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## Gender, Ethnicity, Religiosity, and Same-sex Sexual Attraction and the Acceptance of Same-sex Sexuality and Gender Non-conformity

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### Abstract

This study explored the role of gender, ethnicity, religiosity, and sexual attraction in adolescents' acceptance of same-sex sexuality and gender non-conformity. Using an intersectionality perspective, we also tested whether the effects of gender, ethnicity, and religiosity on adolescents' attitudes would function differently in adolescents with and without same-sex attractions. Data for this study were collected by means of a paper questionnaire completed by 1,518 secondary school students (mean age = 14.56 years,  $SD = 1.05$ ) in Amsterdam, the Netherlands. The sample was 48.1% female and 51.9% male. Approximately one third of adolescents in the sample were of a non-Western ethnic background (32.3%,  $n = 491$ ) and 7.5% of the participants ( $n = 114$ ) reported experiencing same-sex attractions. Results of our analyses showed that adolescents in our sample who were male, of non-Western ethnicity, and who were more religious (as indicated by frequency of religious service attendance), were less accepting of same-sex sexuality and gender non-conformity in comparison to female, Western and less religious peers. We also found a significant interaction effect between religiosity and sexual attractions, but only in relation to evaluation of same-sex attracted, gender nonconforming females. The negative effect of religiosity on acceptance of same-sex attracted, gender non-conforming females was stronger among those adolescents who reported same-sex attractions.

### Keywords

Ethnicity; Religiosity; Sexual orientation; Gender non-conformity; Adolescence

## Introduction

The present study examines the ways in which gender, ethnicity, religiosity, and sexual attraction influence attitudes toward sexual minority and gender non-conforming individuals. Through survey research with a sample of adolescents in Amsterdam, the Netherlands, we sought to explore how social location predicted acceptance of same-sex sexuality and gender non-conformity. The design of this project was informed by the literature on intergroup relations and intersectionality. Although these two areas of theory emerged from different disciplines, they have a common investment in exploring power differentials between social groups and a shared appreciation of the context-dependent nature of such differentials.

### Intergroup Attitudes and Relations in Adolescence

Our understanding of sexual prejudice, or the tendency to respond negatively to gay and lesbian people based on their social categorization (Herek 2009), among adolescents is based mainly on studies conducted in the United States. These studies have examined, for example, associations among sexual prejudice, religious affiliation, fundamentalism, or religiosity (Marsiglio 1993; Morrison et al. 1997); differences across gender (Hoover and Fishbein 1999); associations with gender role attitudes (Hoover and Fishbein 1999; Marsiglio 1993; Morrison et al. 1997) or racial/ethnic prejudice (Hoover and Fishbein 1999; O'Bryan et al. 2004); and the intergenerational transmission of prejudice (O'Bryan et al. 2004). Van de Ven (1994), who conducted research with adolescents and young adults in Australia, looked at correlations between sexual prejudice and age.

Research on intergroup attitudes and relations, coming mainly from the field of social psychology, has explored the ways children and adolescents reason about their own and others' identities, and how such reasoning explains social behaviors (e.g., friendship preferences, exclusion, name-calling; Levy and Killen 2010). It is only recently that intergroup approaches have been applied to the study of adolescents' attitudes toward sexual minorities (Horn 2010). Although to date these studies have been conducted only with convenience samples of middle and high school students from public schools in the U.S., this type of research has expanded our knowledge beyond the basic understanding of demographic or attitudinal correlates of sexual prejudice, giving us better insight into how sexual prejudice functions in everyday situations. This emerging literature examining adolescents' attitudes toward sexual minorities from an intergroup perspective has addressed the impact of intergroup contact on attitudes (Heinze and Horn 2009; Mata et al. 2010); the way that such attitudes are socialized in peer groups (Poteat 2007); willingness to remain friends with gay/lesbian peers or interact with them in school settings (Horn 2010; Poteat et al. 2009); justifications for behaviors toward gay/lesbian school peers (Horn 2006); the role of gender expression in acceptance of gay/lesbian school peers (Horn 2007); and connections between sexual prejudice and the use of anti-gay language (Poteat and DiGiovanni 2010).

In total, past work has demonstrated that sexual prejudice among adolescents is complex; not only does it have multiple determinants, but the ways in which it manifests are highly context-dependent. Horn's (2010) research with U.S. adolescents has suggested that ideological beliefs based on social knowledge cultivated through ethnic and religious group affiliations may influence adolescents' expression (or lack of expression) of sexual prejudice in certain situations. For example, adolescents who believe that homosexuality is wrong do not necessarily support the exclusion or teasing of gay/lesbian peers. Adolescents seem to draw on different domains of social reasoning to justify their attitudes in different situations, such that their investment in social conventions might explain their beliefs that

homosexuality is wrong, while their moral beliefs might explain their unwillingness to justify cruel treatment of gay/lesbian peers (Horn 2010).

Despite these advances in our understanding of adolescents' attitudes toward sexual minorities, there are notable gaps in the literature on this topic. For one, studies of sexual prejudice in adolescence have been conducted almost exclusively with majority Caucasian samples from the United States. The need for research with more diverse samples and in more diverse settings is suggested by Social Identity Development Theory (SIDT), which proposes that the emergence of prejudice in older children is "dependent upon the parameters of the social situation" (Nesdale et al. 2003, p. 180) and children's level of identification with a social group, which can be expected to vary across cultural or geographic contexts. Another limitation of studies of sexual prejudice among adolescents has been the way in which researchers dealt with the sexual orientation of the participants. In some cases, researchers did not seem to assess the sexual orientation of their research participants at all (e.g., Baker and Fishbein 1998; Morrison et al. 1997; Van de Ven 1994); other study authors have reported that they were not permitted to assess the sexual orientation of their research participants (e.g. Mata et al. 2010; Poteat 2007). In other instances, researchers assessed the sexual orientation of the study participants and purposefully excluded sexual minority participants due to the nature of their research question (e.g. Horn 2007; Marsiglio 1993; Poteat et al. 2009).

As a consequence of such limitations, we have yet to learn much about the way adolescents' *social location* may inform their attitudes toward gay and lesbian people. Social location refers to "the relative amount of privilege and oppression that individuals possess on the basis of specific identity constructs, such as race, ethnicity, social class, gender, sexual orientation, age, disability, and faith" (Hulko 2009, p. 48). The attitudes of sexual minority adolescents toward other sexual minorities, in particular, remain largely unexplored. In this study, we explored whether gender, ethnicity, and religiosity affected Dutch adolescents' acceptance of same-sex sexuality and gender non-conformity, with special attention to whether these identity dimensions had a different effect on the attitudes of adolescents with and without same-sex attractions.

### Applying Intersectionality Theory to the Study of Intergroup Relations

We have relied upon the concept of *intersectionality* to help us understand how attitudes are constructed at the place where gender, sexuality, ethnicity, and religion intersect. Although intersectionality research is typically concerned with exploring identity and the ways in which advantage and disadvantage are produced at the junction of social identities, we find it to be an important conceptual tool for our exploration of acceptance of same-sex sexuality and gender non-conformity in adolescents.

In her seminal work on intersectionality, legal scholar and critical race theorist Crenshaw (1991) argued that violence against women of color is often produced at the intersection of racism and sexism. She further argued that the failure of both the feminist and antiracist movements in the U.S. to spotlight problems such as intimate partner violence and rape in communities of color had rendered women of color invisible, and that the failure of both movements to recognize shared priorities limited the potential of both movements to achieve political and social change (Crenshaw 1991). Among sexual minority populations in the U.S., researchers have examined how gender, racial/ethnic, and sexual orientation identities intersect and shape individuals' social interactions (Narváez et al. 2009). Intersectionality analysis has been presented as one means by which to avoid broad-brushing social groups and essentializing their characteristics (e.g., women as white, racial minorities as men; Hankivsky et al. 2010). Purdie-Vaughns and Eibach (2008) address the latter issue in their

theory of *intersectional invisibility*, referring to the “general failure to fully recognize people with intersecting identities as members of their constituent groups” (p. 381).

The application of the concept of intersectional invisibility to the study of intersecting gender, sexual, ethnic, and religious identities is timely given the setting of our study (the Netherlands). Since the 1960s, Dutch society has been transformed by demographic shifts due to immigration, secularization, and advances in gay and lesbian rights (Hekma and Duyvendak 2006; Keuzenkamp 2010b). The Netherlands is a country of 16.5 million people; approximately 1.9 million have a non-Western ethnic background (Statistics Netherlands 2010). The largest ethnic minority groups, in descending order, consist of people of Turkish, Indonesian, Moroccan, Surinamese, and Antillean or Aruban descent, many of whom are Muslim (Statistics Netherlands 2010). The Netherlands saw influxes of Turkish and Moroccan “guest workers” in the late 1960s during a time of labor shortages; these were primarily single men whose stays were assumed to be temporary, but who were later joined by their families (Buruma 2006; Hekma 2002). There was an initial wave of immigration from Suriname in the 1960s and a second after Suriname gained independence in 1975, by which time there were fewer job opportunities for the newcomers (Buruma 2006; Hekma 2002).

In roughly the same time period, the Netherlands rapidly secularized. The “pillars” of Dutch society, or “hierarchically organized religious and socialist subcultures composed of their own media, schools, organizations, social and cultural institutions and political parties,” lost their dominance (Mepschen et al. 2010, p. 966). Church membership declined (Jaspers et al. 2007). Lesbian and gay citizens won a progression of legal gains, beginning in 1971 with the elimination of a law that criminalized some same-sex sexual behavior (Jaspers et al. 2007), and culminating in 2001 with the extension of adoption and marriage rights to lesbian and gay couples (Hekma and Duyvendak 2006).

More recently, several high-profile controversies in the Netherlands have entangled anti-Muslim and gay and women’s rights discourses (Mepschen et al. 2010). These controversies include televised anti-gay remarks by a Moroccan imam from Rotterdam in 2001 and the assassination of Pim Fortuyn, an openly gay politician who was an outspoken critic of Islam and immigration, in 2002 (Buruma 2006; Mepschen et al. 2010). In 2004, a young Moroccan Dutch man murdered the filmmaker Theo van Gogh after van Gogh collaborated with a member of parliament, Ayaan Hirsi Ali, on a film about (in her phrasing) “how Islam crushes women” (Hirsi Ali 2008, 2010, p. xii). Mepschen and colleagues (2010) argue that, in the wake of these events, Dutch politicians and media figures appropriated feminist and gay rights arguments to express anti-immigrant or anti-Muslim sentiments. Ethnic minority, Muslim communities were represented as uniformly opposed to same-sex sexuality and to women’s rights, evidence that they are “backwards ... enemies of European culture” (Mepschen et al. 2010, p. 965). In these narratives, ethnic minorities become all male and all heterosexual, while those at the intersections of ethnic, religious, and sexual minority identities are rendered invisible (Rahman 2010).

It is against this backdrop that we examined how Dutch adolescents’ acceptance of same-sex sexuality and gender non-conformity was related to gender, religiosity (as measured by frequency of religious service attendance), ethnicity, and sexual orientation (as measured by the experience of same-sex sexual attractions). While the broader-scale cultural conversations outlined above may seem distant from the everyday lives of adolescents, they will inform the ways in which children learn about social categorizations and group status, which happens at a very young age (Nesdale et al. 2003), setting up the power imbalances between groups that may then be replicated in school settings. Adults (e.g., teachers and

parents) will also be influenced by events of national prominence and subsequently influence the adolescents with whom they interact (Dessel 2010).

### **The Influence of Gender, Ethnicity, Religiosity, and Sexual Orientation on Sexuality-related Attitudes**

Our primary interest was examining the interaction of sexual attractions with gender, ethnicity, and religiosity in relation to acceptance of same-sex sexuality and gender nonconformity. Prior research suggests that gender, ethnicity, and religiosity are independently related to such attitudes. Gender has been associated with attitudes toward gay men and lesbians in several U.S. studies (e.g., Baker and Fishbein 1998; Hoover and Fishbein 1999; Horn 2007), with female adolescents showing more positive attitudes than males; this finding has been replicated with adolescents in the Netherlands (Collier et al. 2012). Ethnic group differences in attitudes toward same-sex sexuality have been identified in other studies, for example, Ahrold and Meston's (2010) study with U.S. college students. Dutch adolescents generally report more positive attitudes toward same-sex sexuality than do adolescents of non-Dutch ethnicity (Keuzenkamp 2010a, b). A study conducted with pre-adolescent children in the Netherlands found that those with Western ethnic backgrounds had, on average, more positive attitudes toward same-sex sexuality than did ethnic minority children; parental pressure to conform to gender norms explained some of the attitude differences between Western and non-Western children (Bos et al. 2010). As for the interaction between ethnicity and sexual attraction, a longitudinal study of racial and ethnic differences in the coming out process conducted in the U.S. found that ethnic minority youth were relatively less likely to disclose, and felt less comfortable with, their sexual identity, despite similarities in sexual developmental milestones, sexual behavior, and self-identification (Rosario et al. 2004). If youth in the Netherlands who are both ethnic and sexual minorities are experiencing self-stigma, this could manifest in less acceptance of same-sex sexuality and gender non-conformity among these youth.

The relationship between religiosity and acceptance of same-sex sexuality is complex, in part because religiosity and religious affiliation have been measured in many different ways (Herek 2009; Savin-Williams et al. 2010). Religiosity, or the intensity of one's engagement with religion (typically measured by frequency of religious service attendance), is generally understood to be a critical factor regardless of religious background or denomination (Hooghe et al. 2010). Studies of adolescents in Canada and Belgium (Hooghe et al. 2010) and of adults in the Netherlands (Keuzenkamp 2010a, b) have found attitudes toward same-sex sexuality are more negative among those who more frequently participate in religious activities.

A separate line of research, but one which is relevant to our study of the interaction between same-sex sexuality and religiosity, is focused on the role of religion in the lives of lesbian, gay, and bisexual (LGB) individuals. In a small, mixed-methods study with LGB individuals in the U.S., Schuck and Liddle (2001) found that about two-thirds of the participants had experienced conflicts between their religion and their sexual orientation at some point in their lives; this was most common among mainline Protestants and Catholics and derived from denominational teachings, scriptural passages, and feelings of exclusion from the denomination as LGB people. Nonetheless, engagement with religious institutions can be a positive experience for many LGB people (Lease et al. 2005). In a review of correlates of internalized heterosexism or homophobia (IH), Szymanski et al. (2008) concluded that "adherence to orthodox or traditional (presumably heterosexist) religious beliefs is associated with greater IH and that membership in LGB-supportive faith organizations and independent religious decision making are associated with less IH" (p. 561). Internalized homophobia may be an important issue for sexual minority youth in the Netherlands: In a 2009 survey of sexual minority adolescents and young adults (ages 16–25), one fifth of the

participants reported they would prefer to be heterosexual and are uncomfortable being open about their sexual orientation (Keuzenkamp 2010a). The same study found that those who were religious were more likely to be in the closet, to feel that same-sex sexuality was less accepted by their parents, and to have attempted suicide (Keuzenkamp 2010a).

Despite the potential significance of internalized homophobia on adolescents' evaluations of same-sex-attracted peers, it is also possible that adolescents who are themselves same-sex-attracted would more favorably evaluate a same-sex-attracted peer than would those without same-sex attractions. Research in this area has been limited. A U.S. study comparing sexual orientation-related attitudes in gay and heterosexual men found strong in-group preferences (Jellison et al. 2004).

While studies such as those referenced above may indicate general group-level trends in the relationships among gender, religiosity, ethnicity, and sexual orientation—with the requisite caveats that there are always exceptions to any “rule”—the interactions among these factors are a starting point from which to explore the complexity of the attitudes in question in greater depth. We expect to find unique relationships between attitudes and social location as shaped by the interactions among gender, ethnicity, religiosity, and sexual attractions.

### The Current Study

The present study was conducted among secondary school students in the Netherlands. Our first hypothesis was that certain participant characteristics would alone be predictive of greater acceptance of same-sex sexuality and gender nonconformity: a) female gender; b) Western ethnicity; c) lower religiosity; and d) same-sex attraction (H1a–d). Previous research on sexual prejudice, reviewed above, indicates these characteristics would be associated with acceptance in the predicted ways. We tested this hypothesis by entering these predictors into the first step of two parallel hierarchical regression models with acceptance of same-sex sexuality and gender non-conformity as the dependent variable. In the first model, acceptance was assessed in relation to females, and in the second, it was assessed in relation to males. We present acceptance of male and female same-sex sexuality and gender non-conformity in separate regression models because studies have consistently shown attitudes toward lesbians to be more positive than attitudes toward gay men (Herek 2009); we wanted to explore the relative strength of the contributions of gender, ethnicity, religiosity, and sexual attraction toward attitudes about same-sex attracted, gender variant males and females. Because we tend to see greater male/female differences on evaluations of gay men as opposed to lesbians (Herek 2009), we would expect the variables of interest here to be stronger predictors of acceptance of male same-sex sexuality and gender non-conformity than of acceptance of female same-sex sexuality and gender non-conformity.

Interactions between gender and ethnicity and gender and religiosity were included in the regression models to test a second hypothesis: that the effects of ethnicity and religiosity on acceptance of same-sex sexuality and gender nonconformity would be stronger for male adolescents than for female adolescents (H2). Previous research suggests that female gender is the most consistent predictor of more positive attitudes toward sexual minorities, and thus we would expect female gender to somewhat buffer the impact of ethnicity and religiosity on acceptance of same-sex sexuality and gender non-conformity.

Our third hypothesis was that the effects of religiosity, ethnicity, and gender on acceptance of same-sex sexuality and gender non-conformity would be different among adolescents with and without same-sex attractions (H3). We tested this by including the interactions between sexual attractions and religiosity, ethnicity, and gender in the regression models. We expected to see interaction effects that amplified acceptance scores among a) same-sex attracted females; b) same-sex attracted Western participants; and c) same-sex attracted

individuals who less frequently attend religious services. We expected these differences given the unique ways gender, ethnicity, religiosity, and sexual attraction shape social location.

## Method

### Participants

The participants in this study were 1,518 adolescents who reside in Amsterdam, the Netherlands. The participants were recruited from three types of secondary schools in Amsterdam. Six of the thirty-two secondary schools that were invited to participate in the study accepted; although reasons for refusal were not systematically documented, schools in the Amsterdam area have been reporting that they receive an increasing number of requests to participate in research and it is likely that some refusals were due to competing requests from other research projects.

In the six participating secondary schools, first-, second-, and third-year students were eligible to participate. Among the 1,379 participants for whom school type data were available, 47.5% attended a pre-university school, 27.1% attended a general secondary school, and 25.4% attended a pre-vocational school. An overview of sample characteristics broken down by gender is presented in Table 1. Participants' ages ranged from 11 to 18 years, with a mean age of 14.56 ( $SD = 1.05$ ). The sample was 48.1% female and 51.9% male. On average, male participants were slightly older than female participants,  $t(1401.3) = 2.06, p = .04$ ; see Table 2.

The vast majority of participants (94%) were born in the Netherlands. Slightly less than two-thirds of the participants (62.9%,  $n = 955$ ) reported that both their mother and father were born in the Netherlands. Seventy-two participants (4.7%) reported that one or both parents were born in a Western country other than the Netherlands; these participants were classified as having a Western ethnic background. Among those categorized as ethnic minorities (32.3% of the total sample,  $n = 491$ ), the following backgrounds were reported: 39% Moroccan, 17% Turkish, and 15% Surinamese; 29% reported other non-Western backgrounds.

Of the 98% of the participants who reported on their religious affiliation, 59.6% identified themselves as not having a specific religion or belief system. Twenty percent of all participants identified their religious background as Muslim, 11% Roman Catholic, and 2% Protestant. Very small percentages (<1%) of participants identified as Jewish, Hindu, or Humanist, with the remaining participants choosing "other" and filling in a response (e.g. Buddhist, Wiccan). There were no significant differences in religious affiliation between male and female participants.

### Procedure

Data were collected during the 2009–2010 school year as part of a larger study of adolescent health, relationships, and school experiences. Research assistants from the University of Amsterdam worked with an administrator from each participating site who sanctioned students' involvement and the arrangements for implementing the survey at that site. In line with Dutch ethical guidelines, parental consent for the adolescents' participation in the study was sought by means of a letter about the nature and purpose of the overall study. Parents were asked to return a form enclosed with the letter if they did not want their child to participate. Thirty-eight parents did not allow their children to participate; reasons for refusal were not collected. The adolescents assented to participation; all of the adolescents who were present in classes in which the survey was administered, and who had parental consent to participate, completed the survey. The adolescents were not compensated for

their participation. Research assistants from the University of Amsterdam, but not regular teachers, were present in the classrooms while participants self-administered a paper questionnaire. These sessions took place during the school day and lasted 40–60 min (depending on the educational level of the school). The participants returned completed surveys to the research assistants. Participants were given the opportunity to submit written comments to the researchers at the conclusion of the survey; none were received.

## Measures

As previously discussed, data for this study were collected as part of a larger study. For purposes of the present study, we utilized only portions of the survey. These survey items, along with their English translations, have been included in the Appendix.

**Ethnicity**—In keeping with standard procedure used in the Netherlands to assess ethnic background, study participants were asked to report the country of birth for their mother and their father. We classified participants as having a Western ethnic background if they reported that both parents were born in the Netherlands or another Western country (i.e., in Europe or North America). Participants who reported that one or both of their parents were born in a non-Western country (i.e., in Africa, Asia or South America) were classified as non-Western.

**Religiosity**—To assess religiosity, participants were asked, “How often do you attend church, mosque, synagogue, etc.?” Participants could select responses ranging from *never* (1) to *several times a day* (8). Measures of religious service attendance have been commonly used to assess religiosity in prejudice research (Batson and Stocks 2005).

**Sexual Attraction**—Sexual attraction was assessed by asking, “Do you sometimes feel romantically or sexually attracted to someone of your own sex?” This question has been successfully used in previous research on sexual minority youth in the Netherlands (e.g., Bos et al. 2008). Participants responded using a 5-point scale (1 = *not at all*, 5 = *very often*). As has been done in previous studies in which this question was used, the participants were split into two categories. Those who reported that they *very often*, *often*, *regularly*, or *occasionally* felt attracted to the same sex were categorized as same-sex attracted (SSA).

**Acceptance of Same-sex Sexuality and Gender Non-conformity**—We assessed the participants’ acceptance of same-sex sexuality and gender non-conformity with six scenario-based items adapted from an instrument developed by Horn (2007). These items were translated from English to Dutch and altered in minor ways to increase their relevance for use in the Netherlands (e.g., changing a sport reference from baseball to soccer). Three scenarios described female targets, and three described male targets, with parallel items for each gender. In the scenarios, the targets are described as same-sex attracted, but their gender expression is either conforming, non-conforming in terms of appearance (e.g., a boy who wears makeup), or non-conforming in terms of activity choice (e.g., a girl who plays American football).

Survey participants were asked to rate the acceptability of the targets using a 5-point scale (1 = *I would not accept him/her at all*, 5 = *I would completely accept him/her*). We calculated two separate mean scores for each participant: one score for acceptance of female same-sex sexuality and gender nonconformity and one score for acceptance of male same-sex sexuality and gender non-conformity. A high total score across either set of three items would indicate a high level of acceptance of same-sex sexuality and gender non-conformity. Scores on these two sets of items were used as two dependent variables in our regression analyses (one model used the acceptance of female same-sex sexuality and gender



nonconformity score as the dependent variable and the second model used the acceptance of male same-sex sexuality and gender non-conformity score as the dependent variable).

## Results

### Descriptive Analyses

In our sample, there were roughly twice as many Western participants (67.7%,  $n = 1,027$ ) as non-Western participants (32.3%,  $n = 491$ ). Western participants were those with two parents who were born in the Netherlands or another Western country. Table 1 presents descriptive statistics on ethnicity and sexual attraction by gender.

Table 2 presents the mean values and standard deviations of continuous study variables, broken down by gender. We used MANOVA to test for systematic differences by gender on these variables, and found that male and female participants differed significantly on age and on their acceptance of both male and female same-sex sexuality and gender non-conformity.

Intercorrelations among age, religiosity, and acceptance of same-sex sexuality and gender non-conformity are presented in Table 3. Results have been broken down by participant gender. There was a small, negative correlation between age and religiosity in both male and female participants ( $r = -.08$ ,  $p < .05$ ). Religiosity was significantly correlated with male and female participants' acceptance of both male and female same-sex sexuality and gender nonconformity. Acceptance of male and female same-sex sexuality and gender non-conformity was highly correlated among both the male and female participants ( $r = .77$  for females' ratings of the targets;  $r = .72$  for males' ratings of the targets).

Using independent samples t-tests, we found significant differences in target acceptability ratings by sexual attraction; for female targets:  $t(1516) = -2.95$ ,  $p = .003$ ; for male targets:  $t(1516) = -3.12$ ,  $p = .002$ . Same-sex attracted participants gave higher acceptability ratings, regardless of target gender. There were also significant differences in acceptability ratings by ethnicity; for female targets:  $t(746.4) = 9.83$ ,  $p < .001$ ; for male targets:  $t(773.5) = 7.84$ ,  $p < .001$ . Participants of Western ethnicity gave the higher acceptability ratings to both male and female targets.

### Outcomes of Hypothesis Testing

We tested our three hypotheses with hierarchical regression analyses; outcomes are presented in Table 4. To test our first hypothesis that a) female gender, b) Western ethnicity, c) lower religiosity, and d) same-sex attraction would predict greater acceptance of same-sex sexuality and gender nonconformity, we entered gender, ethnicity, religiosity, and sexual attraction into the first step of the regression, in parallel fashion for the models with female and male targets. In the model for acceptance of female same-sex sexuality and gender non-conformity, the Step 1 variables explained 17% of the variance. Gender, religiosity, and ethnicity made significant contributions and affected the dependent variable in the expected directions. Sexual attraction, however, did not make a significant contribution to the model. The Step 1 variables contributed to the model for acceptance of male same-sex sexuality and gender non-conformity in a similar way (all but sexual attraction making significant contributions), although the total variance explained was greater, at 26%. The greater amount of variance explained by the Step 1 variables in the regression model for male targets was largely due to the greater impact of gender (for male targets,  $\beta = .44$ ,  $p < .001$ , for female targets,  $\beta = .28$ ,  $p < .001$ ).

Several interaction terms were entered into the second step of the parallel regression models in order to test our second and third hypotheses. Tolerance statistics indicated no problems

with multicollinearity between the variables in the final models. The interaction terms entered produced a significant change in the coefficient of determination in only the model for acceptance of female same-sex sexuality and gender nonconformity (increasing the total variance explained from 17% to 18%,  $p = .01$ ). Furthermore, the main effects for gender, ethnicity, and religiosity remained significant in both models; male gender, higher religiosity and non-Western ethnicity were associated with lower acceptance scores.

The interactions between gender and religiosity and gender and ethnicity were entered to test our second hypothesis, that the effects of ethnicity and religiosity on acceptance would be strongest among male adolescents. Neither interaction made significant individual contributions to the models for female or male targets.

To test our third hypothesis, that the effects of religiosity, ethnicity and gender on acceptance of same-sex sexuality and gender non-conformity would be different among adolescents with and without same-sex attractions, we also entered the interactions between sexual attraction and gender, ethnicity, and religiosity into the regression equations. One interaction, between sexual attraction and religiosity, made a significant contribution to the model for acceptance of female same-sex sexuality and gender non-conformity. In order to examine this interaction effect, we estimated simple slopes at one standard deviation above or below the mean religiosity score. The simple slopes have been plotted in Fig. 1. We found that for adolescents without SSA, higher religiosity predicted less acceptance of same-sex sexuality and gender non-conformity in female targets ( $\beta = -.26$ ,  $b = -.13$ ,  $SE = .01$ ,  $p < .001$ ). This was also the case among SSA participants ( $\beta = -.47$ ,  $b = -.24$ ,  $SE = .04$ ,  $p < .001$ ), however, the negative effect of religiosity on acceptance was much stronger among the SSA participants.

## Discussion

Our findings, which were mixed in terms of their consistency with our hypotheses, nonetheless contribute to our understanding of acceptance of same-sexuality and gender non-conformity among adolescents in the Netherlands. Hypotheses 1a, 1b, and 1c were supported. Main effects for gender, ethnicity, and religiosity (in descending order of impact) were significant in the final regression models for acceptance of male and female same-sex sexuality and gender non-conformity, with female gender, Western ethnicity, and lower religiosity predicting greater acceptance. Hypothesis 1d was not supported; despite a bivariate association between sexual attractions and acceptance of same-sex sexuality and gender non-conformity, sexual attractions did not make a unique contribution to the variance explained by the regression models for acceptance of male and female same-sex sexuality and gender non-conformity.

Our second hypothesis, which tested interaction effects of gender and religiosity and gender and ethnicity, was not supported. Ethnicity and religiosity did not influence acceptance differently in male adolescents as compared to female adolescents, and this was the case in the models for both female and male targets.

Our third hypothesis was that the effects of religiosity, ethnicity, and gender on acceptance of same-sex sexuality and gender non-conformity would be different among adolescents with and without same-sex attractions, such that same-sex attractions would amplify acceptance scores among females, those of Western ethnicity, and those who less frequently attend religious services. The results provided little support for this hypothesis. For our model assessing acceptance of male same-sexuality and gender nonconformity, none of the interactions were significant. For the model assessing acceptance of female same-sex sexuality and gender non-conformity, the interactions between sexual attractions and gender,

and between sexual attractions and ethnicity, were not significant. In our sample, sexual attraction in combination with gender or ethnicity did not produce unique effects on acceptance of same-sex sexuality and gender non-conformity. With regard to the interaction between sexual attraction and ethnicity, the small number of participants in our sample who were both ethnic and sexual minorities ( $n = 24$ ) may have limited our ability to detect a significant effect.

Some limited support for our third hypothesis came from our finding of a significant interaction between sexual attraction and religiosity in the model for acceptance of female same-sex sexuality and gender non-conformity. The change in the coefficient of determination for the model produced by this interaction, however, was small (1%). The follow-up test exploring this interaction revealed that religiosity had a significant, negative effect on acceptance scores among both SSA and non-SSA participants, but that the effect was much stronger among the SSA participants. Among the less religious participants (whose scores were one standard deviation below the mean), those with SSA were more accepting of female same-sex sexuality and gender non-conformity than were those without SSA, while the situation was reversed among the more religious participants. Religiosity's impact on acceptance of female same-sex sexuality and gender non-conformity may reflect self-stigma experienced by same-sex attracted adolescents who are more religious and outgroup bias among the adolescents without same-sex attractions. The fact that the interaction was only significant in the model for female same-sex sexuality and gender nonconformity may be a result of the gender imbalance of SSA adolescents in our sample (i.e., the SSA girls identifying with the female targets described in the acceptance of same-sex sexuality and gender non-conformity measure).

Our findings demonstrate that gender, ethnicity, and religiosity, as dimensions of adolescents' social location, are independently associated with acceptance of same-sex sexuality and gender non-conformity. These results are consistent with those of studies that have found patterns in the way that gender, ethnicity, and religiosity are related to attitudes about gay men and lesbians, but expand upon them by the nature of the study sample (adolescents in the Netherlands) and attitude measure that was used. By using a scenario-based measure that described a hypothetical classmate, and accounting for gender non-conformity along with sexual attraction, we hope to have obtained results that are more indicative of adolescents' intergroup attitudes toward peers.

We found that participant gender, religiosity, and ethnicity had main effects on the acceptance of both female and male same-sex sexuality and gender non-conformity. That the total amount of variance explained by these factors was greater for acceptance of male (as opposed to female) same-sex sexuality and gender non-conformity was largely due to the impact of gender; male and female participants' ratings of SSA, gender non-conforming females were more similar to each other than were their ratings of SSA, gender nonconforming males. The SSA, gender non-conforming males were also rated less acceptable on average than were their female counterparts. These findings are consistent with prior research that has considered the role of gender in sexual prejudice (reviewed in Herek 2009).

Our findings regarding the main effects of gender, ethnicity, and religiosity are of relevance to interventionists planning programs to change intergroup attitudes because they suggest potential facilitators and barriers to program success and may assist interventionists in targeting programs to specific populations of adolescents. Programs addressing attitudes about same-sex sexuality should expect (and find ways to exploit) more affirming attitudes among female adolescents and should account for the mix of cultural and religious backgrounds represented in their target population.

We found little empirical support for the effect of interactions among sexual attraction, gender, ethnicity, and religiosity that we tested in this study. We did not find evidence to suggest that ethnicity and religiosity moderate the effect of gender, or that gender and ethnicity moderate the effect of sexual attraction, on acceptance of same-sex sexuality and gender non-conformity in adolescents. Intersectionality theory emphasizes the interactive, as opposed to additive, effects of our social identities, and distinguishes between “master” (i.e., gender) and “emergent” (i.e., sexual orientation together with gender) categories of identity (Warner 2008). Here we saw the master categories (gender, religiosity, ethnicity) as the dominant influences on acceptance of same-sex sexuality and gender non-conformity. Sexual attraction on its own did not appear to be a relevant master category for adolescents in relation to their opinions of same-sex-attracted, gender non-conforming peers. This could be because the same-sex-attracted adolescents in our sample were likely to be diverse in terms of their sexual orientation self-identification and in their feelings about their same-sex attractions.

Considering the multiple social identities of the adolescents in our sample, alone and in conjunction with one another, was useful nonetheless. The data we collected show that identities that may often be thought of as mutually exclusive in the setting in which we conducted our research (e.g., ethnic and sexual minority) need not be. Had we not accounted for identities that emerge at the intersections of multiple social identities, we would have overlooked the different effect that religiosity had on the attitudes of adolescents with and without same-sex attractions toward same-sex-attracted, gender non-conforming females. The significant effect of this interaction, although modest, implies a need for special attention to adolescents experiencing ambivalence or distress about their same-sex attractions as a result of their religious beliefs. Narváez and colleagues (2009) have described processes by which aspects of an individual’s identity change in prominence and valence (positive or negative attitude toward the identity) over time and depending on the social context. Future studies might explore the ways that SSA adolescents adapt in religious settings and the ways in which religious, SSA adolescents manage their identities in other contexts (e.g., at school or within their families); allowing a single master category identity to become more prominent depending on the setting may be a significant identity management strategy (i.e., for purposes of safety or social acceptance).

The study’s findings must be interpreted in light of its design limitations. This was a cross-sectional study that surveyed a convenience sample and relied upon self-report methods to obtain attitude data. Generalizability of the findings to populations of adolescents outside the Netherlands, and in samples with a different ethnic and religious makeup, cannot be assumed. As with any research dealing with attitudes or prejudice that relies on self-report, social desirability bias is also a concern, but studies of the effect of social desirability on children’s attitudes toward ethnic minorities have minimized this concern (Aboud and Amato 2001). The small number of non-Western adolescents in our sample who reported same-sex attractions implied limited statistical power for certain analyses.

The ways in which we operationalized ethnicity and sexuality meant that we could not fully account for the heterogeneity within groups (e.g., level of acculturation within the non-Western group or the mix of participants whose same-sex attraction was exclusive or not). From a developmental perspective, assessing sexual attractions rather than identity was most appropriate, although even same-sex attractions may have been underreported. It is likely that these limitations would have only reduced our chances of finding significant results.

The measures of religiosity and acceptance of same-sex sexuality and gender non-conformity also have several limitations. We used a unidimensional measure of religiosity, frequency of participation in religious services. This measure has the advantage of relevance

to people of many faiths, and because it has been used widely in social science research on prejudice, it allows us to compare our findings with those of other studies. However, use of this single measure meant that we could not assess religious engagement occurring outside religious institutions; we also could not assess whether the messages about same-sex sexuality adolescents are exposed to in religious settings are condemning or affirming. Religious service attendance among adolescents, furthermore, may be heavily influenced by parents (Kerestes and Youniss 2003).

In our measures of acceptance of same-sex sexuality and gender non-conformity, a particular ethnicity was not explicitly attributed to the targets described in each scenario, but it is possible that ethnicity was implied—and if so, that this influenced the participants' evaluations in unexpected ways. If any participant inferences about the ethnicity of the targets (e.g., non-Western participants assuming that the described targets were of Western ethnicity, and then finding them less acceptable) did impact the results, this would represent a considerable drawback to use of this measure. These measures also assessed acceptance of gender non-conformity only within the context of same-sex sexuality. Sexuality and gender expression are distinct concepts, and researchers should consider assessing adolescents' attitudes toward gender nonconformity separately in future studies. A strength of our measures, however, was their potential to assess more covert forms of prejudice. This was accomplished through a reliance on descriptive scenarios that emphasized characteristics of the targets described (e.g., "is attracted to girls," "plays soccer") rather than their social identities (e.g., gay or lesbian).

Despite its limitations, this study has several strengths. We had a large, diverse sample of adolescents. We also included same-sex attracted adolescents, and in so doing, demonstrated that acceptance of same-sex sexuality and gender nonconformity is not uniform in this group. Failure to collect sexual orientation information from research participants or exclusion of sexual minority people from this type of attitude research could lead to the loss of important information.

Future studies might consider how heterosexual adolescents socialize with sexual minority peers, and how other dimensions of social identity (e.g., gender, ethnicity, religious group) might affect such relationships. Studies of peer relationships and other intergroup processes (i.e., exclusion) may illustrate how power differentials among social groups manifest themselves in adolescents' daily lives.

Our findings also have implications for the future study of gender and sexuality related attitudes in adolescents in many social contexts. For one, we know that the socially constituted identities of gender, ethnicity, and religiosity are related to these attitudes and thus may affect intergroup relations. This study also demonstrated the utility of an intersectionality perspective, by which we identified the differential effect of religiosity on adolescents with and without same-sex attractions. Future studies could carry this work further by exploring the effect of different aspects of identity on attitudes and by exploring the connections between attitudes and intergroup behaviors. Researchers can also assist interventionists in identifying the best ways to address the impact of social identities on attitudes in any programming for adolescents in which attitude change is the goal.

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## Appendix

Questions assessing ethnicity, religiosity, and sexual attraction, and scale items measuring acceptance of male and female same-sex sexuality and gender non-conformity

### Ethnicity

1. In welk land is je moeder geboren?(1 = Nederland, 2 = Ander land, namelijk .....)  
In which country was your mother born?(1 = The Netherlands, 2 = Other country, namely .....)
2. In welk land is je vader geboren?(1 = Nederland, 2 = Ander land, namelijk .....)  
*In which country was your father born?(1 = The Netherlands, 2 = Other country, namely .....)*

### Religiosity

1. Hoe vaak ga jij naar de kerk, moskee, synagogue, etc?(1 = nooit, 8 = meerdere keren per dag)  
*How often do you attend church, mosque, synagogue, etc.?(1 = never, 8 = several times a day)*



## Sexual attraction

1. Sommige jongeren voelen zich wel eens aangetrokken tot iemand van hetzelfde geslacht. Heb jij wel eens romantische en/of seksuele gevoelens voor iemand van hetzelfde geslacht?(1 = helemaal niet, 5 = erg vaak)

*Some young people sometimes feel attracted to someone of the same sex. Do you sometimes feel romantically or sexually attracted to someone of your own sex?(1 = not at all, 5 = very often)*

## Acceptance of male same-sex sexuality and gender non-conformity

1. Daan is een leerling die in de eindexamen klas van de middelbare school zit. In zijn vrije tijd voetbalt Daan. Daan valt op jongens. Hij ziet eruit als de meeste andere jongens op school: hij kleedt en gedraagt zich zoals de meeste andere jongens op school. In hoeverre zou jij Daan accepteren? Ik zou hem: ..... (1 = helemaal niet accepteren, 5 = helemaal accepteren)

*Daan is a senior in high school. In his spare time Daan plays soccer. Daan is attracted to boys. He looks like most other boys at school and he dresses and behaves like most other boys at his school. To what extent would you accept him? I would: (1 = not accept him at all, 5 = completely accept him)*

2. Mark is een leerling die in de eindexamen klas van de middelbare school zit. In zijn vrije tijd voetbalt Daan. Mark valt op jongens. Hij ziet er anders uit als de andere jongens op school: hij kleedt en gedraagt zich niet zoals de meeste andere jongens op school. Mark gedraagt zich vrouwelijk, besteedt veel tijd aan zijn uiterlijk en maakt zich soms op. Ik zou hem: ..... (1 = helemaal niet accepteren, 5 = helemaal accepteren)

*Mark is a senior in high school. In his spare time Mark plays soccer. Mark is attracted to boys. He looks different than the other boys at school: he dresses and behaves unlike most other boys at school. Mark behaves like a female, spends much time on his appearance and sometimes wears make-up. To what extent would you accept him? I would: (1 = not accept him at all, 5 = completely accept him)*

3. Ruben is een leerling die in de eindexamenklas zit van de middelbare school. In zijn vrije tijd zit Ruben op ballet. Ruben valt op jongens. Hij ziet eruit als de meeste jongens op school: hij kleedt en gedraagt zich zoals de meeste andere jongens op school.

*Ruben is a senior in high school. In his free time Ruben dances ballet. Ruben is attracted to boys. He looks like most other boys at school and he dresses and behaves like most other boys at his school. To what extent would you accept him? I would: (1 = not accept him at all, 5 = completely accept him)*

## Acceptance of female same-sex sexuality and gender non-conformity

1. Julia is een leerling in de eindexamenklas van de middelbare school. In haar vrije tijd volleybalt Julia. Julia valt op meisjes. Zij ziet eruit als de meeste andere meisjes op school: zij kleedt en gedraagt zich zoals de meeste andere meisjes op school.

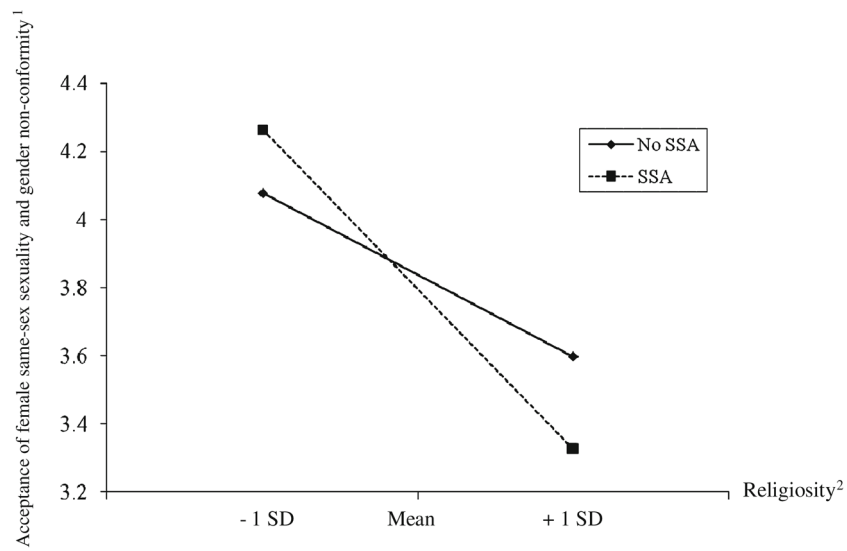
*Julia is a senior in high school. In her free time Julia plays volleyball. Julia is attracted to girls. She looks like most other girls at school and she dresses and behaves like most other girls at her school. To what extent would you accept her? I would: (1 = not accept her at all, 5 = completely accept her)*

2. Lieke is een leerling in de eindexamenklas van de middelbare school. In haar vrije tijd volleybalt Lieke. Lieke valt op meisjes. Zij ziet er anders uit als de meeste ander meisjes op school: zij kleedt en gedraagt zich niet zoals de meeste andere meisjes op school. Lieke gedraagt zich namelijk mannelijk, heeft kort haar en maakt zich nooit op.

*Lieke is a senior in high school. In her free time Lieke plays volleyball. Lieke is attracted to girls. She looks different than the other girls at school: she dresses and behaves unlike most other girls at school. Lieke behaves like a male, has short hair and never wears make-up. To what extent would you accept her? I would: (1 = not accept her at all, 5 = completely accept her)*

3. Sanne is een leerling in de eindexamenklas van de middelbare school. In haar vrije tijd zit Sanne op American Football. Sanne valt op meisjes. Zij ziet eruit als de meeste andere meisjes op school: zij kleedt en gedraagt zich zoals de meeste andere meisjes op school.

*Sanne is a senior in high school. In her free time Sanne plays football. Sanne is attracted to girls. She looks like most other girls at school and she dresses and behaves like most other girls at her school. To what extent would you accept her? I would: (1 = not accept her at all, 5 = completely accept her)*



**Fig. 1.** Religiosity and sexual attractions predicting acceptance of female same-sex sexuality and gender non-conformity. <sup>1</sup>1 = I would not accept her at all, 5 = I would completely accept her. <sup>2</sup>How often do you attend church, mosque, synagogue, etc.? 1 = Never, 8 = Several times per day

Table 1

Study sample characteristics, by gender

	Female Adolescents (n = 730)	Male Adolescents (n = 788)	Total (n = 1,518)	$\chi^2$	df	p
Ethnicity, % (N)				.66	1	.42
Western	66.6 (486)	68.7 (541)	67.7 (1,027)			
Non-Western	33.4 (244)	31.3 (247)	32.3 (491)			
Same-sex attraction, % (N)	10.3 (75)	4.9 (39)	7.5 (114)	14.71	1	<.001
Religion, % (N)				6.97	4	.14
Muslim	22.6 (162)	18.1 (141)	20.3 (303)			
Protestant	2.1 (15)	1.9 (15)	2.0 (30)			
Roman Catholic	12.0 (86)	10.3 (80)	11.1 (166)			
Other	6.7 (48)	7.3 (57)	7.0 (105)			
No affiliation	56.6 (406)	62.4 (485)	59.6 (891)			

**Table 2**  
Means and standard deviations of age, religiosity, and acceptance of same-sex sexuality and gender non-conformity by participant gender

	Females		Males		Multivariate Analysis of Variance (MANOVA)		
	M	SD	M	SD	F-value	df	Partial $\eta^2$
Age in years	14.50	.99	14.61	1.10	4.12*	(1,1388)	.003
Religiosity	2.15	1.62	2.28	1.95	1.85	(1,1388)	.001
Acceptance of female same-sex sexuality and gender non-conformity	4.14	.86	3.62	.91	117.05*	(1,1388)	.078
Acceptance of male same-sex sexuality and gender non-conformity	4.09	.79	3.23	1.01	308.87*	(1,1388)	.182

Religiosity was assessed by asking, *How often do you go to church, mosque, synagogue, etc.* 7 = Never, 8 = Several times per day. Acceptance of male and female same-sex sexuality and gender non-conformity was assessed with a 5-point scale: 1 = I would not accept him/her at all, 5 = I would completely accept him/her. Differences between male and female adolescents were tested with a MANOVA, which revealed a significant main effect of gender,  $F(4, 1385) = 82.1, p < .001$ .

\*  $p < .05$

**Table 3**

Summary of intercorrelations among age, religiosity, and acceptance of same-sex sexuality and gender non-conformity as a function of gender

	1.	2.	3.	4.
1. Age in years	–	–.08 <sup>*</sup>	.05	.13 <sup>**</sup>
2. Religiosity	–.08 <sup>*</sup>	–	–.24 <sup>**</sup>	–.25 <sup>**</sup>
3. Acceptance of female same-sex sexuality and gender non-conformity	.06	–.28 <sup>**</sup>	–	.77 <sup>**</sup>
4. Acceptance of male same-sex sexuality and gender non-conformity	–.06	–.23 <sup>**</sup>	.72 <sup>**</sup>	–

Intercorrelations for male participants are presented below the diagonal, and intercorrelations for female participants are presented above the diagonal. Religiosity was assessed by asking, *How often do you go to church, mosque, synagogue, etc.?* 1 = Never, 8 = Several times per day; Acceptance of male and female same-sex sexuality and gender non-conformity was assessed with a 5-point scale: 1 = I would not accept him/her at all, 5 = I would completely accept him/her.

\*  
 $p < .05$ ,

\*\*  
 $p < .01$

Hierarchical regression analyses of gender, religiosity, ethnicity, and sexual attraction on acceptance of same-sex sexuality and gender non-conformity

**Table 4**

	Acceptance of Female Same-sex Sexuality and Gender Non-conformity		Acceptance of Male Same-sex Sexuality and Gender Non-conformity	
	b (SE)	$\beta$	b (SE)	$\beta$
Step 1				
Gender <sup>a</sup>	.52 (.04)	.28	.89 (.05)	.44
Ethnicity <sup>b</sup>	-.40 (.05)	-.20	-.34 (.06)	-.16
Religiosity <sup>c</sup>	-.08 (.01)	-.15	-.08 (.01)	-.13
Sexual attraction <sup>d</sup>	.11 (.08)	.03	.09 (.09)	.02
R <sup>2</sup>		.17		.26
Step 2				
Gender	.71 (.12)	.38	.67 (.12)	.33
Religiosity	-.08 (.01)	-.15	-.07 (.02)	-.13
Ethnicity	-.40 (.06)	-.20	-.37 (.06)	-.17
Sexual attraction	.06 (.09)	.02	.12 (.09)	.03
Gender × ethnicity	-.20 (.11)	-.12	.21 (.11)	.12
Gender × religiosity	.03 (.03)	.03	-.03 (.03)	-.03
Sexual attraction × gender	.05 (.18)	.01	-.27 (.19)	-.04
Sexual attraction × religiosity	-.13 (.05)	-.07	-.06 (.05)	-.03
Sexual attraction × ethnicity	-.20 (.22)	-.03	-.23 (.23)	-.03
R <sup>2</sup>		.18		.26
$\Delta R^2$		.01		.01

Acceptance of male and female same-sex sexuality and gender non-conformity was assessed with a 5-point scale: 1 = I would not accept him/her at all, 5 = I would completely accept him/her.

<sup>a</sup>Gender: 0 = Male, 1 = Female.

<sup>b</sup>Ethnicity: 0 = Western, 1 = Non-Western.

<sup>c</sup>Religiosity was assessed by asking, *How often do you go to church, mosque, synagogue, etc.?* 1 = Never, 8 = Several times per day.

<sup>d</sup>Sexual attraction: 0 = Not same-sex attracted, 1 = Same-sex attracted.