

Attitudes Toward Lesbians, Gay Men, Bisexual Women, and Bisexual Men in Germany

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Attitudes toward lesbians, gay men, bisexual women, and bisexual men were assessed in a national representative sample of 2,006 self-identified heterosexual women and men living in Germany. Replicating previous findings, younger people held more favorable attitudes than older people; women held more favorable attitudes than men; and men held more favorable attitudes toward female than male homosexuality, whereas women did not differentiate. However, women held more favorable attitudes toward homosexuals than toward bisexuals, whereas men did not differentiate. Knowing a homosexual person was an important predictor of attitudes, as was political party preference. Both same-sex and opposite-sex sexual attraction were substantially related with attitudes. Our findings support the notion that attitudes toward lesbians, gay men, bisexual women, and bisexual men are related but distinct constructs.

During the decades of a conservative federal government coalition under chancellor Helmut Kohl, the progression towards equality of homosexual relationships before the law that was witnessed in neighboring countries seemed impossible in Germany. As the prime example of that progression, the Netherlands, surpassing all other countries in the world, granted full rights to homosexual relationships, including the right to adopt children. Not only did the traditionally liberal and progressive Scandinavian countries pass laws benefiting lesbians and gay men, but also southern European states like France and parts of Spain granted more rights to homosexual relationships than Germany did. Whereas German lesbians and gay men believed they sensed changes in people's attitudes—with, for instance, the number of lesbians and gay men on TV doubling—the Kohl government had no intention of adjusting the laws to recognize legally what long existed as a matter of fact. However, *der Wechsel* (the change) came in 1998, and the new government coalition consisting of the Green party and the Social Democrats agreed to pass a domestic partnership law within the foreseeable future. Indeed, pictures of German gay and lesbian “newlyweds” spanned the world in August, 2001.

Quite certainly, different policies or behaviors with regard to the rights of lesbians and gay men are related to attitudes toward these groups in a number of ways. In this article, we describe a study in which the general public's attitudes toward lesbians, gay men, bisexual women, and bisexual men, specific attitude-related questions, and predictors of attitudes were explored half a year before the partnership law in Germany became effective.

ATTITUDES TOWARD LESBIANS AND GAY MEN

Attitudes toward lesbians and gay men are sometimes assessed with single attitude items. This method is common in survey research (e.g., Jensen, Gambles, & Olsen, 1988; Reuband, 1989) and it has been used to obtain a purely evaluative attitude measure (Haddock, Zanna, & Esses, 1993). Alternatively, researchers can use attitude scales (e.g., Herek, 1994; Larsen, Reed, & Hoffman, 1980). We were interested in comparing attitudes toward lesbians, gay men, bisexual women, and bisexual men. Therefore, we used a single identical evaluative measure for attitudes toward the four groups. Also, it was important to refer to each of these four group unambiguously; for instance, the percentage of interviewees who assume that all *homosexuals* are male reaches up to 75% (e.g., Haddock et al., 1993). Thus, we asked our participants about their attitudes toward female homosexuality, male homosexuality, female bisexuality, and male bisexuality.¹

How favorable attitudes toward homosexuals appear depends heavily on the wording of statements. Some statements make attitudes appear very unfavorable. For instance, a cross-cultural study (Jensen et al., 1988) found that 41% of the respondents in Germany and England agreed that “homosexuality can never be justified.” Only around 20% of participants in Spain, England, and Germany scored on the approval side of the scale (also see Bochow, 1993; Dahme, Kanschat, & Retat, 1981). However, if other attitude-related statements are considered, attitudes seem more tolerant. For instance, another study showed that 50% of medical students in Britain

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¹ We speak of lesbians or gay men wherever possible precisely because of the ambiguity of the term homosexuals. However, for the same reason, we leave homosexuals whenever describing findings where this term was used.

(Parker & Bhugra, 2000) strongly disagreed that "Male homosexuals are a danger to children" (p. 145), and less than 10% agreed that "Male homosexuals, in general, are neurotic." Similar responses indicating tolerance can even be cited from the above-mentioned studies in which other responses suggested intolerance (Bochow, 1993; Dahme et al., 1981; Reuband, 1989). These varying findings indicate that the acceptance of alternative sexual orientations depends on the degree of involvement: Many people seem to not mind meeting a gay man in the gym, but their attitudes are less tolerant when it comes to a gay man teaching their children (cf. Norris, 1991). Thus, in our study, in addition to evaluative single-item measures of attitudes toward the groups of interest, we included a range of statements that would be sensitive to differences in attitudes along a wide continuum.

Even if it is hard to tell how favorable attitudes are, there clearly exists a general trend that attitudes have become more favorable. This is the unanimous finding of all studies examining civil rights (e.g., Bochow, 1993; Herek, 1997; Yang, 1997). "Feeling thermometer" ratings—an indicator of liking or dislike—of lesbians and gay men have become much more favorable in the U.S. (Yang, 1997), even if these groups still are among the most disliked. For instance, Canadian students held on average unfavorable attitudes toward homosexuals ($M = 41$ on a scale from 0 to 100), and these attitudes were much more unfavorable than those toward the second most unfavorably rated group, Pakistanis ($M = 58$; Haddock & Zanna, 1998). Data from Germany collected in 2001 show that these numbers differed for a convenience sample of students (Steffens, 2003). Lesbians were rated in the vicinity of female politicians and Christians, and spontaneous feelings for gay men were even warmer. These data indicate a very high acceptance or "non-discrimination norm" of lesbians and gay men. This difference is in line with other findings across cultures. Whereas a majority of respondents in one study in the U.S. opposed homosexuals' right to marry (Yang, 1997), around 50% of German respondents in a 1991 study replied that they would grant registered partnership rights to homosexuals (Bochow, 1993). Cross-cultural data from the International Social Survey Program show that Germans are, in comparison to people in most other countries, relatively tolerant of homosexual behavior: Among the 29 nations who took part in the survey, former West Germany ranked 6th and former East Germany ranked 10th in "tolerance points," both scoring above the midpoint of the scale and significantly higher than, for instance, Australia, which in turn scored significantly higher than the U.S. (Kelley, 2001).

PREDICTORS OF ATTITUDES TOWARD LESBIANS AND GAY MEN

Luckily, the ability to discover relationships among constructs is largely unrelated to differences in the absolute level of favorability. Thus, the same correlates of attitudes toward gay men and lesbians have been found again and

again (for reviews, see Fernald, 1995; Weishut, 2000). The variable that has drawn the most attention is participant sex. The finding that men's attitudes are less favorable than women's is parsimonious (Hayes, 1995; Larsen et al., 1980; Steffens, in press). When target sex is specified, men's attitudes toward gay men also are more unfavorable than women's (for a review, see Kite & Whitley, 1996). At least in part, this sex difference seems to be rooted in people's gender belief systems, that is, "a broader belief system about women, men, and their appropriate roles" (Kite & Whitley, 1998, p. 40). Corroborating evidence for the role of general gender-related beliefs has come from studies in which support for traditional sex roles (Polimeni, Hardie, & Buzwell, 2000), sex-role attitudes (Bochow, 1993), or the degree of psychological "maleness" (Dahme et al., 1981) were correlated with attitudes toward lesbians and gay men, as were attitudes toward women's roles in society (Simon, 1995) and modern sexism (Morrison, McLeod, Morrison, Anderson, & O'Connor, 1997). In addition to gender-related attitudes, attitudes toward homosexuals correlate with other aspects of human sexuality that may be summarized as "restrictive sexual standards and behavior": Bochow (1993) found that a more unfavorable attitude toward homosexuals went along with first intercourse at a later age, with less frequent reported intercourse, with a lower rating of the quality of that intercourse, and with more reported monogamy. As an extension of those findings, the simple question of how strongly one feels attracted to an attractive person of the opposite sex should predict attitudes: The stronger the opposite-sex attraction, the more positive attitudes toward lesbians and gay men should be.

Not only are men's attitudes toward homosexuality more unfavorable than women's, but attitudes toward gay men are often less favorable than attitudes toward lesbians (Herek, 1994; Kite & Whitley, 1996; Steffens, in press). Moreover, in a previous German study (Steffens, in press), men showed less favorable attitudes toward lesbians than women did (cf. also Morrison et al., 1997).

In addition to participant sex, a demographic factor predicting attitudes toward gay men and lesbians is age. Younger adults hold more favorable attitudes than older adults (Hayes, 1995; Jensen et al., 1988; Reuband, 1989).

Beyond sex and age, educational level, academic achievement, marital status, and, more generally, socioeconomic status have been found to predict attitudes toward lesbians and gay men (e.g., Hayes, 1995; Jensen et al., 1988; Morrison, Parriag, & Morrison, 1999). The psychological construct supposedly related to the predictors of urbanicity and geographical location (cf. Herek, 2000; Sherrod & Nardi, 1998) is general conservatism. As far as such conservatism is mirrored in people's political conservatism, ideology, and party preference, conservatism is clearly predictive of unfavorable attitudes toward lesbians and gay men (e.g., Hayes, 1995; Herek, 1997; Sherrod & Nardi, 1998). Finally, an important correlate of attitudes toward lesbians and gay men is knowing one or more (see

Herek & Capitanio, 1996)—or to be more precise, *knowing* that one knows one or more—lesbians and gay men.

In sum, important predictors of attitudes toward lesbians and gay men are participant sex and general attitudes toward sexuality; age; educational level, income, and urbanicity; political attitudes; and knowing a homosexual person. While many studies have investigated one or more of these predictors, few studies have considered all of them simultaneously, and certainly none has for a representative sample of adults in Germany.

ATTITUDES TOWARD BISEXUAL WOMEN AND MEN

As compared to attitudes toward lesbians and gay men, there is surprisingly little research on attitudes toward bisexual women and men. There are few if any studies outside the U.S. and few that do not rely heavily on relations established for attitudes towards lesbians and gay men. Despite the supposedly greater overlap with heterosexuality, bisexuals have been rated less acceptable than lesbians and gay men (for an exception, see Istvan, 2000). For instance, 50% of a student sample rated bisexual women as "somewhat or very unacceptable" on a single-item measure, and 61% gave that rating to bisexual men. In contrast, "only" 38% and 43% gave those ratings to lesbians and gay men, respectively (Eliason, 1997; also see Mohr & Rochlen, 1999). Men as compared to women gave more unfavorable ratings to gay men, lesbians, and bisexual men, but there was no difference in rating bisexual women. Men also showed less tolerance for male bisexuality than women did, and men showed less tolerance for male as opposed to female bisexuality. Additional predictors of unfavorable attitudes toward bisexual women and men were lack of contact, younger age, religiousness, race, political ideology, and unfavorable attitudes toward lesbians and gay men. In addition, sexual orientation identity was important: The more exclusively heterosexual somebody was, the more unfavorable their attitudes were.

High correlations among attitudes toward all four groups—lesbians, gay men, bisexual women, and bisexual men—have been found. One may thus conclude that studies on attitudes toward bisexuals do not call for including other predictors than those of attitudes toward lesbians and gay men, except for same-sex attraction. Therefore, in addition to asking people whether they were heterosexual, bisexual, or homosexual, we asked them how strongly they felt attracted to an attractive person of their own sex.

GOALS OF THIS STUDY

The aim of this study was to overcome the limitations of preceding studies in Germany by assessing separately the attitudes toward lesbians, gay men, bisexual women, and bisexual men in a large national representative sample; by assessing people's views on related questions including civil rights; and by investigating the most important predictors of these attitudes. We hypothesized that sex, age, political party preference, income and educational level, same-sex and opposite-sex sexual attraction, urbanicity,

geographical location, and knowing a homosexual or bisexual person would predict attitudes toward these groups. We assessed the relative roles of these predictors.²

METHOD

Participants

The population of interest was German-speaking persons ages 14 to 69 years residing in households with telephones in Germany. For the analyses presented in this article, the sample was limited to 2,006 self-identified heterosexual women and men. Interviews were conducted by the staff of an opinion and marketing research company (TNS Emnid) between December 9, 2000, and January 14, 2001, using a computer-assisted telephone interviewing (CATI) system. We used a multistage, stratified, random-sampling procedure and randomized last-two-digits dialing (Schnell, 1997). In the first stage, 306 sample points were selected using the ADM master-sample method. In the second stage, households were selected by a randomized last-two-digits dialing procedure. In the third stage, the interviewer asked to speak to the person in the target age group whose birthday was coming up next. In all, 54,215 phone numbers were dialed; 17,519 connections were not eligible (e.g., fax/data line, non-working or disconnected number, non-residence), 19,701 eligible people were not interviewed due to refusal or non-contact, and 2,053 people were not interviewed because they were not willing to disclose their sexual orientation. A total of 14,942 participants disclosed their sexual orientation. Effectively, the response rate was 40.7%. Of the women, 8,132 reported a heterosexual orientation, 214 a bisexual orientation, and 51 a homosexual orientation. Of the men, 6,276 reported a heterosexual orientation, 185 a bisexual orientation, and 84 a homosexual orientation. For analyses not reported in the present article, detailed interviews were conducted with all self-identified nonheterosexuals in the sample. In addition, a sub-sample of 2,006 self-reported heterosexual participants completed detailed interviews in which attitudes toward lesbians, gay men, bisexual women, and bisexual men as well as other data were assessed. To arrive at that subsample, every 4th person of the consecutively interviewed heterosexual participants received the full interview version until the planned sample size of $n > 2,000$ was reached. The other 12,402 participants received a short form of the interview that included only one attitude-related statement, referring to attitudes toward registered partnership. Of the former

² Whereas religiosity is an important predictor of attitudes toward nonheterosexuals in the U.S. (e.g., Mohr & Rochlen, 1999; Plugge-Foust & Strickland, 2000), this construct may not be too informative in Germany. For instance, ISSP data show on tolerance of homosexuality a partial regression coefficient of -.44 for religious beliefs in the U.S., but only -.12 in former West and -.03 in former East Germany (Kelley, 2001). Whereas the majority of Germans formally belong to one of the few major religious groups, religion plays a minor role for many, and priests do not exert much influence on public opinion. We therefore did not collect data on religious beliefs and cannot test whether this construct would explain additional variance in the models presented below.

interviewees, 1,052 (52%) were female and 954 male. Mean age was 42 years ($SD = 15$). Additional demographic information is displayed in Tables 1 and 2. Participants were free not to reply to questions they did not wish to answer. Therefore, Tables 2 to 5 show all respective *ns*.

Measures

Sexual orientation was assessed by asking interviewees whether they are heterosexual (1), bisexual (2), or homosexual (3). They were asked to report the number that best describes them. Additionally, they were asked how strongly they are attracted to an attractive man or woman (with response options ranging from 1 = *very strongly* to 4 = *not at all*). Attitudes toward lesbians, gay men, bisexual women, and bisexual men were assessed by asking people how favorably they rate male homosexuality, female homosexuality, male bisexuality, and female bisexuality. To assess more specific attitude-related points of view, we asked participants about their opinions concerning (a) homosexuals' right to register their partnerships, (b) discrimination at work because of sexual orientation, (c) having a homosexual child, (d) brand advertising in homosexuals' magazines, and (e) suddenly being "turned" homosexual. For all attitude statements, the exact German wording is presented in the Appendix, and the response options ranged from 1 (*very favorable*) to 4 (*very unfavorable*). For all reported findings, responses were recoded such that higher scores indicate more favorable attitudes.

Sociodemographic information was collected on sex, age, education, household income per month, urbanicity, and geographic location (former East vs. West Germany). Additionally, participants were asked whether they personally knew a homosexual or bisexual person and they were asked about their political party preference.

RESULTS

Given the large sample size, all significance tests were conducted with $\alpha < .01$. Still, even trivial effects may be significant. Therefore, R_p^2 (see Cohen, 1977) is reported as an indicator of the effect size: R_p^2 is the proportion of variance accounted for by a given factor in relation to the variance not accounted for by other factors. Effects explaining less than 2% of the variance in the dependent variable(s) are not discussed. Where applicable, the Pillai-Bartlett V is reported as a multivariate measure of effect size (cf.

Bredenkamp & Erdfelder, 1985). Given the consistent reporting of effect sizes, individual p values are omitted for significant effects. We used unweighted data for all analyses. Using weighted data was not associated with essential changes in our results.

Attitudes Toward Lesbians, Gay Men, Bisexual Women, and Bisexual Men

As a first step, we tested whether there was reason to believe that attitudes differed between participants receiving the full interview version and those receiving the short form. With regard to attitudes toward registered partnership, there was no difference between these groups [$F(1,13874) = 1.96$; $n = 1,946$, $M = 2.86$, $SD = .91$ and $n = 11,929$, $M = 2.83$, $SD = .94$, respectively], nor did a 6 (Age Group) X 2 (Participant Sex) X 2 (Full Interview Group vs. Short Form Group) ANOVA show differences between the interview groups, $F(1,13848) = 2.76$, and there were no significant interactions involving this factor. Thus, those receiving the full interview version seem to represent the larger sample well. Next, we compared the full interview sample to the population.

Table 1 shows the sociodemographic characteristics of the German population ages 14 to 69 years (Federal Statistical Office, 2002) and those of our sample. In the study's sample, men in their 20s are underrepresented whereas women in their 40s are overrepresented. Other than that, the sample represents the population well.

Heterosexual Germans' mean reported attitude toward gay men was 2.32 ($SD = .81$); toward lesbians, 2.37 ($SD = .79$); toward bisexual men, 2.21 ($SD = .78$); and toward bisexual women, 2.35 ($SD = .78$). That is, attitudes were close to the midpoint of our scale, but on the "unfavorable" side. When we formed a composite attitude score, attitudes toward the four groups of interest formed a scale that was remarkably reliable given only four items, $\alpha = .90$.

Table 2 shows, for relevant demographic groups, average attitudes toward each of the four groups of interest as well as the composite score.³ Whenever a one-way ANOVA of a

³ It is apparent from the *ns* depicted in the tables that there is a considerable percentage of missing data (accumulating over the different attitude items). We carefully checked whether this leads to distortions in our results and found little reason for worry. The number of missing data points per participant showed only minor correlations with psychological variables (the largest one, reported opposite-sex attraction, being below $r = .05$), and correlations with demographic variables were also low (all $r_s < .10$).

Table 1. Sociodemographic Characteristics of the German Population Ages 14-69 Years ($N = 60,871,900$) and of the Sample ($n = 2,006$)

Age	Men					Women				
	<i>N</i>	%	<i>n</i>	%	<i>p</i>	<i>N</i>	%	<i>n</i>	%	<i>p</i>
14-19	2,845,200	4.7	88	4.4	.549	2,703,000	4.4	94	4.7	.561
20-29	4,885,600	8.0	113	5.6	<.001	4,692,000	7.7	139	6.9	.208
30-39	7,171,200	11.8	231	11.5	.724	6,742,500	11.1	239	11.9	.261
40-49	6,149,500	10.1	215	10.7	.337	5,954,000	9.8	246	12.3	<.001
50-59	4,940,000	8.1	165	8.2	.860	4,913,900	8.1	157	7.8	.690
60-69	4,762,500	7.8	142	7.1	.243	5,112,500	8.4	177	8.8	.515

Note. p values are based on two-tailed binomial tests.

Table 2. Attitudes Toward Gay Men, Lesbians, Bisexual Men, and Bisexual Women (Means and Standard Deviations) by Sociodemographic Factors

	<i>n</i>	Gay men		Lesbians		Bisex. men		Bisex. women		Mean	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex	1649										
Male	797	2.11	.77	2.25	.77	2.13	.77	2.33	.76	2.20	.67
Female	852	2.51	.80	2.48	.81	2.30	.79	2.37	.80	2.41	.70
Effect size		.06		.02		.01		—		.02	
Age	1649										
14-19	163	2.61	.76	2.64	.76	2.59	.77	2.70	.72	2.64	.64
20-29	218	2.52	.79	2.65	.72	2.41	.79	2.65	.72	2.56	.67
30-39	380	2.43	.78	2.50	.75	2.29	.74	2.43	.72	2.41	.65
40-49	373	2.29	.76	2.31	.78	2.23	.76	2.32	.76	2.29	.67
50-59	257	2.14	.85	2.20	.79	2.06	.77	2.13	.76	2.13	.68
60-69	258	1.97	.78	2.02	.79	1.87	.71	2.01	.77	1.97	.65
Effect size		.06		.07		.07		.09		.09	
Education	1625										
Low ^a	515	2.09	.82	2.17	.83	2.05	.80	2.18	.82	2.12	.69
Middle ^b	581	2.39	.82	2.43	.79	2.27	.79	2.40	.77	2.37	.71
High ^c	529	2.45	.74	2.51	.73	2.34	.73	2.46	.71	2.44	.64
Effect size		.04		.03		.02		.02		.04	
Urbanicity	1649										
<5000	314	2.21	.77	2.27	.72	2.14	.75	2.32	.75	2.24	.65
<20000	426	2.26	.84	2.31	.82	2.23	.80	2.31	.80	2.28	.72
<100000	452	2.33	.83	2.38	.82	2.18	.78	2.33	.79	2.30	.70
<500000	278	2.39	.76	2.44	.77	2.27	.74	2.41	.71	2.38	.65
>500000	179	2.46	.84	2.56	.84	2.32	.84	2.43	.82	2.44	.74
Effect size		.01		.01		—		—		.01	

Note. Effect sizes (R_p^2) associated with group differences are presented for statistically significant effects ($p < .01$).

^aLowest school track (Hauptschule). ^bIntermediate track (Realschule). ^cHigher education entrance qualification (Abitur).

given demographic factor showed it to be significant, R_p^2 is reported as an estimator of the effect size. Women reported more favorable attitudes than men. Mean attitude scores were quite favorable in the youngest age groups and dropped linearly from close to favorable for the under 20-year-olds to clearly unfavorable for the group age 60 and older. We found an effect of education on attitude: Having attended a higher school track went along with more favorable attitudes. In contrast, there was no relationship between attitude and net household income, so that this factor is not presented in Table 2. Living in a rural area or in a smaller town went along with less favorable attitudes than living in a big city. While people living in former West Germany held more favorable attitudes, descriptively, than those living in former East Germany ($M = 2.33$, $SD = .69$ vs. $M = 2.27$, $SD = .71$), this difference was not statistically significant.

In Table 3, attitudes toward lesbians, gay men, bisexual women, and bisexual men are split by various nondemographic factors. Political party preference is clearly related to the attitudes of interest: The more conservative or right wing the party endorsed, the less favorable attitudes are. Personal contact with a nonheterosexual person is the one nondemographic factor showing the largest effect size on favorability of attitudes. Notably, 55% of the interviewees claim to know at least one homosexual or bisexual person. Interestingly, heterosexuals' reported degree of attraction toward their own sex as well as degree of attraction toward the other sex both correlate positively with attitudes toward the groups of interest: The more attraction toward

either group reported, the more favorable attitudes were. In addition to being of interest because of their relation with attitudes, it is interesting in itself that on the one hand, 2% of self-reported heterosexuals claimed very strong or strong erotic attraction toward their own sex, and on the other hand, 6% of them claimed no attraction at all toward the other sex.

In a stepwise multiple regression, we identified the predictors that explained a significant proportion of the variance in the dependent variable beyond that explained by the other predictors. Predictors with larger weights were entered first, and additional predictors were entered only if they explained additional variance ($p < .01$). We created the variable "conservativeness of political party preference" by rank ordering parties in the same order in which they are presented in Table 3 (we did so despite the fact that it is debatable whether this can be treated as an interval scale). A model resulted with an R^2 and an adjusted R^2 of .23, $F(6,1000) = 50.21$. The following predictors were significant: participant age ($\beta = -.26$); personal contact ($\beta = .18$); same-sex attraction ($\beta = .15$); opposite-sex attraction ($\beta = .13$); political party preference ($\beta = -.12$); and participant sex ($\beta = .12$). Geographical location and socioeconomic status did not predict attitudes beyond the other predictors, and the following variables were thus not entered into the model: urbanicity, Eastern/Western Germany, educational level, and income.

Next, we analyzed the significant predictors in more detail. To make the data pattern more digestible, average

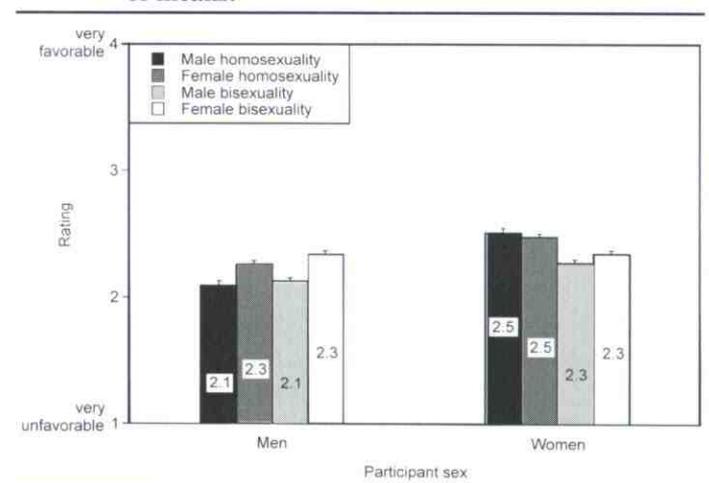
Table 3. Attitudes Toward Gay Men, Lesbians, Bisexual Men, and Bisexual Women (Means and Standard Deviations) by Psychological Factors

	<i>n</i>	Gay men		Lesbians		Bisex. men		Bisex. women		Mean	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Party preference	1159										
PDS ^a	73	2.52	.84	2.48	.80	2.38	.79	2.47	.80	2.46	.72
Gruene ^b	109	2.62	.69	2.69	.66	2.53	.70	2.62	.69	2.62	.60
SPD ^c	452	2.36	.80	2.41	.80	2.25	.78	2.39	.77	2.35	.68
FDP ^d	76	2.37	.73	2.43	.77	2.28	.76	2.36	.71	2.36	.65
CDU/CSU ^e	428	2.14	.80	2.21	.76	2.10	.74	2.23	.78	2.17	.67
Republikaner ^f	21	2.10	.70	2.19	.89	1.95	.92	2.29	.72	2.11	.61
Effect size		.04		.04		.03		.02		.04	
Personal contact	1648										
No	739	2.10	.79	2.17	.79	2.07	.77	2.19	.79	2.13	.68
Yes	909	2.49	.78	2.53	.76	2.34	.77	2.48	.74	2.46	.67
Effect size		.06		.05		.03		.04		.06	
Opposite-sex attraction	1624										
None	104	2.06	.88	1.95	.82	1.85	.73	1.91	.79	1.94	.70
Moderate	317	2.17	.76	2.16	.77	2.06	.73	2.14	.75	2.13	.66
Strong	576	2.35	.78	2.42	.75	2.24	.76	2.36	.74	2.34	.66
Very strong	627	2.39	.83	2.51	.80	2.35	.80	2.52	.77	2.44	.69
Effect size		.02		.04		.03		.05		.05	
Same-sex attraction	1642										
None	1377	2.24	.81	2.30	.79	2.16	.77	2.29	.78	2.25	.69
Moderate	229	2.63	.72	2.69	.70	2.55	.73	2.64	.70	2.63	.62
(Very) strong	36	3.00	.76	2.92	.84	2.50	.88	2.61	.87	2.76	.75
Effect size		.04		.04		.03		.03		.04	

^aPDS = Democratic Socialists. ^bGruene = Green Party. ^cSPD = Social Democrats. ^dFDP = Liberal Democrats. ^eCDU/CSU = Christian Democrats. ^fRepublikaner = Right-wing party.

ratings of lesbians, gay men, bisexual women, and bisexual men are shown in Figure 1 by sex of interviewee. The most unfavorable ratings were given to gay and bisexual men by males. Men rated lesbians and bisexual women more favorably. Women's ratings follow a different pattern: They rated bisexual women and men less favorably than they rated gay men and lesbians. Indeed, a 2 (Participant Sex) X 2 (Target Sex) X 2 (Target Homosexuality vs. Bisexuality) ANOVA with repeated measures on the last two factors showed main effects of participant sex, $F(1,1647) = 71.69$, $R^2_p = .02$, of target sex, $F(1,1647) = 93.33$, $R^2_p = .05$, and of target homosexuality versus bisexuality, $F(1,1647) = 16.63$, $R^2_p = .01$. In addition, we found interactions of participant sex and target sex, $F(1,1647) = 56.52$, $R^2_p = .03$, and of participant sex and target homosexuality versus bisexuality, $F(1,1647) = 67.17$, $R^2_p = .04$. A small interaction of the two repeated-measures factors was of no practical significance, $F(1,1647) = 16.56$, $R^2_p = .01$. To trace the source of the interactions with participant sex, we conducted tests of simple main effects that statistically confirmed what can be seen in Figure 1. In examining the interaction of participant sex and target homosexuality versus bisexuality, we found the following: Whereas men's ratings of homosexuals and bisexuals were essentially identical, $F(1,1647) = 8.21$, $R^2_p = .00$, women's ratings of homosexuals were more favorable than their ratings of bisexuals, $F(1,1647) = 77.92$, $R^2_p = .05$. Split the other way, women rated homosexuals more favorably than did men, $F(1,1647) = 74.36$, $R^2_p = .04$, but there was essentially no participant sex effect for rating bisexuals, $F(1,1647) = 7.98$,

$R^2_p = .00$. Examining the interaction of participant sex and target sex, we found that whereas men's ratings of females were more favorable than men's ratings of males, $F(1,1647) = 142.79$, $R^2_p = .08$, women's ratings did not differ significantly by target sex, $F(1,1647) = 2.37$. Split the other way, women rated males more favorably than did men, $F(1,1647) = 65.59$, $R^2_p = .04$, but there was little participant sex effect for ratings concerning females, $F(1,1647) = 14.36$, $R^2_p = .01$.

Figure 1. Mean ratings of male and female homosexuality and bisexuality, separately for male and female participants. Error bars depict standard errors of means.

We were next interested in participant age interaction effects on the same ratings. A 6 (Age Group) X 2 (Participant Sex) X 2 (Target Sex) X 2 (Target Homosexuality vs. Bisexuality) ANOVA with repeated measures on the last two factors showed, in addition to the main effect of age group, $F(5,1647) = 33.04$, $R_p^2 = .09$, a statistically but not practically significant interaction of age and target sex, $F(1,1637) = 3.87$, $R_p^2 = .01$. We found no other interactions involving age, all $F_s < 1.72$.

When it comes to political party preference, Table 3 shows that those endorsing the Green party had the most favorable attitudes and proponents of the more conservative parties had the least favorable attitudes. A 6 (Party Preference) X 2 (Target Sex) X 2 (Target Homosexuality vs. Bisexuality) ANOVA with repeated measures on the last two factors confirmed a main effect of party preference, $F(5,1153) = 10.02$, $R_p^2 = .04$, but no statistically significant interactions involving party preference, all $F_s < 1$.

The next factor of interest, personal contact, may be as much a precondition for as a result of favorable attitudes toward homosexuals. Thus, we tried to predict personal contact in a stepwise multiple regression analysis (R^2 and adjusted $R^2 = .12$, $F(5,1153) = 32.27$). Significant predictors were living in former West Germany ($\beta = .20$), a higher educational level ($\beta = .17$), endorsing a more left-wing political party ($\beta = -.09$), living in a larger town ($\beta = .09$), and having a higher income ($\beta = .08$). Sex, erotic attraction toward own or other sex, and age did not predict personal contact over and above those factors.

Detailed analyses of the remaining factors of interest, personal contact as well as erotic attraction toward own and other sex, did not yield any practically significant interactions (all $R_p^2 < .02$). Therefore, these analyses are not presented.

Attitude-Related Statements

We next analyzed mean responses to the five specific statements concerning attitudes toward homosexuality. Attitudes toward discrimination of homosexuals at work were reverse coded and are thus referred to as attitudes toward nondiscrimination. The means for the entire sample show that people clearly are in favor of nondiscrimination ($M = 3.68$, $SD = .58$). Also, participants' attitudes toward registered partnership were rather favorable ($M = 2.86$, $SD = .91$), as were their attitudes toward brand advertising in homosexuals' magazines ($M = 2.81$, $SD = .83$). Asked how they would like it if they had a homosexual child, people were more critical ($M = 2.21$, $SD = .72$), and when asked how they would feel about being "turned" homosexual themselves, the most frequent rating was "very unfavorable" ($M = 1.75$, $SD = .72$).

The five attitude-related questions correlated substantially and thus formed a suitable scale, $\alpha = .74$. In a stepwise multiple regression, we identified those of the predictors that explained a significant proportion of the variance in that scale over and above the variance explained by the other predictors. A model resulted with an R^2 and an adjusted R^2 of .31, $F(7,902) = 58.74$. The following predictors were significant: participant age ($\beta = -.25$); participant sex ($\beta = .21$); political party preference ($\beta = -.19$); personal contact ($\beta = .19$); erotic attraction toward people of the other sex ($\beta = .13$); erotic attraction toward people of one's own sex ($\beta = .13$); and educational level ($\beta = .10$). Geographical location (urbanicity, Eastern/Western part of Germany) and income did not predict attitudes in addition to these factors.

In Table 4, mean responses to the five attitude-related statements are split by the demographic groups that were

Table 4. Responses to Specific Attitude-Related Questions (Means and Standard Deviations) by Sociodemographic Factors

	n	Discrimination		Marriage		Ads		Child		Self	
		M	SD	M	SD	M	SD	M	SD	M	SD
Sex	1465										
Male	716	3.55	.67	2.67	.92	2.67	.81	2.08	.68	1.54	.69
Female	749	3.74	.53	3.03	.86	2.94	.81	2.38	.74	1.76	.75
Effect size		.03		.04		.03		.04		.02	
Age	1465										
14-19	149	3.73	.57	3.21	.69	2.97	.76	2.38	.74	1.84	.75
20-29	194	3.74	.51	3.15	.76	3.13	.67	2.33	.66	1.75	.76
30-39	364	3.72	.58	2.98	.86	2.95	.71	2.27	.68	1.74	.71
40-49	313	3.62	.60	2.90	.89	2.85	.79	2.25	.73	1.65	.73
50-59	224	3.56	.67	2.60	.95	2.69	.81	2.17	.76	1.54	.73
60-69	221	3.52	.66	2.38	.92	2.25	.94	2.05	.78	1.43	.65
Effect size		.02		.09		.10		.02		.03	
Education	1444										
Low ^a	452	3.53	.68	2.65	.93	2.55	.88	2.14	.77	1.46	.69
Middle ^b	526	3.67	.59	2.92	.88	2.86	.80	2.29	.75	1.68	.73
High ^c	466	3.73	.54	3.00	.87	3.00	.72	2.28	.65	1.82	.72
Effect size		.02		.03		.05		.01		.04	

Note. Column headings refer (from left to right) to nondiscrimination at work, homosexual marriage, brand advertising in homosexual magazines, having a homosexual child, and being "turned" homosexual.

^aLowest school track. ^bIntermediate track. ^cHigher education entrance qualification.

significant predictors in the regression analysis. Comparable to attitudes toward the four groups, women's attitudes were more favorable than men's, and younger interviewees' attitudes more favorable than those of older interviewees. A multivariate ANOVA with participant sex and age group as predictors confirmed a main effect of sex, $F(5,1449) = 22.56$, $R_p^2 = .07$, and a main effect of age group, $F(25,7265) = 8.85$, $V = .15$. Univariate tests showed that sex explained roughly the same proportion of variance in all criterion variables, but age explained more variance in attitudes toward registered partnership and brand advertising in homosexuals' magazines than in the other three variables. A multivariate ANOVA with educational level as a predictor confirmed a main effect of that factor, $F(10,2876) = 11.19$, $V = .08$. There were similar-size main effects in all univariate analyses.

Table 5 shows mean replies to the same five statements separately for the nondemographic groups that proved relevant in the regression analysis. A multivariate ANOVA with conservativeness of political party preference as a predictor confirmed a main effect of that factor, $F(25,5125) = 4.77$, $V = .11$. Univariate tests showed that the effect was more pronounced for attitudes toward registered partnership than for the other attitude-related questions. For personal contact, the main effect in a multivariate ANOVA, $F(5,1459) = 19.35$, $R_p^2 = .06$, was accompanied by similar-size main effects in all univariate analyses. Similarly, for the erotic attraction toward the other sex, the main effect in a multivariate ANOVA, $F(15,4338) = 4.57$,

$V = .05$, was accompanied by similar-size main effects in all univariate analyses. In contrast, for the erotic attraction toward one's own sex, the main effect in a multivariate ANOVA, $F(10,2906) = 12.30$, $V = .08$, was more pronounced for homosexual transformation than for the other attitude-related questions.

Attitude Structure

Attitudes toward lesbians, gay men, bisexual women, and bisexual men, toward registered partnership, toward brand advertising in homosexuals' magazines, toward having a homosexual child, and toward being turned homosexual together also could be conceived of as a reliable scale, $\alpha = .89$. By way of structural equation modeling, we tested whether a model with one latent attitude factor influencing these eight measured variables would fit the data. We allowed for some correlations between errors (which enhances the model fit if some variables share more variance with each other than with the other variables that are influenced by the same latent factor). Correlations were expected and thus allowed between attitudes toward the two groups of homosexuals; the two groups of bisexuals; the two groups of males; and the two groups of females. An additional correlation was allowed between the two policy-related attitudes, namely, allowing registered partnerships and brand advertising in homosexuals' magazines. The resulting model did not fit the data too well, $N = 1,370$, $\chi^2(15) = 76.72$, $\chi^2/df = 5.11$, RMSEA = .06 (90% confidence intervals [CI] = .04-.07), GFI = .99, AGFI = .97

Table 5. Responses to Specific Attitude-Related Questions (Means and Standard Deviations) by Psychological Factors

	<i>n</i>	Discrimination		Marriage		Ads		Child		Self	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Party preference	1031										
PDS ^a	69	3.70	.49	3.19	.83	2.96	.85	2.42	.77	1.78	.84
Gruene ^b	95	3.82	.50	3.24	.73	3.12	.68	2.39	.66	1.92	.63
SPD ^c	405	3.68	.58	3.00	.86	2.82	.81	2.24	.69	1.74	.75
FDP ^d	65	3.65	.62	2.80	.89	2.86	.70	2.31	.64	1.82	.70
CDU/CSU ^e	379	3.57	.64	2.55	.90	2.70	.87	2.06	.72	1.55	.70
Republikaner ^f	18	3.22	1.11	2.33	1.19	2.61	.92	1.94	.87	1.06	.24
Effect size		.02		.08		.02		.03		.04	
Personal contact	1465										
No	670	3.52	.67	2.68	.88	2.66	.84	2.13	.74	1.54	.67
Yes	795	3.76	.53	3.01	.90	2.94	.79	2.33	.71	1.75	.76
Effect size		.04		.03		.03		.02		.02	
Opposite-sex attraction	1452										
None	83	3.49	.72	2.58	1.11	2.40	.96	2.05	.79	1.35	.59
Moderate	271	3.59	.62	2.70	.92	2.64	.81	2.17	.71	1.56	.67
Strong	524	3.64	.59	2.82	.87	2.81	.79	2.23	.70	1.71	.73
Very strong	574	3.70	.60	3.00	.87	2.95	.81	2.30	.75	1.69	.75
Effect size		.01		.02		.03		.01		.02	
Same-sex attraction	1459										
None	1220	3.63	.62	2.79	.91	2.74	.83	2.19	.72	1.57	.68
Moderate	207	3.73	.52	3.15	.80	3.14	.72	2.43	.69	2.07	.76
(Very) strong	32	3.78	.61	3.44	.62	3.19	.74	2.63	.91	2.13	.98
Effect size		—		.03		.03		.02		.07	

Note. Column headings refer (from left to right) to nondiscrimination at work, homosexual marriage, brand advertising in homosexual magazines, having a homosexual child, and being "turned" homosexual.

^aPDS = Democratic Socialists. ^bGruene = Green Party. ^cSPD = Social Democrats. ^dFDP = Liberal Democrats. ^eCDU/CSU = Christian Democrats.

^fRepublikaner = Right-wing party.

(Byrne, 2001). Model fit was much improved if two latent attitude factors—one for attitudes toward the four groups and one for attitudes toward related issues—were hypothesized, both of them being influenced by a latent “general attitude” factor, $\chi^2(14) = 33.35$, $\chi^2/df = 2.38$, RMSEA = .03 (90% CI = .02-.05), GFI = .99, AGFI = .98. If this model is fitted simultaneously for male interviewees on the one hand and females on the other, the specified structure fits the data for both groups, $\chi^2(28) = 58.66$, $\chi^2/df = 2.1$, RMSEA = .03 (90% CI = .02-.04), GFI = .99, AGFI = .97.

Figure 2 shows the standardized solution of this model, with parameter estimates for men (first numbers) and women (second numbers). The general attitude factor accounts for more than 80% of the variance in the two specific latent attitude factors, implying that they indeed share a lot of variance. In turn, the latent factors have high weights on all observed variables, implying that these groups of four share a lot of variance. Whereas parameter estimates for “attitudes toward homosexuality-related questions” are very similar for men and women, there are some differences with regard to attitudes toward the four groups of interest: For men, “judging gay men” has the largest weight on this factor, whereas for women, “judging lesbians” has the largest weight. As one would expect given the data in Figure 1, the correlation between judging gay and bisexual men on the one hand and judging lesbians and bisexual women on the other is higher for male than for female participants, and it is almost non-existent for females. In contrast, the correlation between judging lesbians and gay men on the one hand and judging bisexual women and men on the other is higher for female than for male participants.

If men’s and women’s attitude structures were equivalent in the strictest sense, the model would still fit the data well if all parameters were restricted to be equal for the two groups. However, such restrictions create considerable stress in the model, $\chi^2(50) = 188.14$, $\chi^2_{diff}(36) = 154.79$. Thus, we conclude that identical attitude struc-

tures but different weights most adequately describe men’s and women’s attitudes toward homosexuality and related issues. It should be noted that many possible alternative models, and models for alternative subgroups, were not tested.

DISCUSSION

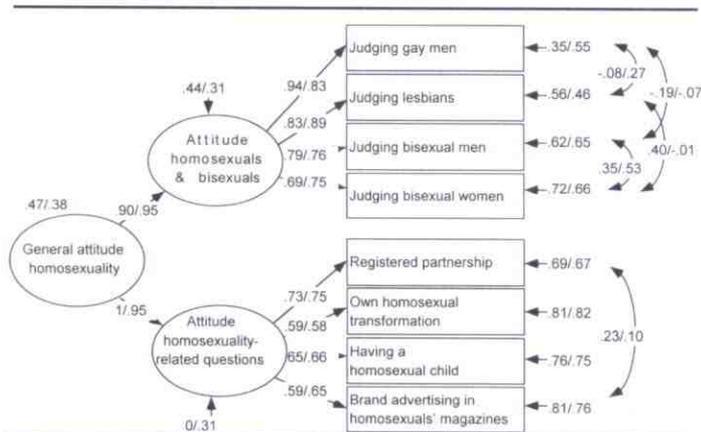
We collected data from a representative sample of self-claimed heterosexual adults in Germany. A first main finding of our study was that attitudes toward lesbians, gay men, bisexual women, and bisexual men were rated close to the midpoint of the scale used, but on the “unfavorable” rather than the “favorable” side. However, ratings varied considerably by demographic and nondemographic factors.

In the 1980s, only every fifth German approved of homosexuality, and data collected even recently in North America showed that most people condemn homosexuality, despite being willing to grant homosexuals basic civil rights. How do our findings relate to those of these previous studies (prudently taking into account that their measures differed from ours)? If only attitudes toward gay men and lesbians are considered (for reasons of comparability), 53% of our participants scored in the homonegative range. While literally being in line with the statement “most Germans score in the homonegative range,” that statement does not seem the most accurate description of the finding. Women in Germany, averaged across all age groups, held neutral attitudes, whereas men held somewhat less favorable attitudes. In addition, under-30-year-olds held favorable attitudes, and many other subgroups reported neutral attitudes: the third of the population with the highest educational level, those living in the major towns, those favoring the two left-wing political parties, those knowing a homosexual person, and those reporting at least moderate attraction toward their own sex or very strong attraction toward the other sex. When these factors were combined, we found subgroups of our sample who held favorable attitudes. In line with other data from the north and west of Europe (e.g., Kelley, 2001), overall attitudes toward lesbians, gay men, bisexual women, and bisexual men were rather liberal. As Bochow (1993) discussed, lesbians and gay men profit from more general societal changes in Germany, such as less-traditional gender roles, more individualization, less conservatism, less-conservative family values, and changes brought about by the women’s movement.

With a growing reluctance to admit unfavorable attitudes based on sexual orientation, alternative means of attitude measurement become more important: for instance, implicit tests based on reaction times (e.g., Steffens, 1999; in press; Steffens & Buchner, 2003). Such attitude measurement allows one to delineate a reluctance to admit unfavorable attitudes from “true” attitude change. In contrast, in the present study the influence of social desirability cannot be disentangled from attitudes because we exclusively relied on self-report data.

A second finding was that attitudes toward lesbians, gay men, bisexual women, and bisexual men had much in com-

Figure 2. Structural equation model (standardized solution) of attitudes toward homosexuality with separate weights for male (first number) and female (second number) interviewees.



mon, but it is still important to differentiate among these attitudes. The least favorable attitudes were male participants' attitudes toward gay or bisexual males. Males' attitudes toward lesbians and bisexual women were more favorable and comparable to females' attitudes toward bisexual women and men. Women's attitudes toward gay men and lesbians were most favorable. Whereas target sex was crucial for predicting men's attitudes, target homosexuality versus bisexuality was more important for predicting women's attitudes.

Our data confirm common findings regarding attitudes toward lesbians and gay men: Men's attitudes are more unfavorable than women's, and attitudes toward gay men are more unfavorable than those toward lesbians. It should be noted that, even though the interviewee sex effect on attitudes was clearly significant, it was a rather small effect (except with regard to gay men). The present findings are also in line with findings concerning attitudes toward bisexuals: Attitudes toward bisexual women and men are less favorable than those toward lesbians and gay men; bisexual men are rated the least acceptable group; men rate bisexual men more unfavorably than women do; men also rate bisexual men more unfavorably than they rate bisexual women; and attitudes toward bisexual women and men can be predicted by the same factors as attitudes toward lesbians and gay men. What is new is our result that the women in our sample rated bisexuality less favorably than they rated homosexuality. The reasons for this finding are unclear as of now. Interestingly, Herek (2002) recently reported the same pattern from a U.S.-based survey. As a side note, the difference between ratings of homosexuality and bisexuality was especially large for those of our "heterosexual" women who reported very strong or strong attraction toward their own sex, $t(24) = 4.08$, $R_p^2 = .41$, and they rated bisexuals less favorably than did women reporting moderate attraction toward their own sex. One might suspect that the former respondents were misclassified as "heterosexual." This is not the case, as 19 of them also reported very strong or strong attraction toward the other sex. These selected individuals who would be bisexual if erotic attraction was used as the classification criterion reported much more favorable attitudes toward homosexuals ($M = 3.08$) than toward bisexuals ($M = 2.5$). We don't know yet whether "internalized biphobia" or some other factor lies at the heart of this finding. However, the finding that homosexuality was rated more favorably than bisexuality is not restricted to these women: The distinction was also made by the large majority of women who reported moderate or no attraction toward their own sex, $t(821) = 7.58$, $R_p^2 = .07$.

Our third main finding is that the most important predictors of attitudes toward the four groups were participant age, personal contact, erotic attraction toward one's own sex, erotic attraction toward the other sex, political party preference, and participant sex. Age trends were linear: the younger the participants, the more favorable the attitudes reported. Personal contact influenced favorability of atti-

tudes toward homosexuals and bisexuals alike. Left-wing West Germans with a higher education living in a big city were most likely to indicate personal contact.

Teenagers are said to struggle with their own sexual identity, and in daily life, we still observe numerous examples of people being afraid to appear gay, especially among male teenagers (a typical statement being, "I would not be caught dead in that gay jacket!"; cf. Burn, 2000). In spite of this, under-30-year-olds reported more favorable attitudes toward lesbians, gay men, bisexual women, and bisexual men than did all older participants, a reassuring finding if we assume that attitudes do not grow more unfavorable with age but rather remain constant, so that change in society as a whole will simply come about as the youngest age groups become the older ones (cf. Kelley, 2001).

As has been found before, we found a high correlation between personal contact with homosexuals and attitudes. The percentage of Germans who report knowing a homosexual person has more than doubled over the last decade, with the majority of our sample reporting knowing somebody. Several causal relationships are conceivable to explain the contact-attitude correlation. First, the coming out as lesbian or gay of a liked individual has been found to lead to a reduction of prejudice (Waldo & Kemp, 1997). Second, coming-out decisions are affected by perceived attitudes. Therefore, if heterosexuals appear more tolerant and live in a more tolerant environment, such disclosure is more probable. Thus, the personal contact variable may subsume other predictors (being of higher education, not conservative, and living in an urban area; cf. Herek & Capitano, 1996). Finally, exactly these predictors could make it more likely that a person has a sensitive "gaydar," suspecting that somebody is lesbian or gay when the rest of the social group is still oblivious to all the evidence that lies plain at hand. Consequently, such a person would know sooner than others. Because of the latter effects, the correlation between personal contact and favorability of attitudes (in the present case, $r = .24$) may overestimate the effect of personal contact on attitudes. However, in our sample, personal contact was predicted by other factors than was favorability of attitudes: Sex and age did not play a role, but geographical location and education did. This speaks against the "selected coming-out" hypothesis and rather suggests that people who have, for some reason or other, been confronted with gay men or lesbians adopt more favorable attitudes.

In part, the same reasoning applies to the erotic attraction toward one's own sex as a predictor of attitudes toward lesbians, gay men, bisexual women, and bisexual men: People who are more willing to acknowledge same-sex attractions are also more tolerant of those who live their lives in accordance with such attractions, a correlation that does not necessarily imply causality. Although not regularly included as a predictor in previous studies, this relationship has been found before (Mohr & Rochlen, 1999). More interestingly, the degree of erotic attraction toward the

other sex also predicted attitudes toward the groups of interest, and this is not an artifact because of a confound with age, even though the correlation ($r = .21$) was smaller if age was controlled for ($r = .14$). This finding is in line with previous findings showing that less restrictive sexual standards in general go along with more favorable attitudes toward homosexuals. An advantage of asking about opposite-sex attraction is that this is a less sensitive topic than asking about specific sex-related attitudes and behaviors, so this question is easier to implement.

In Germany, two major and several minor political parties coexist; these parties can be arranged rather unambiguously on a right-left dimension, and parties endorse official policies concerning homosexuals' rights. Political party preference is a strong predictor of attitudes toward lesbians, gay men, bisexual women, and bisexual men. We did not find a linear relationship between endorsing a more left-wing political party and having a favorable attitude: Proponents of the most left-wing party, PDS, had less favorable attitudes than proponents of the Green party. The reason for this could be that the PDS (which has followed the former East German SED) is endorsed by different segments of the population in former West and former East Germany: Whereas those who live in former West Germany and favor the PDS indeed hold more tolerant attitudes than those favoring the Green party ($M = 2.93$ and $M = 2.63$, respectively), favoring the PDS for former East Germans could also imply conservatism. In line with that notion, people living in former East Germany held less favorable attitudes when favoring the PDS as opposed to the Green party ($M = 2.39$ and $M = 2.55$, respectively).

Whereas factors like urbanicity and socioeconomic status correlated with attitudes toward homosexuals and their rights in previous studies, we suspect that this relationship is mainly due to other, more psychologically meaningful relationships they are confounded with, like general or political conservativeness. The least we can say is that educational level and urbanicity, while correlated with attitudes, did not explain additional variance in attitudes when considered simultaneously with more important predictors.

The fourth main result of our study is that whereas interviewees strongly opposed discriminating against homosexuals at work and whereas they were liberal when rating policy issues like registered partnership laws or brand advertising in homosexuals' magazines, they would not want to have a homosexual child or be "turned" homosexual themselves. These attitudes were predicted by the same factors as attitudes toward the four groups of interest, with the addition of educational level.

Similar to what has been found in North America, people have become quite liberal and tolerant as far as homosexuals' rights are concerned. However, people would be much more reluctant to accept a homosexual child. In line with this, Bochow (1993) described the status quo as indifference rather than tolerance. Despite following largely the same pattern, there were some interesting differences between attitudes toward the groups of interest and atti-

tudes toward related questions. For instance, political party preference was a stronger predictor for attitudes related to policies like registered partnership. Presumably, people are inclined to endorse what their party, their church, or other groups they identify with endorse. If this were so, such important social groups would be able to play an important role in forming attitudes, just as laws probably play a role in shaping the acceptance of behaviors or lifestyles. It would be interesting to replicate our study now that the partnership law has been in effect for some time and it is obvious that Germany has not suffered from the turmoil and the extinction of nuclear families that conservative individuals may fearfully predict (cf. Haddock & Zanna, 1998). Institutional policies will have a positive effect on attitudes if they increase disclosure because, in turn, disclosure improves attitudes.

Age explained more variance in attitudes toward brand advertising in homosexuals' magazines and toward registered partnership than in the other attitude-related statements. These two were the statements for which attitudes were rather favorable, on average, and for which rather liberal norms seem to exist for the younger age groups. When one's personal life is involved—for instance, when having a homosexual child—people were still less enthusiastic. It could be that in the future, age effects will increase on these variables as their variance increases when attitudes toward having a homosexual family member become more favorable in younger age groups. It is perfectly understandable that even the most tolerant individuals find it "very unfavorable" to suddenly find themselves homosexual, because consequently, many existing close relationships would be called into question.

The fifth main finding of our study is inferred from a structural equation model. The best fitting model is one in which (a) a latent general attitude factor influences one latent factor on which the reported attitudes toward the four groups load and a separate factor on which the additional attitude-related questions load; (b) common variance between several measured variables is allowed; and (c) different regression weights and correlations are allowed for female versus male interviewees.

The strong relations between responses show on the one hand that these responses are determined by the general attitude factor. On the other hand, the distinction between attitudes toward groups of nonheterosexuals versus attitudes toward homosexuality-related questions replicates that attitudes toward homosexual persons, behaviors, and civil rights should be distinguished (Kite & Whitley, 1996). In addition, the model makes it obvious that some questions remain. Why do men make a gender distinction, whereas women distinguish between exclusive and nonexclusive same-sex relations? Does a liberal social climate foster reporting favorable attitudes mostly toward the groups that are most obviously discriminated against—that is, lesbians and gay men as opposed to bisexual women and men? If so, why is there no difference in men's ratings? Do women consider bisexuals more threatening

than homosexuals because bisexual best friends or husbands could suddenly reveal unwanted erotic attractions? If so, should this not be the case for men also, at least regarding gay and bisexual males? Discovering the reasons underlying these findings should be an interesting endeavor for more controlled, smaller studies.

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APPENDIX

GERMAN WORDING OF THE ATTITUDE QUESTIONS ASKED

1. Attitude toward gay men:
Wie beurteilen Sie Homosexualität bei Männern? Sehr positiv, eher positiv, eher negativ oder sehr negativ?
2. Attitude toward lesbians:
Wie beurteilen Sie Homosexualität bei Frauen? Sehr positiv, eher positiv, eher negativ oder sehr negativ?
3. Attitude toward bisexual men:
Wie beurteilen Sie Bisexualität bei Männern? Sehr positiv, eher positiv, eher negativ oder sehr negativ?
4. Attitude toward bisexual women:
Wie beurteilen Sie Bisexualität bei Frauen? Sehr positiv, eher positiv, eher negativ oder sehr negativ?
5. Attitude concerning homosexuals' right to register their partnerships:
Was halten Sie davon, homosexuellen Paaren ein Leben in einer geregelten eheähnlichen Beziehung zu ermöglichen? Fänden Sie dies sehr positiv, eher positiv, eher negativ oder sehr negativ?
6. Attitude toward discrimination at work because of sexual orientation:
Angenommen, an Ihrem Arbeitsplatz würde ein Mitarbeiter wegen seiner Homosexualität ausgegrenzt. Fänden Sie dies sehr positiv, eher positiv, eher negativ oder sehr negativ?
7. Attitude toward having a homosexual child:
Stellen Sie sich vor, Sie hätten ein homosexuelles Kind. Fänden Sie dies sehr positiv, eher positiv, eher negativ oder sehr negativ?
8. Attitude toward brand advertising in homosexuals' magazines:
In Deutschland gibt es mehrere Zeitschriften für Homosexuelle. Wie würden Sie es finden, wenn Hersteller von Markenprodukten, etwa Autos oder Lebensmittel, in einer solchen Zeitung werben würden? Fänden Sie dies sehr positiv, eher positiv, eher negativ oder sehr negativ?
9. Attitude toward suddenly being "turned" homosexual:
Stellen Sie sich vor, Sie wären in einem Märchenland und ein Zauberer würde Sie verzaubern, so dass Sie plötzlich homosexuell wären. Fänden Sie dies sehr positiv, eher positiv, eher negativ oder sehr negativ?

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