Published in final edited form as:

J Homosex. 2017 ; 64(13): 1778–1792. doi:10.1080/00918369.2016.1265358.

Attitudes of Heterosexual Men and Women Toward HIV Negative and Positive Gay Men

Andrea Norcini Pala, PhD^a, Paola Villano, PhD^b, and Lauren Clinton, BA^c

^aHIV center New York State Psychiatric Institute (NYSPI)/Columbia University, New York, New York, USA

^bSchool of Psychology and Education, University of Bologna, Bologna, Italy

^cTeachers College, Columbia University, New York, New York, USA

Abstract

Attitudes of Italian heterosexual men and women toward gay men, both HIV positive and negative, are poorly investigated. Italian culture is still extremely conservative and provides limited support to the gay community (e.g., lack of same-sex marriage recognition). Consequently, gay men experience social exclusion and disparities. The present study explores the association between homophobia and closeness with sexual orientation and HIV status. 261 heterosexual Italian men and women were assessed for feelings of closeness and homophobia after reading a vignette where the character was C1: heterosexual and HIV negative; C2: gay and HIV negative; or C3: gay and HIV positive. Experiences of homophobia and closeness varied depending on gender of participant and condition assigned, and higher levels of homophobia were correlated with lower levels of closeness regardless of HIV status. Implications and future directions are discussed.

Keywords

Closeness; culture; gay; heterosexual; HIV status; homophobia; stigma

Gay men and HIV-positive persons experience marginalization as a result of social stigma (Link & Phelan, 2001; Lyimo et al., 2014; Meyer, 1995, 2003; Weiss, Ramakrishna, & Somma, 2006). Such stigma includes homophobia, defined as negative attitudes toward persons that deviate from heteronormativity (Meyer, 2003). This results in hostility, which can manifest in verbal or physical aggression and discrimination (Herek, 2000). Moreover, HIV infection is highly stigmatized, since it is considered not only contagious and severe, but presumably the result of volitional “norm-violating” behavior (e.g., commercial sex work, homosexuality, promiscuity) (Visser, Makin, & Lehobye, 2006). Stigmatized persons, such as gay men and HIV-positive persons, are often ostracized and rejected (Goffman, 2002), resulting in mental and physical health impairment (Meyer, 2003; Norcini Pala, Hart, & Steca, 2015). Considering the severe impact of stigma on these overlapping groups, it is

CONTACT Andrea Norcini Pala, norcini@nyspi.columbia.edu, HIV Center-Mailman School of Public Health, Columbia University, Unit 15, 1051 Riverside Drive, New York, NY 10032, USA.

Notes on contributor

Drs. Norcini Pala and Villano share the first authorship.

imperative to further explore situations that evoke homophobic responses to develop interventions aimed at reducing homophobia and HIV stigma. Specifically, our aim is to identify modifiable factors associated with low levels of stigma as possible target of psychosocial intervention.

Stigma refers to an experienced or anticipated social process characterized by exclusion, rejection, blame, or devaluation, which results from experience, perception, or reasonable anticipation of an adverse social judgment about a person or group (Villano, 2013). Many authors have explored various forms of stigma, such as perceived, enacted, or public, as well as the social and psychological reactions to someone with a stigmatized condition (Vogel, Wade, & Hackler, 2007). Stigmatized characteristics often become relevant when they are contextually salient (Crocker, Major, & Steele, 1998; Goffman, 1963). Changes to this context, including to the population, will then affect the salience and the experience of stigma. For example, sexual orientation stigma becomes relevant when heterosexual individuals interact with gay men (Herek, 2009). However, this effect might be stronger in heterosexual men since they have reported more homophobic attitudes than women (Raja & Stokes, 1998). Conversely, contradictory research has stated pervasiveness of stigma is consistent. For instance, Kurzban and Leary (2001) argued, in opposition of the claims made by Crocker et al. (1998), that some features are universally stigmatized, such as homosexuality and disability. Furthermore, intersectionality theory (Bowleg, 2008) has suggested that the effect of two different stigmatized characteristics simultaneously (e.g., sexual orientation and HIV infection) may promote greater negative attitudes.

Although inherently troublesome and fundamentally unstable, the link between sexual orientation and HIV infection may be difficult to eradicate. Historically, HIV infection was labeled the gay-related immune deficiency (GRID) or with a derogatory term, the *gay plague* (Herek & Glunt, 1988). Herek, Widaman, and Capitanio (2005) have demonstrated that heterosexual men and women may have distorted representations of HIV risk based on sexual orientation. Although MSM may be at a greater risk of HIV contraction than their heterosexual counterparts (Beyrer et al., 2012), heterosexual persons may still be at risk, especially those who live in urban areas with high HIV rates (Denning, DiNenno, & Wiegand, 2011). Additionally, HIV-negative gay men engaging in protected sex are considered more at risk of contracting HIV than HIV-negative heterosexual men and women, although approximately one third of new contraction is through heterosexual physical contact (Hall et al., 2008), suggesting a somewhat skewed perception of HIV status still pertaining exclusively to the gay community. Moreover, homophobia is associated with negative attitudes toward individuals diagnosed with HIV infection (Luchetta, 1999; Luchetta & Pardie, 2013). Because of this distortion and the resulting social stigma, heterosexual men and women tend to show low empathy toward gay men, reducing their willingness to provide help. As such, gay men may have limited access to a variety of health-promoting resources, including social support (Cooper & Roter, 1998; Crocker et al., 1998; Stutterheim et al., 2014).

Empathy is a crucial component in lowering negative attitudes toward stigmatized individuals (Batson et al., 1997; Finlay & Stephan, 2000; Vescio, Sechrist, & Paolucci, 2003), as it promotes social closeness and tolerance (Herek & Capitanio, 1999; Phelan &

Basow, 2007). In the literature, across a number of conditions, including HIV, there is extensive theoretical and empirical support demonstrating how empathy promotes positive interactions and reduces stigmatization (Batson, Chang, Orr, & Rowland, 2002; Heijnders & Van Der Meij, 2006). In Lin and colleagues' study among service providers in China (2013), more empathetic attitudes were negatively related to avoidance attitudes. Additionally, prior contact with gay men may attenuate heterosexuals' homophobia by increasing their willingness to provide support (Menec & Perry, 1998; Schope & Eliason, 2000; Shaw, Borough, & Fink, 1994). In a recent study by Lytle and Levy, they found friendships reduced heterosexuals' sexual prejudice (2015), further elucidating the power of empathetic bonds.

Despite the importance of these bonds, environments that inherently reject the gay community provide little empathetic support. For example, a strong element of Italian cultural identity has traditionally incorporated the vision of heterosexual sex and "natural family" as a design of God. This is linked with the doctrinal orthodoxy of the Catholic Church and its lasting influence on the very notion of "family" values (strictly in the singular) and the resulting set of stereotypical family norms. Especially in public discourse, these "traditional family values" incorporate a condemnation of homosexuality as sinful and a sign of immorality in this culture (Detweiler, 1992).

Given the increasing modernization of Italian culture, religious influence on current cultural norms on the gay community in Italy is mixed. On one hand, the official Catholic teaching on this subject has been described by some as "condemnation and judgment" against homosexuals (Catechismo della Chiesa Cattolica, 1992). On the other hand, some opinions are more fluid, especially recently as shown legal passing of civil unions in Italy (Law n. 76, May 20, 2016). Moreover, among Christians, Catholics show low to moderate level of intolerance than other groups (for example, Protestants; see Baiocco, Nardelli, Pezzuti, & Lingiardi, 2013; Finlay & Walther, 2003; Fisher, Derison, Polley, Cadman, & Johnston, 1994; Lingiardi, Falanga, & D'Augelli, 2005). However, one should also recall current Catholic doctrine makes a distinction between homosexual "orientation" (which must be understood and should not favor discrimination) and "behavior" (which must be resisted), a point Pope Francesco I has emphasized in his perceived more contemporary ideology. These deeply rooted cultural components and legal processes increase the perception of a hostile and unsupportive society (Herek, 2009). As a result, those who deviate from these norms may be harshly ostracized and discriminated against. Considering the social disparities effecting Italian gay persons, it is imperative to examine how it evolves into stigmatization. To our knowledge, this is the first study to examine homophobia and stigmatization in an Italian context.

The current study evaluated heterosexual men and women's levels of homophobia and closeness (i.e., emotional, social, physical, and affective closeness) toward both HIV-negative and HIV-positive gay men. We conceptualized "closeness" as a psychological construct assessing degrees of desired social, emotional, physical, and affective proximity and warmth toward an intended person. We created three vignettes (three conditions) narrating a generic story of Marco, a young Italian man. The three vignettes differed on Marco's sexual orientation and HIV status, namely: (C1) heterosexual and HIV-negative;

(C2) gay and HIV-negative; and (C3) gay and HIV-positive. Participants were randomly assigned to one of the three conditions (see Figure 1a). We hypothesized:

1. The levels of homophobia would be higher in condition C2 (Gay–HIV negative [GH–]) and C3 (Gay–HIV positive [GH+]) compared to C1 (Heterosexual–HIV negative [HH–]);
2. Lower levels of closeness in the conditions C2 and C3 compared to C1;
3. Homophobia would be negatively correlated with closeness;
4. Women would be characterized with lower levels of homophobia and higher levels of closeness compared to men.

Method

Participants and procedures

A total of 369 participants were initially recruited; 76 did not complete the study and were excluded, and 293 participants were randomized and assigned to one of the three conditions. For the purpose of the current study, gay/lesbian ($n = 18$) and bisexual men and women ($n = 14$) were not included in the analysis. The final sample was composed of heterosexual men and women ($n = 261$), of which the majority were women ($n = 192$, 73.6%; men: $n = 69$, 26.4%). The mean age of the sample was 30.03 ($SD = 8.11$; range from 19 to 65) years. Education attainment included elementary/junior high school (4.2%), high school (27.6%), bachelor or master's degree (59.8%), and PhD or higher education (8.4%).

Participants were recruited online through Facebook. The convenience sampling procedure “snowballing” was adopted, where each participant was asked to share the link to the study on his or her Facebook page. The platform Qualtrics (www.qualtrics.com) was used to collect the data. Participants were randomly assigned to one of the three conditions (i.e., HG–, HG+, or HH–) through an algorithm available on Qualtrics. Each participant read only one version of the story. All responses were voluntary and anonymous. All participants declared being over 18 years of age. The study design is graphically represented in Figure 1a.

Instrument

Vignettes

The vignettes were created by the authors of this study to narrate the story of a young man named Marco. The first author of this article translated the vignettes from Italian to English:

Marco is a socially involved person, he is always available to help his friends, who know they can count on his help. Marco lives in Northern Italy, where he currently studies at the university with great results, and works as a bartender. He is very close to his family that loves him very much. Marco defines himself as an outgoing person, creative, and extremely sensitive to social issues. In fact, he volunteers for the Red Cross serving food to homeless and poor people at a soup kitchen during the weekends. Marco is also athletic and takes great care of himself by eating

healthy food. Marco is (condition 1) heterosexual (conditions 2 and 3 Marco is gay) and when he met his (condition 1) girlfriend girlfriend (conditions 2 and 3 his boyfriend) they got tested for HIV and (conditions 1 and 2) both resulted negative (condition 3 Marco resulted positive and his boyfriend negative to HIV). They love each other and dream of living their lives together.

Homophobia

Homophobia was assessed using the short version of the Attitudes Toward Lesbian and Gay Scale (ATLG-R-S5; Herek, Cogan, Gillis, & Glunt, 1998) translated into Italian by the authors of this article. The instrument was composed of 10 items assessing homophobia: five items on homophobia toward gay men and five items on homophobia toward lesbian women. For the purpose of the study, we used only the homophobia toward gay men subscale.

Closeness

The construct of “closeness” consisted of four main domains, assessed with one item each: emotional closeness (can you feel what he feels?); social closeness (do you think you know persons that live in his same situation?); physical closeness (how physically close to him could you be); and affective closeness (could you or would you provide support to him?). The answer scale for these items consisted of a graphical scale where spatial proximity (closeness) of two circles corresponded to the degree of emotional, social, physical, and affective closeness. The two circles (Figure 1b) represented the respondent and Marco. The spatial proximity of the two circles corresponded to the participants’ perceived closeness to Marco. The answer scale ranged from 1 to 9; higher values corresponded to greater closeness.

The remaining questionnaires completed by the participants included the Bem Sex Role Inventory (Bem, 1981); ad hoc items assessing participants’ levels of trust toward Marco; and the emotions solicited by the vignettes (see Figure 1a). However, these variables were not used in this analysis.

Data analysis

SPSS 23 (IBM Corp., 2013) was used to perform descriptive statistics (i.e., mean and standard deviation [*SD*], kurtosis, and skewness), one-way and two-way groups comparison (chi square for categorical variables, and ANOVA and MANOVA for continuous variables), and correlation analysis (Pearson’s *r* coefficient; i.e., association between homophobia and closeness). Partial eta squared (η^2) was used to estimate the effect size (MANOVA), where $\eta^2 = .01$ suggests low effect size; $\eta^2 = .06$ indicates medium effect size; and $\eta^2 = .13$ represents large effect size (Cohen, 1988). A simple effect test was run using the LSD post hoc test.

Mplus 7.2 (Muthén & Muthén, 2012) was used to conduct confirmatory factor analyses (CFAs) of the homophobia and closeness constructs. Maximum likelihood with robust standard errors (MLR) estimator was used to handle non-normality of the variables, multivariate outliers, and missing data. Fit of the models was tested using the root mean square error of approximation (RMSEA), comparative fit index (CFI) and Tucker-Lewis

Index (TLI), and χ^2 test. CFI and TLI .95, RMSEA .05, χ^2 test $p > .05$ reflect good fit (Bentler, 1990; Browne & Cudeck, 1992; Hu & Bentler, 1999). Factor determinacy (FS) coefficients were used to evaluate the reliability of latent factors. FS ranges from 0 to 1 with values close to 1, or more generally greater than .8, indicating optimal reliability (Muthén & Muthén, 2012). The CFAs performed to test the latent constructs of homophobia and closeness generated latent factor scores, which are standardized continuous variables (Muthén & Muthén, 2012). Factor scores were used to perform further analysis.

Results

Preliminary analysis

The groups in the three conditions did not differ with respect to gender ($\chi^2 = .54$, $df = 2$, $p = .76$), age ($F[260,2] = 1.45$, $p = .24$), and educational attainment ($\chi^2 = .85$, $df = 6$, $p = .18$).

Psychometric properties of the homophobia scale (ATLG-R-S5) and closeness scale

CFA was performed to test the construct of homophobia toward men. The fit indexes indicate good fit of the 1-factor model (RMSEA = .06, CFI/TLI .98/.95, $\chi^2 = 8.96$, $df = 5$, $p = .11$). Factor loadings ranged from .36 to .81, and the factor determinacy was .91, indicating good internal consistency.

A second CFA was performed to test the factorial model of the closeness scale. The 1-factor model showed good fit (RMSEA = .06, CFI/TLI .99/.98, $\chi^2 = 3.68$, $df = 2$, $p = .16$). The factor loadings ranged from .61 to .84, and the factor determinacy was .91, confirming the good internal consistency of the scale. Latent factor scores of homophobia and closeness scales were saved and further analyzed.

Levels of homophobia and closeness by conditions and participants' gender

Two-way MANOVA was conducted to test differences on homophobia and closeness by condition and participants' gender (Table 1). The Pillai's trace was statistically significant for gender (.11; $F = 14.01$, $df = 2$, $p < .001$) and the interaction between gender and conditions (.05; $F = 2.74$, $df = 4$, $p = .03$), but not for the conditions.

Men scored higher on homophobia ($M_m = .37$, $SD = .70$ and $M_w = .05$ $SD = .59$) and lower on closeness ($M_m = -.31$, $SD = .62$ and $M_w = .10$ $SD = .59$) compared to women. The interaction between the conditions and participants' gender was significant only for closeness ($p = .035$). The difference on homophobia by condition and gender showed a statistical trend ($p = .06$), whereas no statistically significant difference was found across the three conditions with regard to homophobia ($M_{HH-} = .19$, $SD = .63$, $M_{GH-} = .07$ $SD = .64$ and $M_{GH+} = .13$, $SD = .63$) and closeness ($M_{HH-} = -.00$, $SD = .55$, $M_{GH-} = .07$ $SD = .72$ and $M_{GH+} = -.06$ $SD = .61$). The results are represented graphically in Figures 2 and 3.

The levels of closeness reported by women in the GH- condition were higher compared to the women in the other two conditions (HH- and GH+). Men in the GH- condition were characterized with higher levels of closeness compared to the men in the other two conditions. The results of the simple effect test showed that men and women in the GH- and GH+ conditions differ in the levels of closeness ($F[1,236] = 24.42$, $p < .001$; and $F[1,236] =$

5.34, $p = .022$, respectively), whereas no statistically significant difference was observed in the HH– condition.

Since the difference in the levels of homophobia by gender and conditions was approaching statistical significance ($p = .06$), we cautiously interpret the results as trend. The levels of homophobia were lower among women in the GH negative and positive conditions compared to women in the HH negative condition as well as men, regardless the condition. The opposite trend was observed in men, namely, men in the GH positive and negative conditions scored higher on the homophobia scale than men in the HH– condition.

Lastly, the correlation analysis showed that higher levels of homophobia were associated with low closeness ($r = -.29$, $p < .001$) in the total sample. When stratified by condition, the correlation between the two constructs was not statistically significant in the HH– condition, whereas statistically significant correlations were found in both conditions narrating the story of Marco as a GH– ($r = -.34$, $p = .01$) and GH+ man ($r = -.32$, $p = .02$).

Discussion

The aim of the study is to evaluate the levels of homophobia and closeness (i.e., physical, social, emotional, affective) toward gay–HIV-negative and -positive men among heterosexual men and women. According to Herek (2009), homophobia may be elicited through interaction with gay people. Therefore, we developed three conditions manipulating two socially stigmatized variables—sexual orientation and HIV infection status—to evaluate the levels of homophobia in heterosexual men and women, as well as to assess social, physical, and emotional closeness. When stigmatized characteristics are not contextually salient (Condition 1: HH–), heterosexual men and women show similar levels of homophobia. However, men and women show distinct opposite reactions to the vignettes where “Marco” is a gay man, regardless of HIV status. Although women report low levels of homophobia, men are characterized with increased homophobic attitudes (Cullen, Wright Jr., & Alessandri, 2002; Herek, 2009). Interestingly, GH+ condition corresponds with a slight increase of homophobic attitudes in both men and women. Although this change is subtle, this result warrants further investigation, as homophobia and its manifestations (e.g., discriminations, verbal and physical aggressions) are associated with severe impairment such as depression, anxiety, and suicide (Meyer, 1995, 2003; Norcini Pala et al., 2015). Ultimately, homophobia was associated with lower levels of closeness, including the willingness to be physically, socially, and emotionally close to gay men regardless of HIV status (Batson et al., 1997; Finlay & Stephan, 2000; Menec & Perry, 1998; Phelan & Basow, 2007; Schope & Eliason, 2000; Shaw et al., 1994; Vescio et al., 2003).

With regard to participants’ closeness to the character of Marco, women show an overall higher level of closeness compared to men. Women in the GH– condition report a greater level of closeness when compared to the women in the other two conditions. Men in the gay conditions (HIV negative and positive) are characterized with a lower closeness toward Marco. Male participants in the GH+ condition report a slightly higher level of closeness compared to the GH– condition, but still lower than the men in the HH– condition. Taken together, these results suggest that men and women might react in opposite ways when

socially stigmatized cues such as sexual orientation become contextually salient. Women might react by reducing their negative attitudes toward homosexuality, whereas men accentuate them. Further, our results show that if sexual orientation is not contextually salient, women and men show the same levels of homophobia. Women are characterized by a higher overall physical, social, and emotional closeness than men (Parent & Moradi, 2010), and this is accentuated in the GH– condition. The differences observed between the Gay–HIV-negative and -positive conditions, although minimal, might suggest that HIV stigma accentuates negative attitudes toward gay individuals in both men and women. The effect of the double stigma associated with HIV status and sexual orientation on homophobia and closeness needs to be further investigated in men and women separately.

Conclusion

This study improves present understanding of the association between stigmatization, homophobia, and relationship quality by distinguishing the effects of factors with low levels of stigma, such as closeness. These findings may be useful for researchers in understanding factors that play an important role in stigmatization. Given the history of discrimination and victimization of the gay population, our study demonstrates that when the stigmatized category is not salient, the level of homophobia is low. This result is important to demonstration and continued work on the (de)construction of stigmatized traits: If people see others as “human beings,” rather than heterosexuals versus homosexuals (common in-group identity model; see Dovidio, Gaertner, Ufkes, Saguy, & Pearson, 2016; Gaertner & Dovidio, 2014), homophobic attitudes may decrease. Moreover, our study could be useful to clinicians and educators interested in prevention and educational interventions; aspects such as closeness are determinant factors to activate antigay attitudes and low levels of stigma. The element of closeness could additionally be evaluated in studies on bullying and could offer useful directions for those who work with younger generations; it can enable a level of proximity/empathy (Pettigrew & Tropp, 2008), variables confirmed in literature to be related to a decrease in prejudice.

Limitations and future directions

The present exploratory study presents limitations that need to be overcome by future investigations. Because of the nonprobabilistic recruitment, the results might be not generalizable. Yet the randomization might attenuate the bias due to the convenience sampling. The limited subsample size represents a further limitation: a subsample may be needed to explore the effect of stigma on social behaviors. Specifically, increasing the number of participants allocated in each condition would allow the further stratification by participants' sex. Additionally, the lack of a vignette narrating the story of a heterosexual HIV-positive man is a limitation of this study that should be addressed in future research to better understand HIV stigma separate from sexual orientation. Moreover, it would be of great interest to add conditions with a female character to better measure the way gender identification influences homophobia, closeness, and stigma.

Additionally, the present study examines the variables in an Italian context. Further research may want to explore how homophobia and closeness influence stigma against sexual

minorities greatly across cultures. Moreover, variation within the Italian context may also exist; therefore, greater exploration of participants' cultural assimilation, immigration status, and stigmatized characteristics (e.g., religious affiliation, ethnicity, HIV status) may influence varying degrees of closeness and marginalization. A more in-depth look at within-group differences may shed greater light on these variables. Lastly, pre- and post-assessments of homophobia should be included to evaluate the effect of the vignettes on participants' negative attitudes more accurately.

Acknowledgments

Funding

Dr. Norcini Pala is supported by a NIMH training grant (T32-MH19139 Behavioral Sciences Research in HIV Infection; Principal Investigator: Theodorus Sandfort, PhD).

References

- Baiocco R, Nardelli N, Pezzuti L, Lingardi V. Attitudes of Italian heterosexual older adults towards lesbian and gay parenting. *Sexuality Research and Social Policy*. 2013; 10:285–292. DOI: 10.1007/s13178-013-0129-2
- Batson CD, Chang J, Orr R, Rowland J. Empathy, attitudes, and action: Can feeling for a member of a stigmatized group motivate one to help the group? *Personality and Social Psychology Bulletin*. 2002; 28:1656–1666. DOI: 10.1177/014616702237647
- Batson CD, Polycarpou MP, Harmon-Jones E, Imhoff HJ, Mitchener EC, Bednar LL, Highberger L. Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*. 1997; 72:105.doi: 10.1037/0022-3514.72.1.105 [PubMed: 9008376]
- Bem, SL. *The Bem Sex-Role Inventory: A professional manual*. Palo Alto, CA: Consulting Psychologists Press; 1981.
- Bentler PM. Comparative fit indexes in structural models. *Psychological Bulletin*. 1990; 107:238–246. DOI: 10.1037/0033-2909.107.2.238 [PubMed: 2320703]
- Bowleg L. When Black+ lesbian+ woman Black lesbian woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*. 2008; 59:312–325. DOI: 10.1007/s11199-008-9400-z
- Beyrer C, Baral SD, van Griensven F, Goodreau SM, Chariyalertsak S, Wirtz AL, Brookmeyer R. Global epidemiology of HIV infection in men who have sex with men. *The Lancet*. 2012; 380(9839):367–377.
- Browne MW, Cudeck R. Alternative ways of assessing model fit. *Sociological Methods & Research*. 1992; 21:230–258. DOI: 10.1177/0049124192021002005
- Catechismo della Chiesa Cattolica. Rome, Italy: Libreria Editrice Vaticana, Vatican; 1992.
- Cohen, J. *Statistical power analysis for the behavioural sciences*. Hillsdale, NJ: Erlbaum; 1988.
- Cooper, LA., Roter, DL. Patient-provider communication: The effect of race and ethnicity on process and outcomes of healthcare. In: Smedley, BD, Stith, AY., Nelson, AR., editors. *Unequal treatment: Confronting racial and ethnic disparities in healthcare*. Washington, DC: Institute of Medicine; 1998. p. 552. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Patient-Provider+Communication:+The+Effect+of+Race+and+Ethnicity+on+Process+and+Outcomes+of+Healthcare#0>
- Crocker, J., Major, B., Steele, C. Social stigma. In: Gilbert, DT, Fiske, ST., Lindzey, G., editors. *The handbook of social psychology*. Vol. 2. Boston, MA: McGraw-Hill; 1998. p. 504–553.
- Cullen JM, Wright LW Jr, Alessandri M. The personality variable openness to experience as it relates to homophobia. *Journal of Homosexuality*. 2002; 42(4):119–134. DOI: 10.1300/J082v42n04_08 [PubMed: 12243480]

- Denning PH, DiNenno EA, Wiegand RE. Characteristics associated with HIV infection among heterosexuals in urban areas with high AIDS prevalence-24 cities, United States, 2006–2007. *JAMA*. 2011; 306(12):1320–1322.
- Detweiler JS. The religious right's battle plan in the "Civil War of Values". *Public Relations Review*. 1992; 18:247–255. DOI: 10.1016/0363-8111(92)90052-Z
- Dovidio JF, Gaertner SL, Ufkes EG, Saguy TE, Pearson AR. Included but invisible? Subtle bias, common identity, and the darker side of "We". *Social Issues and Policy Review*. 2016; 10:6–46. DOI: 10.1111/sipr.2016.10.issue-1
- Finlay B, Walther CS. The relation of religious affiliation, service attendance, and other factors to homophobic attitudes among university students. *Review of Religious Research*. 2003; 44:370–393. DOI: 10.2307/3512216
- Finlay KA, Stephan WG. Reducing prejudice: The effects of empathy on intergroup attitudes. *Journal of Applied Social Psychology*. 2000; 30:1720–1737. DOI: 10.1111/j.1559-1816.2000.tb02464.x
- Fisher RD, Derison D, Polley CF, Cadman J, Johnston D. Religiousness, religious orientation, and attitudes towards gays and lesbians. *Journal of Applied Social Psychology*. 1994; 24:614–630. DOI: 10.1111/jasp.1994.24.issue-7
- Gaertner, SL., Dovidio, JF. *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA: Psychology Press; 2014.
- Goffman, E. *Stigma*. Englewood Cliffs, NJ: Spectrum; 1963.
- Goffman, E. *A representação do eu na vida cotidiana*. Petrópolis, Brazil: Vozes. Vozes; 2002.
- Hall HI, Song R, Rhodes P, Prejean J, An Q, Lee LM, Janssen RS. Estimation of HIV incidence in the United States. *JAMA*. 2008; 300(5):520–529. [PubMed: 18677024]
- Heijnders M, Van Der Meij S. The fight against stigma: An overview of stigma-reduction strategies and interventions. *Psychology, Health & Medicine*. 2006; 11:353–363. DOI: 10.1080/13548500600595327
- Herek GM. The psychology of sexual prejudice. *Current Directions in Psychological Science*. 2000; 9:19–22. DOI: 10.1111/cdir.2000.9.issue-1
- Herek GM. Sexual stigma and sexual prejudice in the United States: A conceptual framework. *Nebraska Symposium on Motivation*. 2009; 54:65–111. DOI: 10.1007/978-0-387-09556-1 [PubMed: 19230525]
- Herek GM, Capitanio JP. AIDS stigma and sexual prejudice. *American Behavioral Scientist*. 1999; 42:1130–1147. DOI: 10.1177/00027649921954804
- Herek GM, Cogan JC, Gillis JR, Glunt EK. Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal-Gay and Lesbian Medical Association*. 1998; 2:17–26.
- Herek GM, Glunt EK. An epidemic of stigma: Public reactions to AIDS. *American Psychologist*. 1988; 43(11):886–891. [PubMed: 3063145]
- Herek GM, Widaman KF, Capitanio JP. When sex equals AIDS: Symbolic stigma and heterosexual adults' inaccurate beliefs about sexual transmission of AIDS. *Social Problems*. 2005; 52:15–37. DOI: 10.1525/sp.2005.52.1.15
- Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*. 1999; 6:1–55. DOI: 10.1080/10705519909540118
- IBM Corp.. *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.; 2013.
- Kurzban R, Leary MR. Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin*. 2001; 127:187–208. DOI: 10.1037/0033-2909.127.2.187 [PubMed: 11316010]
- Lin P-Y, Grewal NS, Morin C, Johnson WD, Zak PJ. Oxytocin increases the influence of public service advertisements. *Plos One*. 2013; 8(2):e56934.doi: 10.1371/journal.pone.0056934 [PubMed: 23460821]
- Lingiardi V, Falanga S, D'Augelli AR. The evaluation of homophobia in an Italian sample. *Archives of Sexual Behavior*. 2005; 34:81–93. DOI: 10.1007/s10508-005-1002-z [PubMed: 15772771]
- Link BG, Phelan JC. Conceptualizing stigma. *Annual Review of Sociology*. 2001; 27:363–385. DOI: 10.1146/annurev.soc.27.1.363

- Luchetta, T. Relationship between homophobia, HIV/AIDS stigma, and HIV/AIDS knowledge. In: Pardie, L., Luchetta, T., editors. *The construction of attitudes towards lesbians and gay men*. Binghamton, NY: Haworth; 1999. p. 1-18.
- Luchetta, T., Pardie, PL. *The construction of attitudes toward lesbians and gay men*. New York, NY: Routledge; 2013.
- Lyimo RA, Stutterheim SE, Hospers HJ, De Glee T, Van Der Ven A, De Bruin M. Stigma, disclosure, coping, and medication adherence among people living with HIV/AIDS in northern Tanzania. *AIDS Patient Care and STDs*. 2014; 28:98–105. DOI: 10.1089/apc.2013.0306 [PubMed: 24517541]
- Lytle A, Levy SR. Reducing heterosexuals' prejudice toward gay men and lesbian women via an induced cross-orientation friendship. *Psychology of Sexual Orientation and Gender Diversity*. 2015; 2(4):447–455.
- Menec VH, Perry RP. Reactions to stigmas among Canadian students: Testing an attribution-affect-help judgment model. *Journal of Social Psychology*. 1998; 138:443–453. DOI: 10.1080/00224549809600399
- Meyer IH. Minority stress and mental health in gay men. *Journal of Health and Social Behaviour*. 1995; 36:38–56. DOI: 10.2307/2137286
- Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*. 2003; 129:674. doi: 10.1037/0033-2909.129.5.674 [PubMed: 12956539]
- Muthén, LK., Muthén, BO. *Mplus user's guide*. Los Angeles, CA: Author; 2012.
- Norcini Pala A, Hart PR, Steca P. Minority stress, depression and HIV-progression biomarkers: An exploratory study on a sample of Italian HIV-positive gay and bisexual men. *Journal of Gay & Lesbian Mental Health*. 2015; 19(3):244–260.
- Parent MC, Moradi B. Confirmatory factor analysis of the conformity to feminine norms index and development of an abbreviated version: The CFNI-45. *Psychology of Women Quarterly*. 2010; 34:97–109. DOI: 10.1111/j.1471-6402.2009.01545.x
- Pettigrew TF, Tropp LR. How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*. 2008; 38:922–934. DOI: 10.1002/ejsp.v38:6
- Phelan JE, Basow SA. College students' attitudes toward mental illness: An examination of the stigma process. *Journal of Applied Social Psychology*. 2007; 37:2877–2902. DOI: 10.1111/jasp.2007.37.issue-12
- Raja S, Stokes JP. Assessing attitudes toward lesbians and gay men: The Modern Homophobia Scale. *International Journal of Sexuality and Gender Studies*. 1998; 3:113–134. DOI: 10.1023/A:1023244427281
- Schope RD, Eliason MJ. Thinking versus acting: Assessing the relationship between heterosexual attitudes and behaviors toward homosexuals. *Journal of Gay & Lesbian Social Services*. 2000; 11(4):69–92. DOI: 10.1300/J041v11n04_04
- Shaw JI, Borough HW, Fink MI. Perceived sexual orientation and helping behavior by males and females: The wrong number technique. *Journal of Psychology & Human Sexuality*. 1994; 6:73–81. DOI: 10.1300/J056v06n03_05
- Stutterheim SE, Sicking L, Brands R, Baas I, Roberts H, Van Brakel WH, Bos AER. Patient and provider perspectives on HIV and HIV-related stigma in Dutch health care settings. *AIDS Patient Care and STDs*. 2014; 28:652–665. DOI: 10.1089/apc.2014.0226 [PubMed: 25459231]
- Vescio TK, Sechrist GB, Paolucci MP. Perspective taking and prejudice reduction: The mediational role of empathy arousal and situational attributions. *European Journal of Social Psychology*. 2003; 33:455–472. DOI: 10.1002/(ISSN)1099-0992
- Villano, P. *Pregiudizi e stereotipi*. Roma, Italy: Carocci; 2013.
- Visser MJ, Makin JD, Lehobye K. Stigmatizing attitudes of the community towards people living with HIV/AIDS. *Journal of Community and Applied Social Psychology*. 2006; 16:42–58. DOI: 10.1002/casp.836
- Vogel DL, Wade NG, Hackler AH. Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*. 2007; 54:40–50. DOI: 10.1037/0022-0167.54.1.40

Weiss MG, Ramakrishna J, Somma D. Health-related stigma: Rethinking concepts and interventions. *Psychology, Health & Medicine*. 2006; 11:277–287. DOI: 10.1080/13548500600595053

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Figure 1.

a. Graphical representation of the study procedure. Italian version of the Attitudes Toward Lesbian and Gay scale (ATLG-R-S5; Herek et al., 1998); BSRI: Bem Sex Role Inventory (Bem, 1981).

Figure 2.
Homophobia—men and women mean scores by condition.

Figure 3.
Closeness—men and women mean scores by condition.

Table 1

Tests of between-subjects effects.

IV	DV	F	df	Sig.	η^2
Gender	Homophobia	10.47	1,241	<.001	.08
	Closeness	21.09		<.001	.04
Conditions	Homophobia	.19	2,241	.829	.01
	Closeness	1.09		.337	.00
Gender * Conditions	Homophobia	2.79	2,241	.063	.03
	Closeness	3.39	2	.035	.02

IV = Independent variable; DV = Dependent variable; η^2 partial eta squared.