Heteronormativity in Italy: Psychometric Characteristics of the Italian Version of the Heteronormative Attitudes and Beliefs Scale

Cristiano Scandurra1 · Salvatore Monaco2 · Pasquale Dolce3 · Urban Nothdurfter2

© The Author(s) 2020

Abstract

Introduction Heteronormativity describes a hierarchical societal system that encompasses heterosexuality and binary gender identity as normal and natural, defining boundaries of acceptable heterosexuality and gender identity. As no comprehensive measures of heteronormativity exist in Italy, this study evaluated the psychometric characteristics of an Italian version of the Heteronormative Attitudes and Beliefs Scale (HABS), a measure assessing essential and binary beliefs about sex and gender and normative behaviors.

Methods Five hundred sixty-four cisgender heterosexual and sexual and gender minority individuals, ranging from 18 to 77 years of age (M = 34.66, SD = 11.13), were recruited in 2020 to participate in an online cross-sectional survey on heteronormativity, homonegativity, authoritarianism, intolerance of ambiguity, openness to experience, and religiosity.

Results Confirmatory factor analysis showed that the original 2-factor model had adequate fit to the Italian data. However, although appropriately fit to the data, 4 items showed a loading below .40. Criterion and discriminant validity were fully confirmed, as heteronormativity positively correlated with homonegativity, authoritarianism, intolerance of ambiguity, and religiosity, and negatively with openness to experience; all these correlations were below .60. Furthermore, the results indicated that male gender and heterosexual cisgender individuals showed higher levels of heteronormativity than female gender and sexual and gender minority individuals.

Conclusions This study offers evidence of the validity and reliability of an Italian version of the HABS, providing researchers with a measure to assess heteronormativity in the Italian context.

Policy Implications Assessing heteronormative attitudes and beliefs may help to make societal institutions more inclusive.

Keywords Heteronormative Attitudes and Beliefs Scale · Heteronormativity · Homophobia · Gay · Lesbian

Sexual and gender minority (SGM) is an umbrella term encompassing populations who identify as lesbian, gay, bisexual, and transgender (LGBT). These populations also include people who do not identify with one of these terms, and whose sexual orientations or gender identities differ from binary constructs of sexual orientation (i.e., gay vs. heterosexual) and gender identity (i.e., male vs. female), such as pansexual, genderqueer, or non-binary. Although there are fundamental differences among these populations with respect to health needs, life experiences, and social acceptance (e.g., Goldberg, Rothblum, Russell, & Meyer, 2020; Scandurra et al., 2019), SGM individuals share the common experience of belonging to an often-stigmatized minority. Indeed, SGM individuals experience sexual and gender stigma, or rather negative attitudes, evaluations, and behaviors, due to their non-adherence to binary societal expectations in terms of

1 Department of Neuroscience, Reproductive Sciences and Dentistry, University of Naples Federico II, Via Sergio Pansini 5, 80133 Naples, Italy
2 Faculty of Education, Free University of Bozen, Regensburger Allee 16, 39042 Brixen, Italy
3 Department of Public Health, University of Naples Federico II, Via Sergio Pansini 5, 80133 Naples, Italy
sexual behavior, psychological orientation, or gender identity (e.g., Herek, 2004; Hill, 2003). This type of stigma manifests in different forms, such as structural/institutional (e.g., absence of inclusive laws encompassing sexual and gender diversity), interpersonal (e.g., verbal abuse and discrimination), or individual (e.g., internalization of negative societal attitudes towards SGM, i.e., internalized homophobia or transphobia) (e.g., Plummer, 2003; Rinaldi, 2020; White Hughto, Reisner, & Pachankis, 2015).

Social oppression and negative attitudes towards SGM individuals rely on an implicit social contract that leads to an evaluation of heterosexuality and binary gender identity as normal and natural, defining the boundaries of acceptable heterosexuality and gender identity (Habarth, 2015). This phenomenon, which involves alignment of biological sex, gender identity, and sexual orientation such that, for example, a biological female must identify as a heterosexual woman, is defined as heteronormativity, and comprises attitudes as well as behavioral manifestations, such as rejection, bullying, and hate crimes (e.g., Allen & Mendez, 2018; Herz & Johansson, 2015).

Habarth (2015) developed the Heteronormative Attitudes and Beliefs Scale (HABS) to assess the complex ideology of heteronormativity and its encompassing attitudes and behaviors. To the best of our knowledge, HABS is the only currently available scale that comprehensively assesses heteronormativity, providing researchers a valid tool in this field. In Italy, the context of this study, no specific measures of heteronormativity have been developed and validated, leaving Italian researchers in need of a comprehensive measure assessing this fundamental construct among the Italian social context. Thus, the current study aimed to validate an Italian version of the HABS (Habarth, 2015) in a sample of Italian cisgender heterosexual and SGM adults. In the following sections, we will provide definitions of the main theoretical construct of the study (i.e., heteronormativity) and discuss its related constructs and psycho-social consequences. Then, we will provide an overview of heteronormativity in the Italian context. Finally, we will present the HABS.

**Heteronormativity: Definition, Related Constructs, and Consequences**

The concept of heteronormativity encapsulates the idea that institutionalized heterosexuality constitutes the standard for legitimate social and sexual relationships (e.g., Berlant & Warner, 1998; Warner, 1991, 1993). In this sense, it describes a social set of attitudes, actions, and structures aimed to constitute and regulate “bodies according to normative notions of sex, gender and sexuality” (Lloyd, 2013, p. 818) by considering heterosexuality as “natural, inevitable and desirable” (Montgomery & Stewart, 2012, p. 164). This mostly implicit assumption has strong consequences on the empirical level: not only is heterosexuality assumed to be the unquestioned norm (Myers & Raymond, 2010) and considered a natural trait (e.g., Kitzinger, 2005; Yep, 2003) but heterosexuality also becomes the institutionalized structural foundation that “constitutes the standard for legitimate and expected social and sexual relations” (Ingraham, 1999, p. 17). Heteronormativity assumes a binary and natural conception of gender, providing the foundation for male sexist hegemony that assumes the natural subordination of women to men and defines and delimitates socially acceptable behaviors of men and women (e.g., Martino, 2000; Tolman, 2006). Thus, heteronormativity encapsulates the concept of cisgenderism, an ideology that denies, stigmatizes, and pathologizes gender identities not aligning with those assigned at birth (Ansara & Berger, 2016; Lennon & Mistler, 2014; Schilt & Westbrook, 2009). Consequently, people who flee or stand apart from this ideological and cultural order face discrimination and prejudices related to sexual and gender stereotypes (e.g., Burn, Kadlec, & Rexer, 2005; Meyer, 2003).

Thus, without denying the heterogeneity of life experiences among SGM individuals, heteronormativity describes “a hierarchical societal system that privileges and sanctions individuals based on presumed binaries of gender and sexuality; as a system it defines and enforces beliefs and practices about what is “normal” in everyday life” (Russell, McGuire, & Russell, 2012, p. 188). Consequently, it fosters social and cultural institutions and practices capable of perpetrating its ideological system, conditioning “the regulation of marriage and family life, divisions of waged and domestic labour, patterns of economic support and dependency” (Jackson, 1999, p. 26). As Connell and Messerschmidt (2005) have noted, heteronormativity is a social construction that is spatially negotiated and defined, and thus, its level of pervasion and depth varies from one social context to another. Accordingly, measuring heteronormative attitudes and beliefs in different cultural contexts is a useful strategy to highlight and compare the impact of the heteronormative order on people’s attitudes and beliefs, which also constitute determinants of their further social actions.

Heteronormativity is strongly related to certain psycho-social constructs. For example, it is strictly related to homonegativity, defined as negative attitudes towards sexual minorities (Morrison & Morrison, 2002). Heteronormativity makes a clear distinction between heterosexual and other identities (McPhail, 2004), delegitimizing sexual and gender diversity based on supposed hierarchical differences, even in areas of life in which sexuality is apparently not relevant (Alden & Parker, 2005). This explains homonegativity as the widespread stereotypes and prejudices perpetrated against gay and lesbian people and their “queer ways of life” (Halberstam, 2005) that do not correspond to the heterosexual order. In everyday life, homonegativity results in repulsion,
disgust, or closure towards homosexuality, which can also lead to forms of physical or verbal violence (Herek, 2004). In this sense, homonegativity describes psycho-social consequences of the heteronormative order on the individual level of bias and prejudice and can therefore be understood as a concept directly related to heteronormativity.

The scientific literature has also shown strong correlations between the intensity of sexual prejudice or heteronormativity and other personal characteristics and orientations, such as authoritarianism, social dominance, religion, and gender (Goodman & Moradi, 2008; Herek, 1998, 2000; Herek & McLemore, 2013; Huffaker & Kwon, 2016; Kite & Whitley, 1996; Licciardello, Castiglione, & Rampullo, 2011; Pearte, Renk, & Negy, 2013; Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009; Whitley, 1999, 2001).

Some studies have shown that homonegative and heteronormative attitudes are rooted in authoritarian personalities (Goodman & Moradi, 2008; Whitley & Lee, 2006). Specifically, correlations have been confirmed between heteronormativity and right-wing authoritarianism, social dominance orientation, and conservatism (e.g., Goodman & Moradi, 2008; Whitley & Lee, 2006; Whitley 1999). As Habarth has stressed in her work (2015), negative attitudes towards minorities are also more common in people with low tolerance of ambiguity (Habarth, 2008, 2015) and low openness to experiences (Cullen, Wright, & Alessandri, 2002; Sibley & Duckitt, 2008) and differences (Hegarty & Pratto, 2001). Therefore, it can be assumed that heteronormative attitudes and beliefs are positively correlated with authoritarianism and intolerance of ambiguity and negatively correlated with openness to experience.

Furthermore, a diverse literature has shown associations between heteronormativity and religion and, more generally, with the tendency to rely on an external upper guide of authority and morality (e.g., Finlay & Walther, 2003; Herek, 2004; Herek & McLemore, 2013; Hunsberger, Owusu, & Duck, 1999; Schulte & Battle, 2004; Wilkinson, 2004). Different authors have recommended sensitivity when examining the relationship between heteronormative and homonegative attitudes and religion, pointing out its complex nature and perception (Wilkinson, 2004). For example, positive correlations can be identified mainly for theologically conservative religiousness and for the intrinsic dimension of faith (Rosik, Griffith, & Cruz, 2007; Rowatt & Schmitt, 2003), as intrinsic religiousness (i.e., sincere beliefs in one’s own religion that lead people to live such beliefs in day-to-day life) is generally related to more restricted sexuality across cultures, while extrinsic religiosity (i.e., religion that primarily serves diverse ends rather than central religious beliefs per se) is associated with a less restrained sexuality. Other authors have suggested that strong religious commitment should not be viewed per se as a risk factor for homonegative prejudice, but that homophobic culture within religious contexts might be a more reliable predictor (Ream, 2001). However, at least for Western cultural research, findings agree on an existing and even growing gap in attitudes towards SGM people between devoutly religious people (particularly Catholics) and the general culture, especially regarding the morality of sexual behavior (e.g., Altemeyer, 2001; Finlay & Walther, 2003; Herek & McLemore, 2013). In this sense, it can be assumed that heteronormativity is positively correlated with the importance given to certain religions, such as Catholicism.

Finally, heterosexual cisgender men usually show higher levels of heteronormativity than heterosexual cisgender women, while SGM individuals show lower levels of heteronormativity compared with their heterosexual/cisgender counterparts (e.g., Herek, 2000; Herek & McLemore, 2013; Montgomery & Stewart, 2012). In fact, heterosexual/cisgender women, gay men, lesbian women, and transgender people are more aware of patriarchal, sexist, and heteronormative systems via experiencing delegitimization based on hierarchical differences and being more at risk of suffering different forms of physical, psychological, and verbal violence in their daily life (e.g., Montgomery & Stewart, 2012).

### Heteronormativity in the Italian Social Context

Several Italian studies have reported that Italian SGM individuals experience high levels of oppression and victimization due to their non-heterosexual orientation or gender nonconformity (e.g., Baiocco, Nardelli, Pezzuti, & Lingiardi, 2013; Bochicchìo et al., 2019; Lingiardi et al., 2016; Lingiardi, Baiocco, & Nardelli, 2012; Monaco, 2020; Prunas et al., 2015; Scandurra et al., 2018). Thus, these studies depict the Italian context as unsupportive for SGM individuals.

For instance, Italy only recognized same-sex civil unions in June 2016, following a very long and severe political debate that began in the late 1980s (Corbisiero & Monaco, 2017). The current law on civil unions gives same-sex couples certain rights and duties that are identical to those provided by heterosexual marriage without reaching, however, the full equality of rights. The most evident difference is represented by the difficulty of non-biological parents to adopt their partners (Carone, Baiocco, & Lingiardi, 2017; Carone, Lingiardi, Chirumbolo, & Baiocco, 2018). However, the Supreme Court of Appeals has ruled to the contrary and repeatedly given adoption rights to a number of same-sex couples. Nonetheless, the law remains unchanged, as Court decisions may orient the application of law based on constitutional principles, but the laws themselves must be reformed through the ordinary parliamentary legislative process.
Regarding the gender affirmation process of transgender people, the only existing law dates to 1982 and establishes that, after a psychological and/or psychiatric assessment attesting the presence of gender dysphoria, the judge will consider giving the approval for the affirming surgery and, only afterwards, the correction of identity records (Vitelli et al., 2017). Only recently, in July 2015, a sentence delivered by the Court of Cassation allowed some Italian transgender individuals to correct their identity records at the civil registry without having undergone surgery.

Finally, Italy completely lacks anti-discrimination legislation protecting SGM people from homophobic or transphobic hate crimes, preventing them from benefitting from the positive effects that such laws and policies may have on health and wellbeing (e.g., Hatzenbuehler, 2010; Perez-Brumer, Hatzenbuehler, Oldenburg, & Bockting, 2015; Rinaldi, 2013).

As reported by Lingiardi et al. (2016), the influence of the Catholic tradition, as well as the “don’t ask, don’t tell” attitude towards sexual minority individuals—in other words, Italian sexual minority individuals are better “tolerated” if they neither publicly express their sexual identity nor engage in political activities in the pursuit of equal rights—makes the general Italian population highly ambivalent towards non-heterosexual orientations. Similarly, Italian transgender people experience high rates of social stigma and oppression due to their gender nonconformity (Scandurra et al., 2018). Cumulatively, these data depict a strongly heteronormative country.

**The Heteronormative Attitudes and Beliefs Scale**

HABS originated within the sexual and gender prejudice framework (e.g., Herek, 2004; Hill, 2003), which analyzes origins and consequences of attitudes towards any non-heterosexual and non-cisgender person or community. As very few measures on sexual and gender prejudice existed at the time, Habarth (2015) developed the HABS with the aim to validate a sensitive scale capturing specific aspects of heteronormative attitudes and beliefs. Following Massey (2009), who highlighted that attitudes towards sexual orientations and gender identities are multidimensional and complex, Habarth (2015) developed a 16-item measure of heteronormativity that assessed essential and binary beliefs about sex and gender and normative behaviors.

The first construct (Essential Sex and Gender) locates its theoretical foundation in the concept of bigenderism (Gilbert, 2009), the belief that only two distinct genders perfectly aligning with two biological sexes exist. Complementarily, the second construct (Normative Behaviors) represents a consequence of the first dimension, as it captures “attitudes about expected heterosexual relational behaviors for individuals presumed to inhabit these binary and essential gender roles” (Habarth, 2015, p. 182). These two theoretical constructs underlie the two subscales comprising HABS.

Habarth (2015) showed that HABS demonstrated high internal consistency and validity, supporting the two-factor model. HABS has been significantly associated with previously identified personality traits (e.g., right-wing authoritarianism, openness to experience, homonegativity, and intolerance of ambiguity), male gender, and heterosexual orientation, confirming the research tradition (e.g., Herek, 2002; Parrott, Adams, & Zeichner, 2002) showing that heteronormativity finds its socio-cultural roots in the male and conservative domains.

In Italy, some measures grounded in the sexual and gender prejudice framework exist, such as the Modern Homophobia Scale (Lingiardi et al., 2016), the Homophobia Scale (Ciocca et al., 2015), the Sexual Prejudice in Sport Scale (Baiocco, Pistella, Salvati, Ioverno, & Lucidi, 2020), the Transgender Identity Survey (Scandurra, Amodeo, Bochicchio, Valerio, & Frost, 2017), or the Gender Minority Stress and Resilience Scale (Scandurra et al., 2020). However, specific measures on heteronormativity are lacking.

**The Current Study**

The current study assessed the psychometric characteristics of an Italian version of the HABS, with the aim of providing Italian researchers a measure assessing heteronormative attitudes and beliefs. Thus, the construct, criterion, and discriminant validities of the HABS were evaluated.

Specifically, with the aim of evaluating construct validity, we hypothesized that the 2 subscales of HABS would show good fit indices among Italian participants (Hypothesis 1).

To assess the criterion validity of the HABS, we hypothesized that heteronormativity would correlate positively with homophobia, authoritarianism, intolerance of ambiguity, and religiosity, and negatively with openness to experience (Hypothesis 2).

To evaluate discriminant validity, following Kazdin’s (2003) recommendations on the conceptual distinction between theoretical constructs, we hypothesized that all hypothesized correlations would be below .60 (Hypothesis 3).

Finally, to provide further evidence of the validity of the HABS, we hypothesized that SGM people would present lower heteronormativity than their heterosexual cisgender counterparts (Hypothesis 4) and that cisgender women would show lower heteronormativity than cisgender men (Hypothesis 5).
Methods

Procedures

Translation of the HABS The HABS was translated to Italian using the Back-Translation method (Behling & Law, 2000), according to the following five phases: (1) Items of the HABS were independently translated from English to Italian by three scholars expert in the field of gender studies (first, second, and fourth authors); (2) these scholars compared the three Italian versions and reached agreement to obtain a final unique Italian version; (3) this final Italian version of the HABS was translated into English by a bilingual scholar expert in gender studies; (4) the research group compared the new English version of the HABS with the original version, confirming that the two English versions were perfectly comparable; (5) finally, three external independent scholars expert in gender studies were recruited to complete an online survey aiming to assess the content comprehensibility of each HABS item. Specifically, each judge answered the question “How clear is the content of the following item?” The response options ranged from 1 (“not at all clear”) to 4 (“completely clear”). The average of all items was 3.60.

Survey Procedures This study used a cross-sectional online survey administered through Qualtrics. Participants were recruited through common social networks (e.g., Facebook) between February and March 2020. In the advertisement, we specified that participants could take the survey if they were at least 18 years old and understood and spoke the Italian language. We attempted to maintain a balance between cisgender heterosexual and SGM participants, asking representatives of the Italian LGBT community to share and disseminate the survey. Furthermore, we also tried to balance political orientation by searching for openly conservative and progressive groups. Outreach e-mails stated, “We are looking for people who are 18 years or older and who understand and speak Italian. Heterosexual, cisgender, gay, lesbian, bisexual, transgender, and non-binary people are welcome!”

The first page of the survey presented the researchers’ email address and affiliation, along with clear information about the survey. Specifically, participants were informed about the objectives of the survey, completion times, benefits, and risks, as well as the anonymity of the responses and the right to stop the survey at any point and for any reason. After reading all information, participants gave their consent to participate in the survey by clicking “I accept to take part in the survey.” The second page of the survey contained questions related to the inclusion criteria. If participants did not satisfy these criteria, the system did not allow them to continue answering the questionnaires.

The study was funded by the Free University of Bolzano/Bozen (project no. BW2077 – RTD call 2018), and the Internal Research Commission evaluated all ethical implications of the study and gave consent to proceed. Furthermore, the study was designed to respect all principles of the Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. Privacy was guaranteed based on the EU General Data Protection Regulation, according to which all collected data were protected by a secure gateway. Only the principal investigator (PI) had access to this gateway. The PI removed all IP addresses before sharing the dataset with other involved researchers.

Participants

Five hundred eighty-five participants opened the survey. Among them, 21 participants did not satisfy one or both inclusion criteria. Thus, the final sample included 564 participants, with ages ranging from 18 to 77 years. A total of 381 participants self-identified as cisgender heterosexual, while 183 individuals belonged to an SGM group. Specifically, among this latter group and regarding gender identity, the majority self-identified as cisgender, while 1 participant identified as transgender woman, 1 as transgender man, and 11 as non-binary. Thus, although we were aware of the limitations of evaluating SGM individuals as a single group, the low number of transgender and non-binary participants required us to create a unique variable “SGM” that encompassed all people who self-identified within a sexual or a gender minority group. Demographic characteristics of the sample are reported in Table 1.

Not surprisingly, participants differed in regard to gender identity and LGBT activism, with SGM participants more balanced in terms of gender and showing a higher percentage in activism. Furthermore, SGM participants seemed to live more in urban contexts and to consider religiosity as less important than their heterosexual cisgender counterparts.

Measures

Sociodemographic Characteristics Sociodemographic variables used in the current study included age, sex assigned at birth (male, female, and other with specification required), sexual orientation (heterosexual, gay, lesbian, bisexual, other with specification required), gender identity (man, woman, transgender man, transgender woman, non-binary, other with specification required), ethnicity (Caucasian vs. non-Caucasian), level of education (≤ high school vs. ≥ college or other), living environment (urban vs. non-urban), and knowledge of LGBT people (yes vs. no).

Heteronormativity Heteronormativity was assessed through the HABS (Habarth, 2015), a 16-item scale measuring heteronormative beliefs and attitudes on a 7-point Likert scale, from 1 (“strongly disagree”) to 7 (“strongly agree”).
HABS is composed of two subscales: (1) Essential Sex and Gender (ESG; e.g., “There are only two sexes: male and female”); and (2) Normative Behavior (NB; e.g., “The best way to raise a child is to have a mother and a father raise the child together”). The total score of each subscale is obtained by summing the scores of each item and dividing the general score by the number of items, with higher scores indicating greater heteronormativity.

Homonegativity Homonegativity was assessed through the revised version for Italian context of the Modern Homophobia Scale (MHS; Raja & Stokes, 1998; Italian adaption by Lingiardi et al., 2016). The MHS includes two scales, one measuring attitudes towards lesbian women (MHS/L) through 21 items and the other assessing attitudes towards gay men (MHS/G) through 22 items. Both scales are constituted by three subscales: (1) Deviance (D), which assesses the perception of homosexuality as deviant and pathological (e.g., “Female homosexuality is a psychological disease”; “Physicians and psychologists should strive to find a cure for male homosexuality”); (2) Personal discomfort (PD), which evaluates the degree of avoidance of lesbian women and gay men due to subjective discomfort (e.g., “If my best female friend was dating a woman, it would not upset me”; “I would not mind working with a gay man”); and (3) Institutional homophobia (IH), which measures the degree of opposition to the reduction of institutional discrimination towards lesbian women and gay men (e.g., “Employers should provide health care benefits to the partners of their lesbian employees”; “Gay men shouldn’t be allowed to join the military”). Options ranged from 1 (“do not agree”) to 5 (“strongly agree”), with higher scores reflecting greater homonegative attitudes. The alpha coefficients for the subscales were, respectively, .97, .93, and .77 for MHS/L and .96, .96, and .85 for MHS/G.

Authoritarianism Authoritarianism was assessed through the 10-item Italian version of the Right-Wing Authoritarianism scale (RWA; Altemeyer, 1996; Italian adaption by Roccato & Russo, 2015). RWA is defined as a personality trait consisting of tendencies to submit to authorities perceived as established and legitimate, to adhere to societal norms, and to

| Demographics | Heterosexual/cisgender | SGM | Total | \( p \) |
|--------------|------------------------|-----|-------|-------|
| \( N = 381 \) | \( n \) (%) or \( M \pm SD \) | \( n \) (%) or \( M \pm SD \) | \( n \) (%) or \( M \pm SD \) |       |
| Age | 34.7 ± 11.06 | 34.5 ± 11.30 | 34.66 ± 11.13 | .840 |
| Gender |  |  |  | < .001 |
| Male | 83 (21.8) | 82 (44.8) | 165 (29.3) |  |
| Female | 298 (78.2) | 88 (48.1) | 386 (68.4) |  |
| Transgender/non-binary | - | 13 (7.1) | 13 (2.3) | .963 |
| Ethnicity |  |  |  | .054 |
| Caucasian | 377 (99) | 181 (98.9) | 558 (98.9) |  |
| Non-Caucasian | 4 (1) | 2 (1.1) | 6 (1.1) |  |
| Education |  |  |  | .049 |
| ≤ High school | 60 (15.7) | 41 (22.4) | 101 (17.9) |  |
| ≥ College or other | 321 (84.3) | 142 (77.6) | 463 (82.1) |  |
| Living environment |  |  |  | .225 |
| Urban | 232 (60.9) | 127 (69.4) | 359 (63.7) |  |
| Non-urban | 149 (39.1) | 56 (30.6) | 205 (36.3) |  |
| LGBT people knowledge |  |  |  | .033 |
| Yes | 374 (98.2) | 183 (100) | 556 (98.6) |  |
| No | 7 (1.8) | - | 8 (1.4) |  |
| Religiosity |  |  |  |  |
| Not at all important | 207 (54.3) | 114 (62.3) | 321 (56.9) |  |
| Not very important | 64 (16.8) | 35 (19.1) | 99 (17.6) |  |
| Important | 88 (23.1) | 23 (12.6) | 111 (19.7) |  |
| Very important | 22 (5.8) | 11 (6) | 33 (5.9) |  |

Group differences in age were tested through the Student’s \( t \) test. Group differences in all other variables were tested through the \( \chi^2 \) test.

SGM, sexual and gender minority; \( M \), mean; \( SD \), standard deviation
be hostile towards people who do not adhere to them. An example item is “The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.” The RWA scale includes two items referring to sexual orientation. With the aim of avoiding overlap with the MHS, these items were not included in the RWA score, as suggested by Habarth (2015). Response options ranged from 1 (“strongly disagree”) to 4 (“strongly agree”), with higher scores indicating greater RWA. The alpha coefficient was .73.

Openness to Experience Openness to experience was assessed through the 10-item subscale Openness to Experience (OE) of the HEXACO-60 measure (Ashton & Lee, 2009; Italian adaptation by Di Fabio & Saklofske, 2017). OE is defined as a personality trait leading to curiosity towards different domains of knowledge and interest in unusual ideas or people. An example item is “I like people who have unconventional views.” Response options ranged from 1 (“strongly disagree”) to 5 (“strongly agree”), with higher scores reflecting higher OE. The alpha coefficient was .72.

Intolerance of Ambiguity Intolerance of ambiguity, i.e., the tendency to view ambiguous situations as potential sources of threat, was assessed through the Tolerance-Intolerance of Ambiguity scale (TIA; Budner, 1962; Italian adaption by Lauriola, Foschi, Mosca, & Weller, 2016), a 16-item scale measuring TIA on a 7-point Likert scale, from 1 (“strongly disagree”) to 7 (“strongly agree”). The scale is constituted by three subscales, each corresponding to different types of ambiguous situations characterized by (1) Novelty (e.g., “I like parties where I know most of the people more than ones where all or most of the people are complete strangers”; α = .71); (2) Complexity (e.g., “In the long run it is possible to get more done by tackling small, simple problems rather than large and complicated ones”; α = .72); and (3) Insolubility (e.g., “An expert who doesn’t come up with a definite answer probably doesn’t know too much”; α = .71). In the manner of Habarth (2015), we used the total score of the TIA, with higher scores indicating a greater intolerance for ambiguity. The alpha coefficient for the total scale was .72.

Religiosity Based on previous Italian studies (Baiocco et al., 2013; Lingiardi et al., 2016), religiosity was assessed through a single-item question (i.e., “How involved do you feel in religion?”), with response options ranging from 1 (“Not at all important”) to 4 (“Very important”). Values of this dimension are reported at the end of Table 1. Participants who answered that religiosity was important to some degree were also asked what religion they followed or believed, which was unanimously reported as the Catholic religion.

Statistical Analyses

To evaluate the construct validity of the 2-factor model structure underlying the HABS scale, the traditional explanatory modeling approach was used (Dolce, Marocco, Maldonato, & Sperandeo, 2020). Confirmatory factor analysis was performed using the robust weighted least square (WLSMV) estimator with the lavaan R package (R Core Team, 2018; Rosseel, 2012), as variable distributions were not symmetrical. Modification indices were used to improve the model fit without removing any variables, only including additional parameters that allowed the residual variance of individual items to freely correlate. We assessed the model fit by assessing the estimated loadings, using the following indices: chi square/degrees of freedom ($\chi^2/df$), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and Tucker-Lewis index (TLI). Values of $\chi^2/df < 2$, RMSEA and SRMR < .08, and TLI and CFI > .95 are indicative of a good fit with the data (Kline, 2015). The internal consistency of each HABS subscale was calculated using Cronbach’s alpha.

Furthermore, the criterion and discriminant validities of the HABS were evaluated through a series of correlations between HABS subscales and the main constructs of the current study (i.e., homonegativity, authoritarianism, intolerance of ambiguity, religiosity, and openness to experience) using Pearson’s correlation coefficient.

Differences between heterosexual/cisgender individuals and SGM people with respect to heteronormativity were calculated with the Mann-Whitney U test. Similarly, following Habarth (2015) and with the aim of exploring other potential differences among the sample participants, we also calculated differences based on a binary view of gender identity (men vs. women) through the Mann-Whitney U test, as heteronormativity is strictly linked to a gender binary logic. In these last analyses, we did not include the 13 participants who self-identified as transgender and non-binary, as we were interested in analyzing gender binary differences.

Results

Construct Validity: Confirmatory Factor Analysis

The original 2-factor model proposed by Habarth (2015) fitted the data obtained from the Italian sample, confirming our first hypothesis. Specifically, the following indices were found: $\chi^2/df = 2.6$, $CFI = .95$, $RMSEA = .05$ ($p$ value RMSEA $\leq .05 = .245$, SRMR = .071, and TLI = .93).

However, despite appropriate fit to the data, 4 items (i.e., 1, 8, 13, and 14) showed a loading below .40 (.37, .37, .16, and .34, respectively), which could be explained if participants showed a tendency to answer on the extreme levels of the
Likert scale and reducing the variability of the items. Indeed, most participants answered “mostly disagree” on item 1 (50.7%; “Masculinity and femininity are determined by biological factors, such as genes and hormones, before birth”) and “mostly agree” on item 8 (64.9%; “Gender is something we learn from society”), item 13 (65.4%; “In healthy intimate relationships, women may sometimes take on stereotypical ‘male’ roles, and men may sometimes take on stereotypical ‘female’ roles”), and item 14 (81.7%; “Women and men need not fall into stereotypical gender roles when in an intimate relationship”). For this reason, we reassessed the model upon excluding these items, resulting in an improved fit to the data, as follows: $\chi^2/df=2$, CFI = .98, RMSEA = .04 ($p$ value RMSEA ≤ .05 = .840), SRMR = .067, TLI = .97. Thus, in the following analyses, the subscales were used after excluding items with loadings < .40.

The internal consistency reliability assessed through Cronbach’s alpha was adequate at .81 for Essential Sex and Gender and .71 for Normative Behavior. Full model statistics (i.e., factor loadings, standardized factor loadings, Cronbach’s alphas, means, and standard deviations) are reported in Table 2.

### Criterion and Discriminant Validity of the HABS

Correlational analyses between the main construct of this paper (i.e., heteronormativity, homonegativity, authoritarianism, intolerance of ambiguity, religiosity, and openness to experience) are reported in Table 3.

Regarding criterion validity of the HABS, all the homonegativity scales for lesbian women and gay men correlated positively with both HABS subscales. Similarly, both HABS subscales correlated positively with authoritarianism, intolerance of ambiguity, and religiosity, and negatively with openness to experience. These results confirmed the second hypothesis of the current study.

Regarding the discriminant validity of the HABS, the third hypothesis was also confirmed, as correlations among the main constructs of the current study were below .60. Indeed, the effect sizes ranged from .11 to .38.

### Differences Among Groups Based on Sexual Orientation and Gender Identity

Regarding the fourth hypothesis, both HABS subscale scores were higher in heterosexual cisgender (HC) ($M_{\text{ESG}} = 2.43$; $M_{\text{NB}} = 2.01$) than in SMG ($M_{\text{ESG}} = 1.91$; $M_{\text{NB}} = 1.56$) participants. A Mann-Whitney test revealed that these differences were statistically significant, $U_{\text{ESG}} (N_{\text{HC}} = 381, N_{\text{SGM}} = 183) = 25.962.5, z = -4.09, p < .001$ and $U_{\text{NB}} (N_{\text{HC}} = 381, N_{\text{SGM}} = 183) = 23.935.5, z = -6.08, p < .001$.

Similarly, regarding the fifth hypothesis, both HABS subscales showed higher scores in cisgender men ($M_{\text{ESG}} = 2.53$; $M_{\text{NB}} = 2.05$) compared with cisgender women ($M_{\text{ESG}} = 2.19$; $M_{\text{NB}} = 1.82$). A Mann-Whitney test indicated that these differences were statistically significant, $U_{\text{ESG}} (N_{\text{men}} = 165, N_{\text{women}} = 386) = 27.761.5, z = -2.40, p < .05$ and $U_{\text{NB}} (N_{\text{men}} = 165, N_{\text{women}} = 386) = 28.295.5, z = -2.09, p < .05$.

Thus, the fourth and fifth hypotheses were confirmed, providing further evidence of HABS validity.

### Table 2 Confirmatory factor analysis of the Italian Version of the Heteronormative Attitudes and Beliefs Scale

| Scale and item | Alpha | Range | Total score $M$ (SD) | Factor loadings (SE) | Standardized loadings |
|---------------|-------|-------|----------------------|---------------------|----------------------|
| Essential Sex and Gender | .81   | 6–42  | 13.58 (7.43)         | 1.00 (.60)          | .60                  |
| Item 2        |       |       |                      | 1.01 (.06)          | .69                  |
| Item 3        |       |       |                      | .66 (.07)           | .63                  |
| Item 4        |       |       |                      | .93 (.09)           | .55                  |
| Item 5        |       |       |                      | .74 (.09)           | .63                  |
| Item 6        |       |       |                      | .94 (.09)           | .66                  |
| Item 7        |       |       |                      | .69 (.08)           | .60                  |
| Item 10       |       |       |                      | .79 (.13)           | .44                  |
| Item 11       |       |       |                      | 1.44 (.20)          | .64                  |
| Item 12       |       |       |                      | .69 (.12)           | .44                  |
| Item 16       |       |       |                      | .93 (.11)           | .55                  |

$M$, mean; $SD$, standard deviation; $SE$, standard error
Discussion

The current study aimed to assess the psychometric characteristics of the HABS in an Italian sample of heterosexual cisgender and SGM individuals. The findings showed an appropriate fit to the Italian data, confirming the original two-factor solution, although 4 items showed a factor loading < .40. Additionally, the results showed that the HABS has a good criterion and discriminant validity in the Italian sample. To the best of our knowledge, this is the first available measure for comprehensively assessing heteronormative attitudes and beliefs in an Italian context.

Regarding the construct validity, our findings indicated that the Italian version of the HABS fits better to our Italian sample after excluding items 1, 8, 13, and 14. For items 1 and 8, it is possible that their formulation was too explicit, and it may have been more effective to indirectly infer the concept measured. For example, it is conceivable that, instead of “Masculinity and femininity are determined by biological factors, such as genes and hormones, before birth,” a more effective way to capture the same concept without being so explicit would have been “Masculinity and femininity have bodily roots” or something similar. Likewise, it is also possible that such items have been formulated in an overly scientific fashion, while an item such as “I agree with those who claim that masculinity and femininity are determined by biological factors, such as genes and hormones, before birth” would have captured the same “scientific” concept but in terms of personal opinions and beliefs. Furthermore, a possible explanation for the low loadings of items 13 and 14, which assess gender roles in intimate relationships, is the role of social desirability. Indeed, despite the presence of heteronormativity, it would be difficult to admit taking on stereotypical roles in intimate relationships in a contemporary society that tends to view stereotypes as referring to other people. Furthermore, being consciously against certain stereotypical gender roles within a heterosexual relationship does not automatically mean that people are not deeply heteronormative, as it deals with a dimension that it is now often perceived as old-fashioned. For these reasons, we would suggest that Italian researchers using the HABS should include such items but exclude them if they show low loadings and use a 12-item measure instead. In the Appendix, all items were reported.

Regarding other types of validity, the results of the current study showed significant associations of heteronormativity with homonegative attitudes, religiosity, and personality traits (i.e., authoritarianism, intolerance of ambiguity, and openness to experience). The association between heteronormativity and homonegativity may be explained by the evidence that heteronormative attitudes are rooted in an ideological belief leading people to perceive romantic relationships between cisgender men and women as the only legitimate relationship form, and to perceive non-heterosexual orientations and gender nonconformity as positioned at the margins of the presumed normality (e.g., Morrison & Morrison, 2002; Savin-Williams, Pardo, Vrangalova, Mitchell, & Cohen, 2010). In Italy, homonegative attitudes towards SGM people are widespread and hidden by the “don’t ask don’t tell” attitude towards homosexuality; this leads people to tolerate SGM

Table 3 Correlations between heteronormativity, homonegativity, authoritarianism, intolerance of ambiguity, religiosity, and openness to experience

| Scales | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | M | SD |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| ESG    | – | .52***| – | – | – | – | – | – | – | – | – | – | 2.26 | 1.24 |
| NB     | .52***| – | – | – | – | – | – | – | – | – | – | – | 1.87 | .85 |
| MHS/G-D | .12**| .12*| .94***| – | – | – | – | – | – | – | – | – | 2.09 | 1.07 |
| MHS/G-PD | .12**| .12*| .94***| – | – | – | – | – | – | – | – | – | 2.09 | 1.07 |
| MHS/G-IH | .16***| .17***| .90***| .92***| – | – | – | – | – | – | – | – | 2.19 | 1.01 |
| MHS/L-D | .15***| .13**| .90***| .89***| .88***| – | – | – | – | – | – | – | 1.79 | 1.32 |
| MHS/L-PD | .15***| .15**| .86***| .86***| .85***| .94***| – | – | – | – | – | – | 1.88 | 1.28 |
| MHS/L-IH | .18***| .21***| .84***| .86***| .90***| .92***| .89***| – | – | – | – | – | 2.17 | .95 |
| RWA    | .26***| .38***| .02| .03| .03| .06| .06| .06| – | – | – | – | 1.15 | .33 |
| TIA    | .30***| .31***| .04| .03| .04| .01| .02| .02| .24***| – | – | – | 3.44 | .55 |
| Religiosity | .26***| .31***| .05| .05| .02| .03| .02| .06| .17***| .17***| – | – | 1.74 | .97 |
| OE     | – | .30***| – | .34***| – | .05| .06| .10*| .06| .09*| .10*| – | 3.97 | .53 |

*p < .05; **p < .01; ***p < .001
ESG, Essential Sex and Gender; NB, Normative Behavior; MHS/G – D, Modern Homophobia Scale/Gay- Deviance; MHS/G – PD, Modern Homophobia Scale/Gay- Personal Discomfort; MHS/G – IH, Modern Homophobia Scale/Gay- Institutional Homophobia; MHS/L – D, Modern Homophobia Scale/Lesbian- Deviance; MHS/L – PD, Modern Homophobia Scale/ Lesbian - Personal Discomfort; MHS/L – IH, Modern Homophobia Scale/ Lesbian - Institutional Homophobia; RWA, authoritarianism; TIA, tolerance-intolerance of ambiguity; OE, openness to experience; M, mean; SD, standard deviation.
individuals provided that they do not publicly display their sexual or gender identity or engage in public activities, especially those aimed at obtaining equal rights, such as the right to adopt children (e.g., Baiocco, Argalia, & Laghi, 2014; Lingiardi et al., 2012). The association between heteronormativity and religiosity, instead, may be explained by the ideological values and social conservatism entailed by some religions (e.g., Herek, 2004; Herek & McLemore, 2013), such as the Catholicism that is most practiced and taught in Italy, which is traditionally considered unsupportive towards SGM individuals (Worthen, Lingiardi, & Caristo, 2017). Thus, both homogeneity and religiosity seem to characterize the general Italian socio-cultural context, being intertwined with each other (Lavizzari & Prearo, 2019; Lingiardi et al., 2016). One possible explanation underlying such a relationship, as well as the associations of heteronormativity with homogeneity and religiosity in Italy, is that the Vatican State, despite being an independent State, is situated in Italy and thus cannot fail to influence the socio-cultural climate; moreover, the Vatican State often interferes in Italian public affairs, especially those related to family life and sexualities (Garelli, 2007), thus reinforcing a negative view of SGM individuals and indirectly promoting sexual and gender prejudice (Worthen et al., 2017). Furthermore, as suggested by Lasio, Congiargiu, De Simone, and Serri (2019), traditional values promoted by the Catholic Church find fertile ground in the Italian social context, in which Catholic ethical values remain dominant and accepted by most of the population and shared by both center-right and center-left politicians.

Our results are also in concordance with previous research highlighting strong relationships of heteronormativity with certain personality traits. These associations may be explained through the evidence that heteronormative attitudes lead people to conform to the traditional sex and gender role system and consequently to act in certain way, such as (1) to recall an external source of morality and authority (i.e., authoritarianism); (2) to perceive ambiguous situations as sources of threat (i.e., intolerance of ambiguity); and (3) to be distressed towards unusual ideas or unknown domains of knowledge (i.e., openness to experience) (Habarth, 2015).

Regarding the first point, authoritarianism is defined as tendency to adhere to traditional and moral values and norms, legitimizing authorities and devaluing individuals who violate such values and norms. This means that authoritarian people tend to perceive SGM individuals as those who violate these norms, as they do not adhere to the traditional system of different-sex relationships and gender roles, thus perceiving them as outgroups that threaten ingroup norms (e.g., Cramer, Miller, Amacker, & Burks, 2013; Whitley & ÁEgisdóttir, 2000).

Potential associations of intolerance of ambiguity with RWA, prejudice, discrimination, and aggression towards minorities (in this case, based on ethnicity) have been shown since first theorizations of such construct (Frenkel-Brunswik, 1949). Indeed, intolerance of ambiguity is a personality trait encompassing, among other things, the need for categorization and certainty and a binary way of thinking associated with a black and white view of life (Bochner, 1965), and this affects how people perceive others with whom they come in contact. Considering that non-heterosexual and gender-diverse individuals are usually perceived as non-conforming to societal expectations and falling outside the binary view of sex and gender role system, the relationship between heteronormativity and intolerance of ambiguity becomes evident: SGM identities are “unexpected” subjectivities, especially in unsupportive socio-cultural contexts, such as the Italian one.

Similarly, openness to experience, defined as the degree to which people seek out new experiences, has well-established relationships with RWA (Akrami & Ekehammar, 2006; Duriez & Soenens, 2006) and attitudes towards gay men and lesbian women (Butler, 2000). Indeed, such a personality trait leads individuals to feel distress towards unusual ideas or unknown domains of knowledge and SGM individuals, as “unexpected” identities may represent unfamiliar realities. This may be particularly true in the Italian context, where the “don’t ask don’t tell” logic (Lingiardi et al., 2016) prevails, encouraging most SGM individuals to not make themselves visible. It is likely that the invisibility of SGM individuals leads many heterosexual cisgender people to perceive them as “unfamiliar” and “unusual.”

Finally, as hypothesized, our results indicate that male gender and heterosexual cisgender individuals showed higher levels of heteronormativity compared with female gender and SGM individuals. This finding is in line with a well-established research tradition highlighting the central role of male hegemony, as well as conformity to sexual roles and behaviors, in producing heteronormativity (e.g., Gilbert, 2009; Herek, 2002; Jackson, 2006; Parrott et al., 2002). However, some contemporary authors argue that homonegativity and heteronormativity are in significant decline, and that cisgender heterosexual men are becoming increasingly inclusive towards SGM individuals (e.g., Adams, 2011; Anderson, Magrath, & Bullingham, 2016; Campbell et al., 2011; Cashmore & Cleland, 2012; McCormack, 2011). For instance, in sociological research, new terms have been coined to indicate these new masculinities, such as inclusive masculinities (Anderson, 2009) or hybrid masculinities (e.g., Bridges, 2014; Bridges & Pascoe, 2014). Nonetheless, a recent Italian work by Scandurra, Braucci, Bochicchio, Valerio, and Amodeo (2019) aimed at exploring these theoretical concepts in a typically masculine sport (i.e., soccer) found that unlike other EU (i.e., UK) or non-EU (i.e., USA) contexts, a strong men’s dominance over women as well as a high
stigmatization of SGM individuals seems to persist in Italy, despite some inclusive openings. Thus, Scandurra et al. (2019) have pointed out that some forms of masculinity are still considered acceptable in Italy while others are denigrated, confirming the presence of a heteronormative socio-cultural context.

The results obtained in the current study should be understood in light of several important limitations. First, the non-probabilistic nature of a sample limits the external validity of its findings. However, we decided to spread the survey on social networks rather than in specific Italian populations (e.g., university students) in order to reduce the effects of such limit. Nonetheless, our sample is mostly constituted by cisgender women and highly educated participants. Therefore, future studies should attempt to recruit probabilistic and more heterogeneous samples. Second, although demonstrated in previous Italian studies (Baiocco et al., 2013; Lingiardi et al., 2016), religiosity dimension was assessed through only one item, and this was only indicative of personal beliefs. Future studies should consider assessing this dimension with more reliable and complex measures. Third, this study used a cross-sectional design that prevented us from performing predictive statistical analyses to explore potential causal relationships between variables. Fourth, due to the low number of transgender participants, we were forced to group together sexual and gender minorities in the analyses, preventing an exploration of potential differences between these groups. Future studies should attempt to expand the SGM sample and analyze differences based on diverse sexual orientations and gender identities/expressions.

Notwithstanding the aforementioned limitations, Italian researchers may now benefit from a measure assessing heteronormativity in their research practices, expanding Italian research on this important topic. In particular, our work helps show that, in Italy as elsewhere, the logic behind the laws and social policies necessary for the recognition of formal equality among citizens is based on a traditional static view of sex and gender roles, which appears incapable of facilitating social changes. Indeed, Italian SGM people are deprived of certain fundamental rights (i.e., adoption for same-sex couples or the right to self-determination for transgender people), and this may adversely affect their mental health, self-representation, self-esteem, or parenting quality (e.g., Carone et al., 2018; Hatzenbuehler, 2014; Perez-Brumer et al., 2015). As heteronormativity is a societal ideological system produced and perpetuated by social institutions and practices, we believe that the existence of heteronormative attitudes and beliefs should be primarily viewed as a social consequence of legislative deficits in relation to sexual and gender equality. To this end, it is conceivable that heteronormative attitudes and beliefs would decrease with increasing visibility of the Italian SGM population and their needs, as well as increased alignment of their rights with those benefitting the majority; in this scenario, Italian policymakers may play a central role by focusing on sexual and gender diversity needs.

Various Italian social actors can be involved in redefining the society’s conventional heteronormative rules, such as LGBT associations, decision makers, and street-level professionals.

For instance, since the 1990s, LGBT associations have been making efforts to become members of advisory boards, councils, and commissions and have established partnerships with some Italian mayors (Corbisiero & Monaco, 2017). Especially in large cities (such as Bologna, Milan, Naples, Rome, and Turin), LGBT associations and mayors are collaborating to enhance social justice and promote equality among citizens at different levels, ensuring that the LGBT community has a “right to the city” (Lefebvre, 1967). However, given that Italian LGBT representatives are underrepresented at the national level (e.g., in Parliament), there remain significant differences at local and regional levels based on the different degrees of effectiveness of local groups’ actions (e.g., Corbisiero & Monaco, 2020; Prearo, 2015). At the same time, decision makers responsible for designing policies and initiatives at the institutional level are key actors in challenging heteronormative assumptions and making policies more inclusive. Last but not least, different street-level workers and professionals have crucial roles in shaping the encounters between people and societal institutions. These individuals are responsible for implementing policies at the street level, and in many contexts they hold discretionary power that is used in the context of their own attitudes and beliefs (Lipsky, 2010). As the European Union Agency for Fundamental Rights (2015) has pointed out, pathologizing views and a knowledge gap among professional frontline workers in education, healthcare, and law enforcement heavily contribute to discrimination against SGM people in public institutions. In this sense, assessing heteronormative attitudes and beliefs is a first important step to raise awareness and challenge the status quo via different social actors who can contribute to make practices, and eventually societal institutions, more inclusive.

Conclusions

This study allows Italian researchers to benefit from the use of the HABS in their practice. HABS may be used to evaluate heteronormative attitudes and beliefs among specific segments of the Italian population, such as health professionals, social workers, and politicians, as well as the general population. Assessing such fundamental dimensions may allow Italian researchers to suggest the implementation of specific
social policies, providing national authorities and policymakers with data on the levels of heteronormativity and its associations with SGM health and social stigma. Indeed, we believe that calling attention to heteronormativity as a hierarchical and structured societal system oppressing SGM individuals may help promote change in social contexts and contribute to an inclusive society.

Acknowledgements Open access funding provided by Università degli Studi di Napoli Federico II within the CRUI-CARE Agreement.

Contribution Statement Conceptualization: Cristiano Scandurra, Salvatore Monaco, and Urban Nothdurfter; methodology: Cristiano Scandurra and Pasquale Dolce; formal analysis and investigation: Cristiano Scandurra and Pasquale Dolce; writing - original draft preparation: Cristiano Scandurra; writing - review and editing: Salvatore Monaco and Urban Nothdurfter; funding acquisition: Urban Nothdurfter; resources: Salvatore Monaco and Urban Nothdurfter; supervision: Urban Nothdurfter. All authors read and approved the final manuscript.

Funding Information The project was funded by the Free University of Bolzano/Bozen (project no BW2077 – RTD call 2018).

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethics Approval Approval was obtained from the Internal Research Commission of the Faculty of Education of the Free University of Bolzano/Bozen (ratified by decision of the Faculty Council n° 118 from 15/06/2018). The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

Informed Consent Participants were informed about the objectives of the survey, completion times, benefits, and risks, as well as about the anonymity of the responses and the right to stop the survey in any point and for any reasons. Furthermore, participants were informed that the data collected would have been published in scientific journals in aggregate form.

After reading all information, participants had to give their consent to participate in the online survey by clicking on the bottom “I accept to take part in the survey.”

Appendix. Italian version of the Heteronormative Attitudes and Beliefs Scale

Istruzioni

Leggi attentamente le seguenti affermazioni e segna il numero che meglio rappresenta il tuo grado di accordo da 1 = “fortemente in disaccordo” a 7 = “fortemente d’accordo”.

1. Mascolinità e femminilità sono determinate da fattori biologici che sono precedenti alla nascita, tra cui i geni e gli ormoni.
2. Esistono solo due sessi: maschio e femmina.
3. Tutte le persone sono o maschi o femmine.
4. Genere e sesso sono la stessa cosa.
5. Il sesso è complesso; infatti, potrebbero esserci anche più di due sessi. (R)
6. Il genere è una questione complicata e non sempre corrisponde al sesso biologico. (R)
7. Chi dice che ci sono solo due generi legittimi si sbaglia. (R)
8. Il genere è qualcosa che impariamo dalla società. (R)
9. Nelle relazioni intime, donne e uomini assumono ruoli in base al genere per una ragione; e questo è davvero il modo migliore per avere una relazione di successo.
10. Nelle relazioni intime le persone dovrebbero comportarsi solo in base a ciò che tradizionalmente ci si aspetta dal loro genere.
11. Va assolutamente bene avere rapporti intimi con persone dello stesso sesso. (R)
12. Il modo migliore per crescere un figlio è avere una madre e un padre che lo allevino insieme.
13. Nelle relazioni intime sante, le donne possono talvolta assumere ruoli “maschili” stereotipati, così come gli uomini ruoli “femminili” stereotipati. (R)
14. Per le donne e per gli uomini non è necessario cadere in ruoli di genere stereotipati quando si trovano in una relazione intima. (R)
15. Le persone dovrebbero fare coppia con chiunque scelgano, indipendentemente dal sesso o dal genere. (R)
16. Nelle relazioni ci sono modi specifici in cui gli uomini dovrebbero comportarsi e modi specifici in cui le donne dovrebbero comportarsi.
Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium, or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

References

Adams, A. (2011). “Josh wears pink cleats”: Inclusive masculinity on the soccer field. *Journal of Homosexuality, 58*(5), 579–596. https://doi.org/10.1080/00918369.2011.563654.

Akrami, N., & Echhammar, B. (2006). Right-wing authoritarianism and social dominance orientation: Their roots in big-five personality factors and facets. *Journal of Individual Differences, 27*, 117–126. https://doi.org/10.1027/1614-0001.27.3.117.

Alden, H. L., & Parker, K. F. (2005). Gender role ideology, homophobia and hate crime: Linking attitudes to macro-level anti-gay and lesbian hate crimes. *Deviant Behavior, 26*(4), 321–343. https://doi.org/10.1080/10611940509316114.

Allen, S. H., & Mendez, S. N. (2018). Hegemonic heteronormativity: Toward a new era of queer family theory. *Journal of Family Theory and Review, 10*(1), 70–86. https://doi.org/10.1111/jftr.12241.

Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

Altemeyer, B. (2001). Changes in attitudes toward homosexuals. *Journal of Homosexuality, 42*, 63–75. https://doi.org/10.1300/j082v42n02_04.

Anderson, E. (2009). Inclusive masculinity: The changing nature of masculinities. New York, NY: Routledge.

Anderson, E., Magrath, R., & Bullingham, R. (2016). *Out in sport: The experiences of openly gay and lesbian athletes in competitive sport*. New York, NY: Routledge.

Ansara, Y. G., & Berger, I. (2016). Cisgenderism. In N. Naples, R. C. (Eds.), *Organizations: Approaches to gender-nonconforming children in preschool and primary school: Clinical and educational implications*. *Journal of Gay and Lesbian Mental Health, 23*(2), 117–144. https://doi.org/10.1080/19359705.2019.1565791.

Bochner, S. (1965). Defining intolerance of ambiguity. *The Psychological Record, 15*, 393–400. https://doi.org/10.1007/BF03393605.

Bridges, T. (2014). A very “gay” straight? Hybrid masculinities, sexual aesthetics, and the changing relationship between masculinity and homophobia. *Gender & Society, 28*(1), 58–82. https://doi.org/10.1177/0891243213503901.

Bridges, T., & Pascoe, C. J. (2014). Hybrid masculinities: New directions in the sociology of men and masculinities. *Sociology Compass, 8*(3), 246–258. https://doi.org/10.1111/soc4.12134.

Budner, S. (1962). Intolerance of ambiguity as a personality variable. *Journal of Personality, 30*(1), 29–50. https://doi.org/10.1111/j.1467-6494.1962.tb02303.x.

Burn, S. M., Kadlec, K., & Rorer, R. (2005). Effects of subtle heterosexism on gays, lesbians, and bisexuals. *Journal of Homosexuality, 49*(2), 23–38. https://doi.org/10.1300/J082v49n02_02.

Butler, J. C. (2000). Personality and emotional correlates of right-wing authoritarianism. *Social Behavior and Personality, 28*(1), 1–14. https://doi.org/10.2224/sbp.2000.28.1.1.

Campbell, J., Cohren, D., Rogers, R., Kistler, L., Osowski, A., Greeneauer, N., & End, C. (2011). Sports fans’ impressions of gay male athletes. *Journal of Homosexuality, 58*(5), 597–607. https://doi.org/10.1080/00918369.2011.563658.

Carone, N., Baiocco, R., & Lingiardi, V. (2017). Italian gay fathers’ experiences of transnational surrogacy and their relationship with the surrogate pre- and post-birth. *Reproductive Biomedicine Online, 34*(2), 181–190. https://doi.org/10.1016/j.rbmo.2016.10.010.

Carone, N., Lingiardi, V., Chiambocolo, A., & Baiocco, R. (2018). Italian gay father families formed by surrogacy: Parenting, stigmatization, and children’s psychological adjustment. *Developmental Psychology, 54*(10), 1904–1916. https://doi.org/10.1037/dev0000571.

Cashmore, E., & Cleland, J. (2012). Fans, homophobia and masculinities in association soccer: Evidence of a more inclusive environment. *British Journal of Sociology of Sport, 63*(2), 370–387. https://doi.org/10.1111/j.1468-4446.2012.01414.x.

Ciocca, G., Capuano, N., Tuziak, B., Mollaioili, D., Limoncin, E., Valsecchi, D., Carosa, E., Gravina, G. L., Gianfrilli, D., Lenzi, A., & Jannini, E. A. (2015). Italian validation of homophobia scale (HS). *Sexual Medicine, 3*(3), 213–218. https://doi.org/10.1002/sm2.68.

Connell, R., & Messerschmidt, J. (2005). Hegemonic masculinity: Rethinking the concept. *Gender and Society, 19*(6), 829–859. https://doi.org/10.1177/0891243205278639.

Corbissiero, F., & Monaco, S. (2017). *Città Arcobaleno. Una mappa della vita omosessuale in Italia* [rainbow cities. A map of the gay life in Italy]. Rome, IT: Donzelli.

Corbissiero, F., & Monaco, S. (2020). The right to a rainbow city: The Italian homosexual social movements. *Society Register, 1*(18), 1–18. https://doi.org/10.14746/1sr.2020.04.03.

Cramer, R. J., Miller, A. K., Amacker, A. M., & Burks, A. C. (2013). Openness, right-wing authoritarianism, and antigay prejudice in college students: A mediation model. *Journal of Counseling Psychology, 60*(1), 64–71. https://doi.org/10.1037/a0031090.

Cullen, J. M., Wright, L. W., & Alessandri, M. (2002). The personality variable openness to experience as it relates to homophobia. *Journal
Liccariello, O., Castiglione, C., & Rampello, A. (2011). Intergroup contact, value system and the representation of homosexuality. *Procedia - Social and Behavioral Sciences, 30*, 1467–1471. https://doi.org/10.1016/j.sbspro.2011.10.284.

Lingiardi, V., Baiocco, R., & Nardelli, N. (2012). Measure of internalized sexual stigma for lesbians and gay men: A new scale. *Journal of Homosexuality, 59*(8), 1191–1210. https://doi.org/10.1080/00918369.2012.712850.

Lingiardi, V., Nardelli, N., Iovino, S., Falanga, S., Di Chiaccio, C., Tanzilli, A., & Baiocco, R. (2016). Homonegativity in Italy: Cultural issues, personality characteristics, and demographic correlates with negative attitudes toward lesbians and gay men. *Sexuality Research & Social Policy, 13*(2), 95–108. https://doi.org/10.1007/s13178-015-0197-6.

Lipsky, M. (2010) [1980]. Street-level bureaucracy: Dilemmas of the individual in public services (30th anniversary expanded ed.). London, UK: Russell Sage.

Lloyd, M. (2013). Heteronormativity and/as violence: The “sexing” of Gwen Araujo. *Hypatia. A Journal of Feminist Philosophy, 24*(4), 818–834. https://doi.org/10.1111/hypa.12015.

Martino, W. (2000). Policing masculinities: Investigating the role of homophobia and homonormativity in the lives of adolescent school boys. *The Journal of Men’s Studies, 8*(2), 213–236. https://doi.org/10.3149/jms.0802.213.

Massey, S. G. (2009). Polymorphous prejudice: Liberating the measurement of heterosexuals’ attitudes toward lesbians and gay men. *Journal of Homosexuality, 56*(2), 147–172. https://doi.org/10.1080/00918369.2009.1003663.

McCormack, M. (2011). The declining significance of homophobia for male students in three sixth forms in the south of England. *British Educational Research Journal, 37*(2), 337–353. https://doi.org/10.1080/01411921003653357.

McPhail, B. A. (2004). Questioning gender and sexuality binaries: What queer theorists, transgendered individuals, and sex researchers can teach social work. *Journal of Gay and Lesbian Social Services, 17*(1), 3–21. https://doi.org/10.1300/J041v17n01_02.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674.

Monaco, S. (2020). Being bisexual in contemporary Italy: Between stigma and desire of visibility. *International Journal of Sociology and Social Policy, 9*(20), 1–20. https://doi.org/10.1108/IJSSP-05-2020-0157.

Montgomery, S. A., & Stewart, A. J. (2012). Privileged allies in lesbian and gay rights activism: Gender, generation, and resistance to heteronormativity. *Journal of Social Issues, 68*(1), 162–177. https://doi.org/10.1111/j.1540-4560.2012.01742.x.

Morison, M. A., & Morison, T. G. (2002). Development and validation of a scale measuring modern prejudice toward gay men and transgendered women. *Journal of Homosexuality, 43*(2), 15–37. https://doi.org/10.1300/J082v43n02_02.

Myers, K., & Raymond, L. (2010). Elementary school girls and heterosexuality. *Gender & Society, 24*(2), 167–188. https://doi.org/10.1177/0891243209385879.

Parrott, D., Adams, H., & Zeichner, A. (2002). Homophobia: Personality and attitudinal correlates. *Personality and Individual Differences, 32*(7), 1269–1278. https://doi.org/10.1016/S0191-8869(01)00117-9.

Pears, C., Renk, K., & Negr, C. (2013). Explaining variation in relations among intrinsic religiosity, political conservatism, and homonegativity as a function of authoritarianism’s three components: An expansion on recent literature. *Sexuality Research & Social Policy, 10*(2), 97–109. https://doi.org/10.1007/s13178-013-0114-9.

Perez-Brumer, A., Hatzenbuehler, M. L., Oldenburg, C. E., & Bockting, W. O. (2015). Individual- and structural-level risk factors for suicide attempts among transgender adults. *Behavioral Medicine, 41*(3), 164–171. https://doi.org/10.1080/08964289.2015.1028322.

Plummer, K. (2003). Intimate citizenship: Private decisions and public dialogues. Seattle: University of Washington Press.

Prearo, M. (2015). *Politiche dell’Orgoglio. Sexualità, Soggettività e Movimenti Sociali* [Politics of pride. Sexuality, subjectivity and social movements]. Pisa, IT: ETS.

Prunas, A., Clerici, C. A., Gentile, G., Muccino, E., Veneroni, L., & Zoja, R. (2015). Transphobic murders in Italy: An overview of homicides in Milan (Italy) in the past two decades (1993-2012). *Journal of Interpersonal Violence, 30*(16), 2872–2885. https://doi.org/10.1177/0886260514554293.

R Core Team. (2018). R: A language and environment for statistical computing. Vienna, AT: R Foundation for Statistical Computing. Retrieved March 15, 2020, from https://www.R-project.org/.

Raja, S., & Stokes, J. P. (1998). Assessing attitudes toward lesbians and gay men: The modern homophobia scale. *International Journal of Sexuality and Gender Studies, 3*(2), 113–134. https://doi.org/10.1023/A:1023244427281.

Ream, G. L. (2001, August 24–28). Intrinsic religion and internalized homophobia in sexual minority youth [Conference paper]. San Francisco: Conference of the American Psychological Association. https://eric.ed.gov/?id=ED437488.

Rinaldi, C. (Ed.) (2013). *La violenza Normalizzata. Omofobia e Transfobia negli Scenari Contemporanei* [Normalized violence. Homophobia and transphobias in contemporary scenarios]. Turin, IT: Kaplan.

Rinaldi, C. (2020). Homophobic conduct as normative masculinity test: Victimization, male hierarchies, and heterosexualizing violence in hate crimes. In A. Balloni & R. Sette (Eds.), *Handbook of research on trends and issues in crime prevention, rehabilitation, and victim support* (pp. 100–123). Hershey, PA: IGI Global.

Roccato, M., & Russo, S. (2015). Two short, balanced, unidimensional, invariant across genders parallel forms of Altemeyer’s (1996) right-wing authoritarianism scale. *Psicologia Sociale, 10*(3), 257–272. https://doi.org/10.1482/81371.

Rosik, C. H., Griffith, L. K., & Cruz, Z. (2007). Homophobia and conservative religion: Toward a more nuanced understanding. *American Journal of Orthopsychiatry, 77*(1), 10–19. https://doi.org/10.1037/0002-9432.77.1.10.

Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*, 1–36. https://doi.org/10.18637/jss.v048.i02.

Rowatt, W. C., LaBouff, J., Johnson, M., Froese, P., & Tsang, J. (2009). Associations among religiousness, social attitudes, and prejudice in a national random sample of American adults. *Psychology of Religion and Spirituality, 1*(1), 14–24. https://doi.org/10.1037/a0014989.

Rowatt, W. C., & Schmitt, D. P. (2003). Associations between religious orientation and variables of sexual experience. *Journal for the Scientific Study of Religion, 42*(3), 455–465. https://doi.org/10.1111/1468-5906.00194.

Russell, T. B., McGuire, J. K., & Russell, S. T. (2012). Heteronormativity, school climates, and perceived safety for gender nonconforming peers. *Journal of Adolescence, 35*(1), 187–196. https://doi.org/10.1016/j.adolescence.2011.03.001.

Savin-Williams, R. C., Pardo, S. T., Vrangalova, Z., Mitchell, R. S., & Cohen, K. M. (2010). Sexual and gender prejudice. In J. C. Christer & D. R. McCrery (Eds.), *Handbook of gender research in psychology. Volume 2: Gender research in social and applied psychology* (pp. 359–378). New York, NY: Springer.

Scandurra, C., Amodeo, A. L., Bochicchio, V., Valerio, P., & Frost, D. M. (2017). Psychometric characteristics of the Transgender Identity and Desire of Visibility. *Journal of Homosexuality, 59*(8), 1191–1210. https://doi.org/10.1080/00918369.2015.1028322.
Scandurra, C., Bochicchio, V., Amodeo, A. L., Maldonato, N. M., Valerio, P., & Vitelli, R. (2019). “Soccer is a matter of real men?” Sexist and homophobic attitudes in three Italian soccer teams differentiated by sexual orientation and gender identity. *International Journal of Sport and Exercise Psychology, 17*(3), 285–301. https://doi.org/10.1080/1612197X.2017.1339728.

Scandurra, C., Mezza, F., Maldonato, N. M., Bottone, M., Bochicchio, V., Valerio, P., & Vitelli, R. (2019). Health of non-binary and genderqueer people: A systematic review. *Frontiers in Psychology, 10*, 1453. https://doi.org/10.3389/fpsyg.2019.01453.

Schilt, K., & Westbrook, L. (2009). Doing gender, doing heteronormativity: “Gender normals,” transgender people, and the social maintenance of heterosexuality. *Gender & Society, 23*(4), 440–464. https://doi.org/10.1177/0891243209340034.

Schulte, L. J., & Battle, J. (2004). The relative importance of ethnicity and religion in predicting attitudes towards gays and lesbians. *Journal of Homosexuality, 47*(2), 127–141. https://doi.org/10.1300/J082v47n02_08.

Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review, 12*(3), 248–279. https://doi.org/10.1177/1088868308319226.

Tolman, D. L. (2006). In a different position: Conceptualizing female adolescent sexuality development within compulsory heterosexuality. *New Directions for Child and Adolescent Development, 112*, 71–89. https://doi.org/10.1002/cd.163.

Vialeti, R., Scandurra, C., Pacifico, R., Selvino, M. S., Picariello, S., Amodeo, A. L., Valerio, P., & Giami, A. (2017). Trans identities and medical practice in Italy: Self-positioning towards gender affirmation surgery. *Sexologies, 26*(4), e43–e51. https://doi.org/10.1016/j.sexol.2017.08.001.

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.