

## ORIGINAL RESEARCH—PSYCHOLOGY

## Italian Validation of Homophobia Scale (HS)

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DOI: 10.1002/sm2.68

## ABSTRACT

**Introduction.** The Homophobia Scale (HS) is a valid tool to assess homophobia. This test is self-reporting, composed of 25 items, which assesses a total score and three factors linked to homophobia: behavior/negative affect, affect/behavioral aggression, and negative cognition.

**Aim.** The aim of this study was to validate the HS in the Italian context.

**Methods.** An Italian translation of the HS was carried out by two bilingual people, after which an English native translated the test back into the English language. A psychologist and sexologist checked the translated items from a clinical point of view. We recruited 100 subjects aged 18–65 for the Italian validation of the HS. The Pearson coefficient and Cronbach's  $\alpha$  coefficient were performed to test the test–retest reliability and internal consistency.

**Main Outcome Measures.** A sociodemographic questionnaire including the main information as age, geographic distribution, partnership status, education, religious orientation, and sex orientation was administered together with the translated version of HS.

**Results.** The analysis of the internal consistency showed an overall Cronbach's  $\alpha$  coefficient of 0.92. In the four domains, the Cronbach's  $\alpha$  coefficient was 0.90 in behavior/negative affect, 0.94 in affect/behavioral aggression, and 0.92 in negative cognition, whereas in the total score was 0.86. The test–retest reliability showed the following results: the HS total score was  $r = 0.93$  ( $P < 0.0001$ ), behavior/negative affect was  $r = 0.79$  ( $P < 0.0001$ ), affect/behavioral aggression was  $r = 0.81$  ( $P < 0.0001$ ), and negative cognition was  $r = 0.75$  ( $P < 0.0001$ ).

**Conclusions.** The Italian validation of the HS revealed the use of this self-report test to have good psychometric properties. This study offers a new tool to assess homophobia. In this regard, the HS can be introduced into the clinical praxis and into programs for the prevention of homophobic behavior. **Ciocca G, Capuano N, Tuziak B, Mollaioli D, Limoncin E, Valsecchi D, Carosa E, Gravina GL, Gianfrilli D, Lenzi A, and Jannini EA. Italian validation of Homophobia Scale (HS). *Sex Med* 2015;3:213–218.**

**Key Words.** Homophobia; Italy; Italian Validation; Homophobia Scale; Psychometric Properties

## Introduction

Scientific interest in the assessment of homophobia started more than 30 years ago.

Over the years, this construct has been measured by various instruments, and many others have been created and recently validated. Homophobia, a term coined by Weinberg, was originally defined as

the irrational fear, hatred, and intolerance of homosexual men and women by heterosexual individuals [1,2]. More generally, homophobia is the tendency to discriminate against homosexual people through psychological and social aversion and, in some cases, even with the manifestation of acts of violence. However, other researches speak of homonegativity, to avoid a terminological overlapping with the phobic symptoms and to distinguish this attitude from the phobia [3]. In any case, research into homophobia or homonegativity increased in 1983 following the nosological revisions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). In fact, in that year, homosexuality was removed from the list of mental health problems, indicating more social acceptance of homosexuality [4,5].

Nevertheless, the occurrence of homophobic attitudes have not stopped in individuals, highlighting the necessity of a correct measurement of this phenomenon [6,7]. The primary and most frequently used instruments to measure the construct of homophobia are as follows: Homophobia Scale (Bouton et al. 1987) [8]; Modern Homophobia Scale (Raja and Stokers 1998) [9]; LGB-KASH (Worthington, Dillon, and Becker-Schutte 2005) [10]; Multidimensional Heterosexism Inventory (Walls 2008) [11]; and Homophobia Scale (Wright, Adams, and Bernat 1999) [12].

Bouton et al.'s Homophobia Scale is composed of 30 items designed by the authors, later reduced to 18, assessed as positive/negative on a scale of 11 points. It was administered for the first time to 528 American college students. The Modern Homophobia Scale, or MHS (Raja and Stokers 1998), consists of items gleaned from a review of the scientific literature of the main tests used and was administered to 322 students. The LGB-KASH (Worthington, Dillon, and Becker-Schutte 2005), consists of 32 items with 28 new items inserted after the pilot study. The Multidimensional Heterosexism Inventory (Walls 2008), initially composed of 44 items taken from the previous version, now consists of 23 items decided upon after analysis of four specific factors. Another important tool is the Attitudes toward gay men and lesbians composed by 20 items along five-point Likert scale [13,14].

From the above tools, we consider the Homophobia Scale (HS) of Wright, Adams, and Bernat (1999) to be one of the most valid self-report tests for the measurement of the homophobic construct, because it overcomes the criticism of many scales that they do not assess

the vast spectrum of homophobia [15]. In this regard, a recent systematic review also considers the HS an adequate tool that considers the complex phenomenon of homophobia in a new and exhaustive way [16].

The first validation of the HS was aimed at developing and validating its initial psychometric properties, with particular attention paid to the description of cognitive, affective, and behavioral aspects of homophobia. Therefore, after a factor analysis, the scale was divided into three subscales: behavior/negative feeling, feeling/behavioral aggression, and negativism cognitive.

The development of the HS in the English language and the related validation was performed on a sample of 321 subjects at its first administration and 122 at the test–retest analysis.

The psychometric characteristics of the HS were calculated with Cronbach's  $\alpha$  coefficient for internal consistency ( $\alpha = 0.9528$ ), whereas, in the test–retest reliability, a Pearson coefficient of  $r = 0.958$  ( $P < 0.01$ ) was found. The concurrent validity of the Pearson coefficient between the Index of Homophobia [17] and the HS used indicates a high level of correlation ( $r = 0.658$ ,  $P < 0.01$ ). The final version of HS, validated by Wright, Adams and Bernat (1999), consists of 25 items and assesses three factors: behavior/negative feeling, emotion/aggression behavioral, and cognitive negativism. In the total score of the scale, higher scores indicate a high level of homophobia. Answers are also distributed along the five-point Likert scale from “strongly agree” (1) to “strongly disagree” (5).

## Aim

On the basis of our consideration of the assessment of homophobia, the aim of this study was an Italian translation of the HS and its subsequent validation in a sample of the Italian population.

## Methods

### Sample Recruitment

A study population composed of 100 heterosexual subjects aged 18–65 was recruited from university students, employees in our institutions, and friends during an opened manifestation of our University where our sexological section have participated.

We admitted healthy subjects without severe mental disorders, that is, mood disorders or psychosis as assessed by a clinical psychologist accord-

ing to the DSM-V criteria. The study protocol was approved by our ethics committee for investigations involving human subjects, in line with the Declaration of Helsinki, and all subjects signed an informed consent regarding the handling of personal data.

### Main Outcome Measures

We administered a protocol composed of a socio-demographic questionnaire including information as age, geographic distribution, partnership status, education, religious orientation and sex orientation, and the Italian translation of the HS.

### Translation

We put the original version of the HS through a forward and backward translation procedure, having developed a consensus of the authors who developed the scale. The translation and adaptation was carried out from English to Italian by two expert bilingual translators and a clinical psychologist and sexologist evaluated each item, according to an accurate understanding of the Italian people.

### Statistical Analysis

Continuous variables were represented statistically as mean and standard deviations. Categorical variables were represented as absolute and percentage frequencies. The internal consistency was assessed by the overall Cronbach's  $\alpha$  coefficient following the 25 items of the HS and also for the four domains. Moreover, the factorial analysis was employed to test the eigenvalues and the variance. The test-retest reliability was performed by the Pearson coefficient, calculated with two administrations, first at the baseline and then after 15 days. Moreover, a correlation among the factors of HS was carried out. To perform the statistical analysis, MED-CALC statistical software (Ostend, Belgium), version 14, was used.

### Results

Sociodemographic characteristics revealed that, among the recruited subjects, there were no differences by gender. Half of the sample was from the center of Italy (52%), 30% were from the South, and 18% of subjects were from Northern Italy. Moreover, most subjects were in a relationship (72%), declared themselves as Catholic (65%), and had a secondary or a university degree education. Finally, the mean score of the HS was  $22.54 \pm 15.71$  (Table 1).

**Table 1** Demographic characteristics and scores to Homophobia Scale

		n; (%)
Age	Mean = $34.78 \pm 11.9$	100; (100%)
Gender	Women	58; (58%)
	Men	42; (42%)
Geographic distribution	Northern Italy	18; (18%)
	Central Italy	52; (52%)
	Southern Italy	30; (30%)
Partnership status	Have a relationship	72; (72%)
	Single	28; (28%)
Sex orientation	Heterosexual	100; (100%)
Religion	Catholic	65; (65%)
	Atheist	22; (22%)
	Other religion	13; (13%)
Education	University graduation	62; (62%)
	High school degree	38; (38%)
Homophobia Scale (mean $\pm$ SD)	Total score	$22.54 \pm 15.71$
	Behavior/negative affect	$8.15 \pm 7.55$
	Affect/behavioral aggression	$8.08 \pm 5.69$
	Negative cognition	$6.31 \pm 4.42$

After the extraction and rotation, we considered the eigenvalues higher of one, and the variance explained was of 67.8%.

The analysis of internal consistency showed an overall Cronbach's  $\alpha$  coefficient was of 0.92. In the three subscales, the Cronbach's  $\alpha$  coefficient was 0.90 in behavior/negative affect, 0.94 in affect/behavioral aggression, and 0.92 in negative cognition, whereas in the total score was 0.86. (Table 2).

For the test-retest reliability, we assessed 71 of the initial 100 subjects and analysed the Pearson coefficient related to the total score and the three subscales. In this regard, 29 subjects did not participate to the follow-up analysis, for personal impediments to compile a second time the questionnaire. Our test-retest analysis had two administrations, one at the baseline and one after 15 days. We found a significant and positive correlation in the four domains of the HS after the test-retest analysis. In particular, the HS total score was  $r = 0.93$  ( $P < 0.0001$ ), the behavior/negative affect was  $r = 0.79$  ( $P < 0.0001$ ), the affect/behavioral aggression was  $r = 0.81$  ( $P < 0.0001$ ), and the negative cognition was  $r = 0.75$  ( $P < 0.0001$ ) (Table 3).

**Table 2** Internal consistency of the Homophobia Scale in a Italian sample (n = 100)

Domains of Homophobia Scale and overall internal consistency	Cronbach's $\alpha$
Behavior/negative affect	0.90
Affect/behavioral aggression	0.94
Negative cognition	0.92
HS total score	0.86
Overall Cronbach's $\alpha$	0.92

**Table 3** Test–retest reliability (n = 71)

Domains of Homophobia Scale	Pearson coefficient
HS total score	0.93*
Behavior/negative affect	0.79*
Affect/behavioral aggression	0.81*
Negative cognition	0.75*

\* $P < 0.0001$ 

Moreover, as shown in Table 4, we can see the positive correlation among the HS domains. Each of the domains positively correlate with another domain of the HS, for example, the behavior/negative affect has a positive correlation with affect/behavioral aggression ( $r = 0.65$ ;  $P < 0.0001$ ), with negative cognition ( $r = 0.76$ ;  $P < 0.0001$ ), and with the total score of the HS ( $r = 0.93$ ;  $P < 0.0001$ ). In addition, affect/behavioral aggression correlates positively with negative cognition ( $r = 0.59$ ;  $P < 0.0001$ ) and with the total score of the HS ( $r = 0.84$ ;  $P < 0.0001$ ), and negative cognition has a positive association with the total score of the HS ( $r = 0.86$ ;  $P < 0.0001$ ).

In the Appendix S1, the usefulness of the Italian version of HS and its scoring as a psychometric tool is shown.

## Discussion

This study has provided the first translation and validation of the HS in the Italian language and analyzed its implementation of the assessment of phobic behavior against homosexuals in both clinical and research contexts.

The easy and rapid administration of this psychometric tool is the main quality that emerges after our validation. Moreover, good psychometric characteristics were found after the analysis, and this aspect should incentivize the use of HS in Italy.

**Table 4** Correlation among the domains of Homophobia Scale

	Behavior/negative affect	Affect/behavioral aggression	Negative cognition	HS total score
Behavior/negative affect	/	0.65*	0.76*	0.93*
Affect/behavioral aggression	/	/	0.59*	0.84*
Negative cognition	/	/	/	0.86*

\* $P < 0.0001$ 

In particular, the internal consistency assessed with Cronbach's  $\alpha$  revealed high values for the overall coefficient and also in the four subscales. Moreover, about 70% of the variance has been explained, such as in the original version of HS [12]. Moreover, the test–retest reliability demonstrated another good characteristic regarding the validity of this test, such as the correlation coefficients among the scales. All these psychometric elements contribute to, and should incentivise the use of, the HS in Italy [18]. According to recent data [19], homophobic behaviors are more present in the Italian population when compared with other countries in Europe, and episodes of violence or denigration toward homosexual people are more frequent.

Many associations for homosexual rights promote a culture of respect and equality, also from a judicial point of view, and prevention programs toward violence, discrimination, and homophobic bullying were developed in many public institutions, above all, in schools [20].

However, adequate tools for the assessment of homophobia are few, and the only psychometric instrument actually validated in the Italian language is the MHS, which assesses three domains: deviance, personal discomfort, and institutional homophobia [21].

This validation of the HS in Italian is very useful and adds to the MHS in the measurement and scientific knowledge of homophobia. In fact, the assessment of such specific domains as behavior/negative affect, affect/behavior aggression, and negative cognition could help researchers and clinics to better elucidate this phenomenon in a subject or in an entire study population. The domains of the HS are focused on specific feelings, on the emotional arousal and behaviors linked to homosexuality and to homosexual people [22].

In this regard, some studies have investigated the unchecked psychological mechanisms related to homophobia that involve anger and a conservative culture [23,24]. The HS investigates these aspects with specific items with integration among the emotional, psychological, and cultural factors that contribute to homophobic behavior.

The accurate assessment of homophobia has a benefit for both potential offenders and, above all, for victims [3]. In fact, the assessment of potential homophobic tendencies in a subject could also prevent other deviant behavior, such as generalised violence and the abuse of substances whereas, for potential victims, it may be possible to prevent physical or psychological aggression.

Moreover, the assessment of homophobia and the diffusion of this praxis can indirectly improve the social perception of homosexuality and related aspects. In fact, homosexual people are greatly influenced by a homophobic society, and this contributes to the phenomenon of internalized homophobia in homosexuals. Many studies point out that internalized homophobia causes distress, depression, and even suicidal thoughts [25–27].

The rights and physical and psychological health of homosexuals is a goal of a free society and the individuation of deviant behaviors as homophobia is a desirable capacity that each operator in educational and care contexts should know. In fact, many studies also investigate the approach of physicians and nurses to homosexual people [28,29], with some unpleasant surprises [30,31]. Therefore, it is also necessary to activate adequate programs of prevention of homophobia among psychologists and experts in sex and gender rights, in various social areas, and to introduce the HS into the development of these prevention programs.

In conclusion, we consider the evaluation of homophobia to be a fundamental issue in the safeguarding of the physical, psychological, and social health of homosexuals. In this regard, the HS can describe the prodromal signs of homophobic attitudes in the general Italian population and in specific contexts, such as schools, universities, workplaces, and health institutions.

### Acknowledgments

This work is partially supported by Italian Ministry of University (MIUR-PRIN and FIRB grants).

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*Conflict of Interest:* The author(s) report no conflicts of interest.

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### Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher’s website:

**Appendix S1** Italian version of Homophobia Scale.\*