG scores were 6.06 (close friends), 7.06 (immediate family), 7.28 (acquaintances), and 9.57 (distant family). A significant effect for relationship type was found ($F(3,94) = 3.38$, $p < .05$). Post hoc comparisons revealed that ATG scores for those with close gay friends were significantly lower (more favorable attitudes) than for those with distant gay family members.

Hypothesis 1.4: Receiving direct disclosure of another's homosexuality is more likely to be associated with positive attitudes toward gay people than is having acquired such information indirectly. Of the 153 respondents with contact, 33% reported disclosure from one friend or relative, 28% reported disclosure from two friends or relatives, and 38% reported no direct disclosure. Respondents who had been told directly by a friend or relative about her or his homosexuality manifested significantly lower ATG scores (more favorable attitudes) than did those who had guessed or had been told by a third party; the effect was even stronger if respondents had received disclosure from two gay men or lesbians (mean ATG scores = 8.96 for no disclosures, 7.56 for one disclosure, and 6.32 for two disclosures; $F(2,151) = 11.81$, $p < .001$; all groups were significantly different from each other).

Almost all (92.7%) of the respondents with a gay close friend were recipients of direct disclosure, compared to 86.2% of those in the immediate family group, 57.4% in the other friend group, and 8.9% of those in the distant relative group. Because of this strong association, the observed intergroup differences

in ATG scores may have resulted from the closeness of relationships rather than from receiving disclosure. Statistically disentangling the disclosure and relationship variables was not possible with the current data set. However, one category of relationships - acquaintances and friends who were not described as close - included roughly equal numbers of respondents with and without disclosure experiences (57.4% and 42.6%, respectively). ATG scores for respondents in this group differed significantly according to disclosure category: means = 8.34 for those with no disclosure, 8.12 for those with one disclosure, and 6.58 for those with two or more disclosures ($F(2,76) = 3.07$, $p = .05$). Although the Student-Newman-Keuls procedure did not indicate significant differences among the three groups, a follow-up analysis comparing respondents reporting one or no disclosure with those reporting two or more disclosures indicated that the latter group had significantly lower ATG scores than the former ($F(1,77) = 6.11$, $p < .05$). Thus, disclosure appears to be associated with more favorable attitudes independently of its association with type of relationship - at least among respondents with two or more gay acquaintances.

Hypothesis 1.5: Heterosexuals are more likely to report contact to the extent that they belong to demographic groups that have increased opportunities for contact and are perceived by gay men and lesbians as more accepting of gay people. We constructed two logistic regression equations (each using a forward stepwise procedure) to assess whether various social and demographic variables might be differentially associated with heterosexuals' contact experiences. In the first set, which included all respondents, the dependent variable was contact (dichotomized as any versus none). In the second set, which included only those respondents who reported knowing at least one gay person, the dependent variable was whether the respondent was the recipient of direct disclosure (dichotomized as ever versus never). A total of 12 demographic and social psychological variables and variable sets were

entered into both equations as independent variables.¹¹

The results indicate that certain groups of heterosexuals are more likely than others to experience contact and direct disclosure. Having contact with a gay man or woman was predicted by being female, having a higher educational level, *not* attending religious services frequently, being younger, living in one of the Pacific coast states, and having a higher income (model *chi-square* = 74.493, *df* = 6, *p* < .001). Among those who knew a gay person, the recipients of direct disclosure were more likely than others to be politically liberal, single, and an urban resident (model *chi-square* = 27.245, *df* = 3, *p* < .001).

Insert Table 1 about here

Alternative explanations. Although the results reported above are consistent with the contact hypothesis, both contact and attitudes toward gay men might be determined by one or more other variables. To assess the plausibility of a third-variable explanation, we used ANOVA to compare mean ATG scores for those reporting contact and those with no contact across the same variables described above for the logistic regression analyses. We found that individuals with contact manifested lower mean

¹¹ The independent variables were: (1) gender; (2) age; (3) educational attainment; (4) income; (5) current employment status (dichotomized as employed versus not); (6) marital status (coded as two dummy variables - married vs. not, and never married vs. currently/formerly married); (7) number of children; (8) political ideology, affiliation, and involvement (coded as four dummy variables - liberal vs. not, Democrat versus not, Republican versus not, and registered to vote versus not); (9) frequency of religious attendance; (10) religious denomination (dichotomized as fundamentalist or liberal/no religion, based on a continuum described by Paige, 1977); (11) number of sexual partners since age 18; and (12) current geographic residence (coded as three dummy variables - Pacific states region versus elsewhere, Northeastern states region versus elsewhere, and large city vs. elsewhere).

ATG scores than did individuals without contact across almost all of the subgroups examined (see Table 1). The only exception to this pattern occurred among African Americans, whose ATG scores were roughly equivalent regardless of contact (see Herek & Capitano, in press, for further discussion of this finding). For only one demographic variable (number of children) was the contact-by-group interaction term significant (applying the Bonferroni method to correct for the large number of significance tests, we set *p* < .003). Thus, the effect of contact did not differ significantly across most demographic subgroups.¹²

Discussion

Heterosexuals who had interpersonal contact with gay men or lesbians expressed significantly more favorable attitudes toward gay men than did heterosexuals without contact. The relationship between contact and favorable attitudes was stronger to the extent that respondents reported multiple contacts, more intimate contacts, and contacts that involved direct disclosure of sexual orientation. Before discussing the results further, we present data from the Wave 2 survey, in which the Wave 1 hypotheses were tested for heterosexuals' attitudes toward lesbians as well as gay men. The Wave 2 data also permitted assessment of the relationship between attitudes and contact across time.

SURVEY WAVE 2

Method

Wave 2 interviews were conducted with the same Wave 1 respondents between 20 November 1991 and 13 February 1992. Reinterviews were completed with 382 (71.0%)

¹² We also computed a regression equation for ATG scores in which we entered the same set of demographic and social psychological variables on the first step, with contact (number of reported relationships) on the second step. The amount of variance explained by contact (5.7%) was significant (*p* < .001) even after the effects of the other variables had been controlled statistically (the combined variables accounted for 28.7% of the variance in ATG scores).

of the original respondents.¹³ The mean duration of the Wave 2 interview was 40 minutes. As before, the analysis was restricted to individuals who described themselves as heterosexual ($n = 366$).

In addition to the Wave 1 measures of personal contact and attitudes toward gay men, a 3-item short form of the Attitudes Toward Lesbians (ATL) scale (Herek, 1988) was included in the survey protocol. It comprised the same three ATG items, but reworded to apply to lesbians. Response alternatives and scoring were as in Wave 1 (Wave 2 α s = .76 for the ATL and .76 for the ATG).

Results

The response distributions were remarkably similar for attitudes toward lesbians and toward gay men. Most respondents expressed negative attitudes. A majority agreed that “Sex between two women is just plain wrong” and that “I think lesbians are disgusting” (respectively, 64.3% and 59.9% agreed, with 68.3% and 59.9% agreeing with the corresponding items about men). Roughly one-fourth of respondents (26.6%) agreed that “Female homosexuality is a natural expression of sexuality in women;” 24.6% agreed with the comparable item about male homosexuality. The overall mean scores were 9.0 ($sd = 2.76$) for the ATL and 9.09 ($sd = 2.78$) for the ATG. For both 3-item scales, the range of scores was from 3 (extremely favorable attitudes) to 12 (extremely hostile attitudes).

¹³ Most Wave 2 interviews (72.6%) were completed in one or two attempts. Four respondents, however, required more than eight attempts. The maximum number of attempts before completing an interview was 14. As in Wave 1, *chi-square* analyses revealed no consistent response differences according to the number of contact attempts. Only two demographic differences were observed across samples at the two waves of data collection. Disproportionately more Asians and fewer Whites were lost through attrition at Wave 2 (*chi-square* (4) = 13.7, $p < .01$). In addition, attrition was consistent for all income categories except the highest (> \$70,000), which had a significantly lower attrition rate (*chi-square* (7) = 19.4, $p < .01$).

As in Wave 1, almost one-third of the sample (32.1%) knew at least one person who is gay or lesbian. Also as in Wave 1, respondents within this subgroup tended to know more than one gay person, were more likely to report that their closest relationships were with gay men than with lesbians, and were more likely to describe contact with gay or lesbian friends than with relatives.¹⁴

Hypothesis 2.1: Interpersonal contact and favorable attitudes. As in Wave 1, contact with a gay person was associated with significantly more favorable attitudes toward lesbians and gay men (MANOVA using Pillai’s trace, $V = .125$, $F(2,356) = 25.38$, $p < .001$). The mean ATL score for those reporting contact was 7.8 ($sd = 2.92$), compared to 9.61 ($sd = 2.45$) for those reporting no contact ($F(1,357) = 37.61$, $p < .001$). The mean ATG score for those reporting contact was 7.69 ($sd = 3.06$), compared to 9.78 ($sd = 2.34$) for those reporting no contact ($F(1,357) = 50.84$, $p < .001$).

Hypothesis 2.2: Multiple contact experiences. As in Wave 1, respondents manifested progressively more favorable attitudes to the extent that they knew more gay people (Pillai’s trace, $V = .157$, $F(6,710) = 10.08$, $p < .001$). Mean ATL scores were 8.83 ($sd = 2.7$) for respondents with one relationship; 7.57 ($sd = 2.86$) for those with two relationships;

¹⁴ Male and female respondents alike were more likely to report that their closest relationships were with gay men than with lesbians. Of the 192 reported relationships (with 40 respondents describing one relationship and 76 describing two), only 54 (28%) were with a lesbian. Shifting the unit of analysis from the relationship to the respondent, only 43 (37%) of those who knew one or more gay people described at least one relationship with a lesbian. Female heterosexuals were more likely than males to know a gay person (of those who knew any gay people, 62% were women; *chi-square* = 5.8893, $p < .05$).

Respondents’ ATL and ATG scores did not differ significantly according to the gender of the gay person(s) they knew. Using procedures comparable to those reported above for Wave 1, this was assessed through MANOVA and hierarchical regression analysis.

7.09 ($sd = 2.96$) for those with three or more relationships; and 9.61 ($sd = 2.45$) for those with no contact (univariate $F(3,356) = 16.03, p < .001$). Comparable means (and standard deviations) for the ATG were 8.64 (2.77), 7.78 (3.23), 6.86 (3.0), and 9.78 (2.34), respectively (univariate $F(3,355) = 20.76, p < .001$). ATL and ATG scores were significantly lower (more favorable attitudes) for respondents who knew three gay persons versus those who knew none or one. Moreover, respondents who had contact with two gay people had significantly lower ATL and ATG scores than did those who knew no gay people. Attitude differences between those with one relationship and those who reported none were in the expected direction, but statistically significant only for ATG scores.

Hypothesis 2.3: Intimate versus superficial contact. We were unable to use MANOVA for this analysis because of the small number of respondents in several cells (three cells had fewer than 4 respondents). Instead, we examined the association between type of relationship and attitude scores through least-squares regression analyses conducted with the subset of respondents who knew at least one gay person. Because this analysis combined respondents who described only one relationship with those who described two (in contrast to Hypothesis 1.3 above, for which we conducted separate ANOVAs for each), we entered the respondent's number of reported relationships on the first step of the equations. This variable was a strong predictor of attitudes, accounting for 6.3% of the variance in ATL scores and 6.2% of the variance in ATG scores. On the second step, we entered dichotomized forms of the four relationship variables (close friend, immediate family, etc.). For the ATL equation, the "distant relative" variable accounted for 9.5% of the variance beyond that explained by number of relationships. For the ATG equation, the "distant relative" variable accounted for 9.3% of the variance in addition to that explained by number of relationships. For both subscales, respondents manifested less favorable attitudes if they had a gay distant relative than if their relationship was with an immediate family member or a friend.

Hypothesis 2.4: Direct disclosure. As in Wave 1, respondents reporting direct disclosure had more favorable attitudes than did respondents reporting contact without disclosure. The difference was significant, however, only for respondents who reported disclosures from two friends or relatives. The mean ATL and ATG scores, respectively, were 8.29 and 8.27 (no direct disclosures), 8.51 and 8.45 (one disclosure), and 6.01 and 5.68 (two disclosures). Using MANOVA, we found a significant difference in attitudes between respondents who reported two direct disclosures and those who reported one or none (Pillai's trace, $V = .139, F(4,224) = 4.18, p < .01$).¹⁵

Longitudinal patterns. Because the survey from which the present data set is taken included two successive interviews with the same respondents, we were able to assess longitudinal patterns in contact and attitudes. Of primary interest was whether individuals who met a gay person for the first time between their Wave 1 and Wave 2 interviews would manifest changes in ATG scores (i.e., the three items that were administered at both waves). Only 26 respondents who did not know a gay person at Wave 1 subsequently reported knowing one or more gay people at Wave 2. Those individuals did *not* manifest more positive attitudes at Wave 2 (in fact, their mean ATG scores increased slightly from 8.87 at Wave 1 to 9.52 at Wave 2, but the difference was not statistically significant). Nor did their ATG scores differ significantly from those of respondents who did

¹⁵ It would be desirable to know the relative strength of each aspect of contact in predicting heterosexuals' attitudes. Because of the relatively small number of respondents who reported contact, however, complex contingency tables (e.g., number or relationships by type of relationship by disclosure) would have resulted in several empty or near-empty cells. Furthermore, because of the strong correlations among independent variables (e.g., type of relationship and disclosure), problems of multicollinearity precluded us from combining all of the variables into a single regression equation. Consequently, the present research does not establish definitively the relative importance of different aspects of contact.

not know any gay people at both Wave 1 and Wave 2. Further examination of the data revealed that the relationships reported by this subgroup of respondents tended to be distant: All but one reported that their contact was with a gay acquaintance or distant relative. In addition, only 9 of the 26 respondents (35%) reported direct disclosure. Thus, the types of relationships reported by this subgroup were those shown in previous analyses to be the least likely to be associated with favorable attitudes.

We also examined the relationships among contact and attitudes across waves for the entire sample. We observed strong zero-order correlations between Wave 1 and Wave 2 ATG scores ($r = .70, p < .001$) and between Wave 1 and Wave 2 reports of contact (dichotomized as *any* versus *none*; $r = .67, p < .001$). The correlations between attitudes and contact were remarkably consistent across waves. Wave 1 ATG scores were correlated with Wave 1 contact and Wave 2 contact at nearly the same level ($r_s = -.35$ and $-.38$, respectively; both $p_s < .001$). The correlations between Wave 2 ATG scores and contact also were consistent ($r = -.38$ with Wave 1 contact and $-.37$ with Wave 2 contact; $p < .001$).

Treating Wave 2 ATG scores as a dependent variable in ordinary least-squares regression, we found that Wave 1 ATG explained 46.8% of its variance. Thus controlling for prior attitudes, we next entered Wave 1 contact and found that it explained an additional 1.7% of the variance. In a parallel analysis using logistic regression, we treated Wave 2 contact (*any* versus *none*) as the dependent variable and assessed the predictive power of Wave 1 ATG scores, controlling for Wave 1 contact. With Wave 1 ATG scores added, the fit of the model was significantly better (improvement *chi-square* = 13.32, $p < .001$) than when only Wave 1 contact was entered. From these analyses, we concluded that the relationship between contact and attitudes is fairly stable over time, and that the longitudinal relationship between contact and attitudes is probably reciprocal: Having contact experiences predicts increasingly more favorable attitudes at

a later date, and holding favorable attitudes predicts subsequent increased reports of contact.¹⁶

GENERAL DISCUSSION

Heterosexuals who had experienced interpersonal contact with gay men or lesbians expressed significantly more favorable general attitudes toward gay people than did heterosexuals without contact. This pattern was generally consistent across both waves of data collection. Of considerable importance is that the findings were similar for attitudes toward lesbians and gay men alike. Because most previous research in this area has not directly assessed heterosexuals' attitudes toward lesbians, the extent to which findings about attitudes toward gay men or toward

¹⁶ We also conducted ordinary least squares regression analyses using number of contacts (none, 1, 2, 3 or more) instead of the dichotomized contact variable. Wave 1 ATG scores accounted for 1.4% of the variance in Wave 2 number of contacts (controlling for Wave 1 number of contacts). In contrast, Wave 1 number of contacts accounted for 2.8% of the variance in Wave 2 ATG scores (controlling for Wave 1 ATG scores). Although these results suggest that the influence of contact on attitudes is greater than the influence of attitudes on subsequent contact, we consider them to be extremely tentative for two reasons. First, the predictive power of the two variables may have been affected by differences in their ranges (4 points for number of contacts, 12 points for ATG) and distributions (the contact variable was particularly skewed, with roughly two thirds of the sample reporting no contacts). Second, closer inspection of the data suggested that the effect detected in the regression analyses occurred primarily among the 18 respondents who knew at least one gay person at Wave 1 and then knew more gay people at Wave 2 (as noted previously, ATG scores did not change significantly among the 26 respondents who knew no gay people at Wave 1 but at least one gay person at Wave 2). Thus, the analysis leaves open the question of whether those 18 respondents developed more favorable attitudes toward gay people as a consequence of their *first* contact experience (which occurred prior to Wave 1), or had unusually favorable attitudes in the first place (prior to that first contact).

“homosexuals” (a term likely to evoke attitudes toward gay men) could be generalized to attitudes toward lesbians has been in doubt. The present research suggests that such attitudes closely resemble attitudes toward gay men.

The relationship between contact and attitudes was affected by three different aspects of the contact experience. First, favorable attitudes were more likely among heterosexuals who reported multiple contacts with lesbians or gay men. Although knowing one gay person was associated with more positive attitudes than was knowing none, only respondents who knew at least two gay people were consistently significantly different from those with no contacts. Perhaps knowing multiple members of a stigmatized group is more likely to foster recognition of that group’s variability than is knowing only one group member (Wilder, 1978). Knowing multiple members of a group may also reduce the likelihood that their behavior can be discounted as atypical (Rothbart & John, 1985).

The two other dimensions of contact examined here - degree of intimacy and direct disclosure - were highly correlated. Having a close gay or lesbian friend was almost always associated with direct disclosure, whereas heterosexuals who knew lesbians or gay men only as distant relatives were likely to have learned about the individual’s sexual orientation indirectly. One interpretation of this pattern is that gay people come out to their close friends but not to distant relatives or acquaintances (with whom their homosexuality may be common knowledge but not openly discussed). Alternatively, disclosing one’s stigmatized sexual orientation may strengthen a relationship, whereas not disclosing - despite the heterosexual’s knowledge that one is homosexual - may weaken a relationship. In either case, the results are consistent with the contact hypothesis: Interpersonal relationships characterized by intimacy, shared values, and common goals are more likely to be associated with favorable attitudes toward gay people as a group than are superficial or distant relationships.

Although the strong correlation between closeness of relationship and receipt of disclosure makes it difficult to evaluate the individual contribution of each, both variables appear to affect intergroup attitudes. Closer relationships were consistently associated with more favorable attitudes. Furthermore, in the one relationship category for which disclosure experiences were nearly equally divided (acquaintances and distant friends), respondents reporting at least two disclosure experiences had significantly more favorable attitudes toward gay men than did other respondents.

The importance of disclosure and relationship type is also highlighted by our analysis of ATG scores among the 26 respondents who reported knowing one or more gay people at Wave 2 but none at Wave 1. The finding that this group did not manifest a significant attitude change across waves could be interpreted as disconfirming the contact hypothesis. We believe, however, that this pattern is better understood as demonstrating that type of contact, not contact *per se*, shapes intergroup attitudes. For all but one of the 26 respondents, the relationship newly described at Wave 2 was distant: with a distant relative, an acquaintance, or a friend described as “not close.” Furthermore, two-thirds of the 26 respondents did not report direct disclosure. Thus, although this subsample experienced new intergroup contact between Waves 1 and 2, that contact was of the sort least likely to reduce prejudice. Consequently, the subsample does not provide an adequate test of the contact hypothesis.

In our analyses across the two waves of data collection, Wave 1 contact explained a significant amount of variance in Wave 2 attitudes, even when Wave 1 attitudes were statistically controlled. This pattern suggests that heterosexuals who know a gay man or lesbian are likely to develop more positive attitudes toward gay people as a group, a conclusion that is consistent with the contact hypothesis. Yet, we also observed that Wave 1 attitudes explained a significant amount of variance in Wave 2 contact, even controlling for

Wave 1 contact. Thus, heterosexuals with preexisting favorable attitudes toward gay men and lesbians subsequently are more likely than others to experience contact. When they are able, lesbians and gay men appear to be selective in associating with heterosexuals and revealing their sexual orientation. To the extent that this finding can be replicated with majority group attitudes toward other stigmatized groups - especially those with a concealable stigma - it suggests a potentially important modification to the contact hypothesis. Not only does contact affect attitudes, but a majority group member's attitudes (or minority group members' perceptions of them) may affect the likelihood that she or he will knowingly experience contact with persons whose stigmatized status can be concealed in normal interactions.

Another theoretically interesting finding concerns the apparent relationship between intergroup attitudes and receipt of disclosure. In a close relationship, we speculate that a minority individual's direct disclosure about her or his concealable stigma can provide the majority group member with the necessary information and motivation to restructure her or his attitudes toward the entire minority group. This seems most likely to occur when the gay man or lesbian carefully manages the disclosure process so that the heterosexual can receive information (e.g., about what it means to be gay, about the gay person's similarity to other gay people) in the context of a committed relationship. For example, the gay person may disclose in a series of gradual stages, frame the disclosure in a context of trust and caring, explain why she or he did not disclose earlier, answer the heterosexual person's questions, and reassure the heterosexual that her or his past positive feelings and favorable judgments about the gay friend or relative are still valid.

Such interactions may assist the heterosexual person in keeping salient the relevant ingroup-outgroup distinction (i.e., heterosexual-homosexual) while observing behaviors that are inconsistent with her or his stereotypes, thereby facilitating the rejection of those stereotypes while fostering attitude

change. If this experience leads the heterosexual person to accept that the friend or relative is indeed representative of the larger community of gay people (i.e., the friend or relative is not regarded as an anomaly), the heterosexual is likely to experience cognitive dissonance: On the one hand, she or he has strong positive feelings toward the gay friend or relative; on the other hand, she or he probably has internalized society's negative attitudes toward homosexuality. If the dissonance is resolved in favor of the friend or relative - an outcome that is more likely when the gay person plays an active role in imparting information about her or his stigmatized status - the heterosexual's attitudes toward gay people as a group are likely to become more favorable.

In contrast, a readily apparent stigma (such as race or physical disability) can usually be detected without such disclosure. Consequently, contact between the bearers of such stigma and members of the majority group may be less likely to reduce the latter's prejudice than when a stigma is concealable. This is exemplified in the assertion by a White person that "Some of my best friends are Black." Although having a best friend from a minority group should be associated with an absence of prejudice toward the group, making such a statement is commonly perceived as a defensive attempt to disavow racist attitudes. Rather than simply dismissing the statement (many individuals who make such a statement probably do not actually have best friends from the minority group), we can draw a potentially important insight from it. Because of the visible nature of race, a White person can have a Black friend but never discuss issues related to race in any depth. Without such discussion, even a White who personally knows Blacks might still retain negative stereotypes and attitudes toward African Americans as a group (e.g., if her or his Black friends are not perceived as representative of African Americans generally). In contrast, because homosexuality represents a concealable stigma, knowing that some of one's best friends are gay probably means that a heterosexual has directly discussed homosexuality with gay individuals and consequently has acquired greater insight

and empathy for their situation, which can be generalized to gay people as a group. Rather than concluding that her or his friends are unlike other gay people, for example, such discussions might lead a heterosexual to regard sexual orientation as irrelevant to one's qualities as a human being.

The results reported here suggest directions for future studies. Collecting heterosexuals' first-person accounts of their contact experiences with gay people would be useful for identifying different patterns of contact and developing hypotheses about their role in attitude change. Similarly, descriptions by gay men and lesbians of their coming out experiences could be useful for describing how gay people decide to disclose to others, how they manage the disclosure process, and what happens when they lose control of that process (e.g., Curtis, 1988; Holmes, 1988; Wolfe & Stanley, 1980). Controlled field experiments and longitudinal survey studies of heterosexuals' attitudes will be important for understanding the causal relationships between contact and attitude change. They also will permit description of the cognitive processes that underlie these relationships.

The findings also have important policy implications. At the most basic level, they demonstrate that heterosexuals can and do establish close relationships with openly gay people. This conclusion is contrary to one of the U.S. government's principal objections to allowing gay people in the military, namely, that heterosexual personnel cannot overcome their prejudices against homosexuality (Herek, 1993). A second implication of the findings is that heterosexuals' antigay prejudices are likely to be reduced in the course of close, ongoing contact that involves direct disclosure about sexual orientation. Thus, institutional policies are more likely to reduce prejudice to the extent that they encourage gay people to disclose their homosexual orientation to heterosexual peers. Conversely, policies that discourage or punish such disclosure may perpetuate prejudice.

Recognizing the ongoing dangers posed by societal prejudice (e.g., Herek, 1991, 1992),

lesbian and gay activists nevertheless have often called upon gay people to disclose their sexual orientation publicly, that is, to come out of the closet. Perhaps the most noted political leader to advocate this strategy was Harvey Milk, San Francisco's first openly gay Supervisor, who was assassinated in 1978. For example, in a message that he had recorded to be played in the event of his death, Milk expressed the belief that coming out would eliminate prejudice: "I would like to see every gay lawyer, every gay architect come out, stand up and let the world know. That would do more to end prejudice overnight than anybody could imagine" (Shilts, 1982, p. 374).

Such calls to come out reflect a conviction that the tenets of the contact hypothesis are applicable to heterosexuals' attitudes toward lesbians and gay men. Although not definitive, the findings of the present study suggest that this belief is fundamentally correct. Coming out to heterosexuals - especially to close friends and immediate family - appears to reduce prejudice against gay people as a group. Furthermore, the finding that heterosexuals with multiple contacts and disclosures hold the most favorable attitudes of any group suggests that coming out will be most effective as a strategy for reducing prejudice when it is practiced by large numbers of lesbians and gay men. Thus, although coming out to loved ones exposes gay men and lesbians individually to the possibility of ostracism, discrimination, and even violence, it appears to be one of the most promising strategies for promoting the kind of societal change that will ultimately end such stigma.

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Table 1***Breakdown of ATG scores by contact within demographic groups***

Demographic Group	Group Mean	Contact Yes	Contact No	ANOVA Contact <i>F</i>	Group <i>F</i>	Contact X Group
Entire sample	9.08	7.74	9.69	60.35	n/a	n/a
Gender:						
Female	8.78	7.67	9.55	54.85	NS	NS
Male	9.38	7.89	9.80			
Race:						
White	9.07	7.67	9.56	56.30**	NS	NS
Black	9.59	9.77	9.60			
Education:						
Less than high school	9.94	9.06	10.06	53.39**	NS	NS
High school diploma	9.37	8.76	9.59			
Some college	9.29	8.08	9.97			
College degree or higher	8.15	6.54	9.44			
Income:						
0-20,000	9.13	8.45	9.30	54.46**	NS	NS
20-40,000	9.14	7.66	9.89			
40-60,000	9.23	7.63	9.92			
60,000+	8.59	7.63	9.34			

(table continues)

Table 1 (continued)

Demographic Group	Group Mean	Contact Yes	Contact No	Contact F	ANOVA Group F	Contact X Group
Age:						
18-29	9.02	8.02	9.52	60.98**	NS	NS
30-49	8.95	7.28	9.95			
50-64	9.34	8.51	9.69			
65 and older	9.15	8.58	9.20			
Geographic residence:						
Northeast/Mid-Atlantic	8.32	7.22	9.06	49.97**	NS	NS
Pacific Coast	8.41	7.22	9.72			
Mountain/Southwest	9.59	8.93	9.96			
Central/Midwest	8.92	8.41	9.16			
South/Southeast	9.69	7.64	10.21			
Household residence:						
Large city	8.66	7.05	9.54	58.39**	NS	NS
Small city	8.99	7.58	9.72			
Suburb	9.13	8.67	9.40			
Small town	9.40	7.72	9.88			
Farm or wilderness	9.32	7.72	9.94			
Relationship Status:						
Married/widowed	9.20	8.17	9.66	61.78**	NS	NS
Never married	8.86	6.42	9.61			
Divorced/separated	8.91	7.72	9.97			
Cohabiting	8.30	5.55	9.99			

(table continues)

Table 1 (continued)

Demographic Group	Group Mean	Contact		Contact <i>F</i>	ANOVA	
		Yes	No		Group <i>F</i>	Contact X Group
Number of children:						
None	8.47	6.23	9.50	64.39**	NS	4.99*
One	9.47	9.08	9.70			
Two	9.07	7.59	9.69			
Three or more	9.42	8.44	9.87			
Religious denomination:						
Conservative	9.32	8.21	9.82	58.07**	17.03**	NS
Nonconservative	7.95	5.98	9.07			
Religious attendance:						
Never	8.75	6.88	9.71	53.98**	7.80**	NS
One, few	8.29	6.88	9.16			
1-3 times/month	9.32	8.34	9.81			
Weekly or more often	9.96	9.64	10.05			
Political ideology						
Liberal	7.95	6.14	9.07	49.81**	17.15**	NS
Moderate	9.12	8.17	9.65			
Conservative	9.89	9.19	10.08			
Political party:						
Republican	9.67	8.55	10.13	60.33**	6.77**	NS
Democrat	8.54	6.86	9.43			
Independent	9.19	8.05	9.68			

(table continues)

Table 1 (continued)

Demographic Group	Group Mean	Contact Yes	Contact No	Contact <i>F</i>	ANOVA Group <i>F</i>	Contact X Group
Registered to vote:						
No	8.86	7.62	9.44	60.01**	NS	NS
Yes	9.14	7.78	9.77			
Voted in 1988:						
No	9.09	8.07	9.47	61.97**	NS	NS
Yes	9.06	7.61	9.81			
Employed:						
No	9.62	8.45	9.76	43.27**	NS	NS
Yes	9.01	7.78	9.65			
Number of sexual partners since age 18:						
0	9.74	0.0	9.74	52.62**	NS	NS
1	9.50	8.69	9.82			
2-5	8.76	7.26	9.47			
6+	8.67	7.32	9.66			

* $p < .003$ ** $p < .001$

Higher ATG scores indicate more negative attitudes toward gay men. Because of listwise deletion of missing data, number of cases differs slightly according to variables. Minimum n for any demographic variable is 396. Using the Bonferroni method to correct for the large number of significance tests, only F values significant at $p < .003$ are reported.