Multidimensional Scale of Attitudes Toward Lesbians and Gay Men: Construction and Preliminary Validation¹

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Abstract: Prejudice against non-heterosexual individuals persists and currently assumes various forms. This study describes the process of developing and validating a multidimensional instrument to assess attitudes toward lesbians and gay men. Three types of negative attitudes were defined based on a literature review of the various aspects of antigay prejudice. Existing scales were selected and their items were categorized according to expected attitudes. Exploratory factor analysis revealed a scale composed of three negative attitudinal dimensions: two with a more traditional nature (Rejection of proximity and Pathologizing of homosexuality) and a more contemporary one (Modern heterosexism), as well as a positive dimension (Support). All dimensions showed good internal consistency. Additional evidence of the instrument's construct validity was obtained through a differential study, based on the participants' gender and their interpersonal contact with lesbians and gay men.

Keywords: Sexual Orientation, Homosexuality, Prejudice, Sexual Attitudes.

Escala Multidimensional de Atitudes face a Lésbicas e a *Gays*: Construção e Validação Preliminar

Resumo: O preconceito contra as pessoas não heterossexuais persiste e atualmente assume diversas formas. Este estudo teve por objetivo apresentar o processo de construção e validação de um instrumento multidimensional de avaliação de atitudes face a lésbicas e a *gays*. Partindo de uma revisão teórica sobre diversos aspectos do preconceito anti-homossexual, foram definidos três tipos de atitudes negativas. Selecionou-se, em seguida, um conjunto de escalas pré-existentes, tendo os seus itens sido categorizados de acordo com as atitudes previstas. Análises fatoriais exploratórias revelaram uma escala composta por três dimensões atitudinais negativas, duas de caráter mais tradicional (Rejeição da proximidade e Homopatologização) e uma de caráter mais atual (Heterossexismo moderno), assim como por uma atitude positiva (Suporte). Todas as dimensões apresentaram uma boa consistência interna. Provas adicionais da validade de constructo do instrumento foram obtidas através de um estudo diferencial, em função do sexo dos participantes e do seu contato interpessoal com lésbicas e *gays*.

Palavras-chave: Orientação Sexual, Homossexualidade, Preconceito, Atitudes Sexuais.

Escala Multidimensional de Actitudes Hacia Lesbianas y *Gays*: Construcción y Validación Preliminar

Resumen: El prejuicio contra las personas no heterosexuales persiste, asumiendo diversas formas hoy día. Se presenta en este trabajo el proceso de construcción y validación de un instrumento multidimensional de evaluación de las actitudes hacia las lesbianas y los *gays*. Partiendo de una revisión teórica sobre diversos aspectos del prejuicio, fueron definidos tres tipos de actitudes negativas. Posteriormente fueron seleccionadas escalas de evaluación pre-existentes, siendo sus ítems categorizados de acuerdo con las actitudes propuestas. Análisis factoriales exploratorias revelaron una escala compuesta por tres dimensiones negativas, dos de carácter más tradicional (Rechazo de aproximación y Homopatologización) y una de carácter más actual (Heterosexismo moderno), así como por una actitud positiva (Soporte). Todas las dimensiones presentaron consistencia interna adecuada. Pruebas adicionales de validez de constructo fueron obtenidas a través de un estudio diferencial, en función del sexo de los participantes y de su contacto interpersonal con lesbianas y *gays*.

Palabras clave: Conducta Sexual, Homosexualidad, Prejuicio, Actitudes Sexuales.

The growing visibility and social acceptance of lesbian and gay individuals (Andersen & Fetner, 2008; Carneiro & Menezes, 2007; Costa, Pereira, Oliveira, & Nogueira, 2010)

may lead people to think that prejudice and discrimination due to sexual orientation is no longer a problem. Nonetheless, as asserted by Nogueira and Oliveira (2010), "if (...) adopting a gay or lesbian identity is considered to be a viable and healthy orientation, on the other hand, there is still persistent prejudice and misinformation concerning homosexuality that has different outcomes and consequences" (p. 10). The homosexual population still is one of the main targets of hate crimes and harassment in the United States (Herek, 2009). Discrimination that lesbians and gay men suffer is also

¹ This paper is the result of a study financially supported by a doctoral scholarship awarded to the first author by the Foundation for Science and Technology (SFRH/BD/41752/2007).

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apparent in the relatively high rates of suicide and suicide attempts observed among non-heterosexual adolescents and adults (Haas et al., 2011; Marshal et al., 2011). Despite some changes implemented in the legal system of Portugal aiming to reduce discrimination based on sexual orientation (for instance, access to civil marriage for same-sex couples; Law No. 9 May 31st, 2010), various social surveys indicate that Portuguese individuals still present negative attitudes toward lesbians and gay men, especially when compared to other west European countries (Comissão Europeia, 2009; European Commission, 2008). Therefore, investigations and studies addressing this type of prejudice are justified.

The first conceptualizations and instruments to evaluate anti-homosexual prejudice intended to account for its phobic and sexist nature (Herek, 1988; Hudson & Ricketts, 1980; Kite & Deaux, 1986; Wright, Adams, & Bernat, 1999). However, as happened with other groups that were objects of discrimination, prejudice against lesbians and gay men also became more dissimulated. In this context, new theories and evaluation instruments emerged (Morrison, Kenny, & Harrington, 2005; Morrison & Morrison, 2002; Park, 2001; Raja & Stokes, 1998) (see Gato, Carneiro & Fontaine, 2011 for an updated review of the psychological approaches of prejudice against non-heterosexual individuals). There are currently various types of negative attitudes toward lesbians and gay men, from the most traditional to the most modern ones. Given a lack of original instruments in Portuguese that simultaneously evaluate these attitudes, this study's objective was to develop an instrument that encompassed the complexity of attitudes toward lesbians and gay men that are currently observed.

Moral Condemnation and Pathologizing of Homosexuality

Several manifestations of moral condemnation and pathologizing of homosexuality can still be observed. Until recently, the Portuguese Blood Institute explicitly excluded malehomosexualindividuals from voluntary donation of blood. Such a decision was based on the claim that gay individuals are sexually "more promiscuous" than heterosexual individuals (Carneiro, 2006; "Recusa de Dádivas", 2009). In 1999, the Portuguese National Classification of Impairments included "homosexuality", calling it "a deficiency of the heterosexual function" (Carneiro). Even though the American Psychiatric Association removed homosexuality from the list of mental disorders in 1973, 36 years later, the president of the College of Psychiatry of the Portuguese Physicians still distinguished between primary homosexuality (biologically acquired) and secondary homosexuality (socially acquired), arguing the latter could be the object of psychiatric treatment (Sanches, 2009). An instrument intended to evaluate prejudice toward homosexual individuals will be incomplete if it does not take into account moral condemnation and the pathologizing of homosexuality, still evident in the contemporary society.

Traditional Prejudice versus Modern Prejudice

In addition to evaluating prejudice in its more classical form, that is, emotional aversion/rejection of proximity or avoidance of members of the outgroup (Allport, 1954/1997), attention should also be paid to more modern expressions. In fact, transformations in attitudes toward lesbians and gay men find a parallel, whether in the domain of racial or ethnic prejudice (aversive racism - Gaertner & Dovidio, 2000; modern racism - McConahay, 1986; subtle racism - Meertens & Pettigrew, 1999) or in the domain of contemporary gender prejudice (ambivalent sexism - Glick & Fiske, 2001; modern sexism - Swim, Aikin, Hall, & Hunter, 1995; neo sexism - Tougas, Brown, Beaton, & Joly, 1995). In general, these studies have emphasized a more dissimulated nature of prejudice and its persistence in societies in which discriminatory practices are forbidden and where people who show prejudice are objects of disapproval (Gato et al., 2011). Some of these conceptualizations were used to explain changes also observed in the expression of prejudice against non-heterosexual individuals.

Many studies (Quiles del Castillo, Betancor Rodríguez, Rodríguez Torres, Rodríguez Pérez, & Coello Martel, 2003; Lacerda, Pereira, & Camino, 2002; Marinho, Marques, Almeida, Menezes, & Guerra, 2004; Pereira, Monteiro, & Camino, 2009) applied the theory of blatant versus subtle racial prejudice (Meertens & Pettigrew, 1999; Pettigrew & Meertens, 1995) to prejudice toward lesbians and gay men. Blatant racial prejudice corresponds to traditional prejudice and is characterized as warm, close or direct. It is composed of two components: (a) a perception that the outgroup is a threat, and (b) avoidance of intimacy with the outgroup's members. Subtle racial prejudice in turn is described as being cold, distant and indirect. It includes three factors: (a) defense of traditional values and the perception that the outgroup does not adhere to work and success values, (b) cultural differences are emphasized, and (c) positive emotions toward the outgroup are denied. Lacerda et al. and Pereira et al. applied this model of prejudice to lesbians and gay men using the component 'avoidance of intimacy' as an indicator of blatant prejudice, and the component 'denial of positive emotions/expression of negative emotions' as an indicator of subtle prejudice. Quiles del Castillo et al. and Marinho et al., in turn, verified a distinction between 'subtle' and 'blatant homophobia' (nomenclature used by the last authors).

Using modern racism (McConahay, 1986) and neosexism (Tougas et al., 1999), as inspiring models, Morrison and Morrison (2002) proposed the concept of modern homonegativity. This concept is based on beliefs such as: (a) lesbians and gay men demand unnecessary social changes, (b) prejudice and discrimination are phenomenon of the past, (c) lesbians and gay men put too much emphasis on their sexuality and in doing so, they become responsible for their own marginalization.

Nonetheless, modern manifestations of prejudice against non-heterosexual individuals have specific features that distinguish them from modern forms of racial/ethnic prejudice or sexism (Massey, 2009). First, the Lesbian, Gay, Bisexual, and Transgender (LGBT) population is not as "protected" by social norms impeding hostile forms of prejudice as other outgroups are (Herek, 2007; Pereira et al., 2009). In other words, prejudice against non-heterosexual individuals is socially more accepted than ethnic or sexist prejudice.

Second, applying theories that explain modern manifestations of racism to sexual prejudice is a problem since the underlying ideologies are not necessarily the same. According to Hegarty (2006), prejudice against lesbians and gay men is not so much rooted in positive discrimination, economic competition or irreconcilable cultural differences, which are evident in modern racism, but rooted in a certain discomfort with their greater visibility and questions some of these individuals ask concerning values and institutions traditionally associated with heterosexuality (i.e. marriage and parenthood). In this regard, Biernat, Vescio and Theno (1996) observed that values related to protestant ethics and egalitarianism increased the probability of using race as a basis for evaluating the outgroup, but not sexual orientation.

Because homosexual and heterosexual individuals generally share the same culture, using models designed for racial prejudice to evaluate anti-homosexual prejudice may be particularly inappropriate. For instance, the original item of Pettigrew and Meertens (1995, our translation), which belongs to the subscale Rejection of Intimacy on the scale Traditional Prejudice: "I would be willing to have sexual relationships with a West Indian" was transformed by Quiles del Castillo et al. (2003, our translation) into "I could, under certain circumstances and if I had the opportunity, feel like having a sexual relationship with someone of the same sex". It should be noted that disagreement to each of these items is not equivalent given the ideologies underlying them. Hence, in the case of sexual orientation, what is at stake is mainly related to the influence of heterosexism, an ideology that values heterosexuality as the most natural form of sexuality and/or superior to homosexuality, from the perspective of the person being asked (Morin, 1977).

Third, as noted by Herek (2007), in contrast to ethnicity/race or gender, one's sexual orientation is not necessarily visible. In this regard, Hegarty (2006) called attention to the fact that some experimental studies (Moreno & Bodenhausen, 2001) suggest that lesbian and gay identities are not the ones automatically triggering prejudice in egalitarian social contexts, rather it is the visibility of these identities that trigger such prejudice. Morrison and Morrisson (2002), for instance, verified that individuals with higher scores on their modern homonegativity scale would avoid watching a movie in a laboratory with a man wearing a t-shirt identifying him as being gay when there was another plausible reason in addition to the man's sexual identity for doing so. According

to Hegarty, this experience is very illuminating concerning social costs associated with the expression and visibility of a lesbian or gay identity. Hence, it is not the identities *per se* but the explicit manifestations of these identities that would motivate derogatory treatment, especially when they question the normativity of heterosexuality in a public space.

As we tried to demonstrate, the direct transposition of explanatory models of modern racial and gender prejudice to evaluate contemporary prejudice against lesbians and gay men is not without problems. Therefore, a specific and complete evaluation of modern anti-homosexual prejudice should encompass the following: (a) the concepts of modern racism/homonegativity, already addressed, that there is no discrimination and that fighting for equal rights is not justified; (b) concepts related to the performance of roles traditionally associated with heterosexuality, such as marriage and parenthood; (c) and those related to the visibility/expression of lesbian and gay identities.

In summary, several attitudes seem to coexist, from the most traditional to the most modern ones. There are two types of attitudes among the most traditional expressions that are important to evaluate: on the one hand, moral condemnation and pathologizing of homosexuality; and on the other hand, the classical traditional prejudice, that is, rejection or avoiding interaction with lesbians and gay men in several contexts and social roles, associated with the manifestation of negative emotions toward this population (Quiles del Castillo et al., 2003; Lacerda et al., 2002; Marinho et al., 2004; Pereira et al., 2009). In relation to contemporary manifestations of prejudice, in addition to the attitude of modern homonegativity (Morrison et al., 2005; Morrison & Morrison, 2002), it is also important to evaluate attitudes, whether in relation to marriage among same-sex individuals and lesbian and gay parenthood, or in relation to the visibility or expression of lesbian and gay identities (Hegarty, 2006; Herek, 2007).

Influence of Sex and Interpersonal Contact on Attitudes Toward Lesbians and Gay Men

Sex is one of the most powerful predictors of attitudes toward homosexual persons and men have been found to be more homophobic than women. In fact, Kite and Whitley (1996) confirmed such a difference in a meta-analysis of 109 studies addressing the relationship between the participant's sex and attitudes toward lesbians and gay men. This pattern is also observed among samples of college students (Evans, 2001). Given such evidence, we predicted that the scale would indicate the influence of the participants' sex in the different types of evaluated attitudes. The differences between female and male participants were tested, and we expected that the latter would show more negative attitudes than their female counterparts.

In regard to interpersonal contact, there are various studies confirming that people who report knowing lesbian and/or gay individuals generally express less negative attitudes toward non-heterosexual individuals compared to those who report no such contact (Bowen & Bourgeois, 2001; Herek & Capitanio, 1996; Iraklis, 2010; Lemm, 2006; Sakalli, 2002). Having homosexual acquaintances/friends is indeed a factor influencing the perspective of Europeans concerning the existence of discrimination against sexual minorities: 56% of those with homosexual friends reported discrimination was dominant; while 48% of those without homosexual friends agreed with such a statement (European Commission, 2007). Considering the studies presented, it was expected that individuals without homosexual friends (lesbian and/or gay men) would present more negative attitudes than those with homosexual friends.

This study presented the process of developing and validating an instrument that simultaneously evaluates three types of attitudes toward lesbians and gay men, two of a more traditional nature and one of a more modern nature. In order to gather more evidence in favor of the instrument's construct validity, its ability to differentiate in the expected direction, the evaluated dimensions based on sex and interpersonal contact with lesbian and gay men was also investigated.

Method

Participants

A total of 380 Portuguese college students (59% women), aged between 18 and 53 years old (M = 21.53; SD = 4.62), enrolled in three programs at the University and Polytechnic Institute of Porto, Portugal (Psychology, Physical Therapy, and Mechanical Engineering) participated in this study.

Instruments

The instruments used are described as follow.

Socio-demographic questionnaire. Information concerning gender, age and program was collected. Interpersonal contact of the participants with lesbians and gay men was evaluated through the question "Do you have homosexual (lesbian and/or gay) friends?"

Preliminary version of the Scale of Attitudes Toward Lesbians and Gay Men. This instrument was applied in order to obtain a set of items that appropriately represented the conceptual domains to be evaluated, ensuring the instrument's content validity. Some scales evaluating attitudes toward homosexuality were selected: Attitudes Toward Lesbian Women/Gay Men (Herek, 1988), Index of Homophobia (Hudson & Ricketts, 1980), Homosexuality Attitude Scale (Kite & Deaux, 1986), Modern Homonegativity Scale (Morrison et al., 2005), Heterosexism Scale (Park, 2001), Modern Homophobia Scale (Raja & Stokes, 1998) and The Homophobia Scale (Wright et al., 1999). Two experts in Portuguese and in English performed translation and back translation of this set of items.

Six individuals with training in Psychology classified the items according to the following categories: pathologizing of homosexuality, rejection of proximity, and modern heterosexism (the definition of these categories was provided). Only the items that presented inter-rater agreement above 80% were selected. This process was completed with the reformulation of some items and the development of others in order to encompass the entire scope of the conceptual field, ultimately originating the first version of the Multidimensional Scale of Attitudes Toward Lesbians and Gay Men. The face validity of this first version was ensured based on a discussion with a group of four young Portuguese adults. A Likert scale ranging from 1 (completely disagree) to 6 (completely agree) was used.

Procedure

Data collection

The first author along with two psychology master's students administered the questionnaires collectively after authorization was provided by the Higher Education Institutions.

Data analysis

The instrument's preliminary version was submitted to Principal Components Factor Analysis. The differences in attitudes due to sex and interpersonal contact with lesbians and gay men were computed using Student's *t* test.

Ethical Considerations

Data collection was initiated after free and informed consent forms were signed. The participants received clarification concerning the voluntary nature of their participation and the study's objective, and were also ensured confidentiality and anonymity of answers.

Results

Exploratory Factor Analysis

Before proceeding to the Exploratory Factor Analysis (EFA), we analyzed the dispersion of the items by the six answer options. Three items were removed for being too consensual: a concentration above 70% was observed in the first option of the response scale (*totally disagree*). These items corresponded to strong negative statements concerning homosexual individuals (item No. 5 "Homosexuals should be kept separate from the rest of society, i.e., separate housing, restricted employment"; item No. 8 "I would remove my child from class if I found out the teacher was lesbian or gay"; and item No. 15 "If I discovered that a friend was gay or lesbian I would end the friendship"). EFA was

performed with 30 items: 11 items belonged to the dimension *rejection of proximity*, six to the dimension *pathologizing of homosexuality*, and 13 to the dimension *modern heterosexism* (Table 1).

The sample's adequacy for the EFA (principal components) was verified through the Kaiser-Meyer-Olkin (KMO) index, whose value (0.957) suggested that the variables were correlated and the factor analysis was strongly recommended. Because the objective was to obtain constructs theoretically significant and correlated to each other, that is, different types of negative attitudes toward lesbians and gay men, we used a method of oblique rotation (Direct Oblimin). Since the number of hypothesized dimensions was defined, an *a priori* criterion was used to extract the factors, totally three factors. The obtained solution explained 52.4% of the total variance. Factor 1 was loaded by 16 items: five belonged to the category pathologizing of homosexuality and 11 to rejection to proximity. The seven items loading Factor 2 belonged to the category modern heterosexism

and were related to visibility and the fight for equal rights for lesbians and gay men. Factor 3 aggregated seven items that belonged to the category modern heterosexism, mainly related to marriage and parenthood. Because the three obtained factors were not theoretically interpretable in light of the proposed categories and also because analysis of the scree plot indicated the existence of another factor, we proceeded with the extraction of four factors. This new solution explained 56.6% of the total variance. In relation to the factorial organization of the items, Factor 1 gathered the items that belonged to the category rejection of proximity; Factor 2 was loaded by items from the category modern heterosexism that refer to the visibility and rights of lesbians and gay men; Factor 3 gathered items of the category modern heterosexism, which were related to negative attitudes toward homosexual parenting and same-sex marriage, and also discomfort with expressions of lesbian and gay identity; items from the category pathologizing of homosexuality loaded Factor 4.

Table 1
Principal Components Factor Analysis of the Preliminary Version of the Instrument

Items		Factor 1	Factor 2	Factor 3	Factor 4	h2
28. I would not mind working with a lesbian/gay man.a	RP	78	.08	.06	07	,70
21. I would feel uneasy if I found out that my doctor was not heterosexual.d	RP	.72	.01	04	.03	.51
29. Gay people make me nervous. ^d	RP	.70	.09	.32	.16	.52
12. I would be hesitant to support lesbian and gay individuals for fear of being perceived as one.d	RP	.69	.15	.23	11	.52
24. I would not vote for a homosexual in an election for public office. $^{\rm c}$	RP	.68	10	.02	.14	.66
23. I feel that you cannot trust a person who is homosexual. d	RP	.66	11	24	.13	.51
18. I would feel uncomfortable knowing my daughter's or son's teacher was homosexual. ^c	RP	.64	01	01	.28	.66
1. It does not matter to me whether my friends are gay or straight.d	RP	62	.09	04	04	.50
31. I don't mind companies using openly lesbian/gay celebrities to advertise their products. ^a	RP	60	.15	.08	10	.50
7. If I were a parent, I could accept my son or daughter being gay. ^c	RP	59	.07	24	04	.62
16. Two individuals of the same sex holding hands or displaying affection in public is disgusting. ^c		.39	14	.29	.26	.64
14. Lesbians and gay men who are "out of the closet" should be admired for their courage.	MH	.13	.79	04	.06	.55
17. Lesbians and gay men still need to protest for equal rights. ^f	MH	01	.77	.05	11	.63
27. I see the gay movement as a positive thing. ^c	MH	24	.69	14	.12	.72
11. Organizations who promote gay rights are necessary.d	MH	22	.66	16	06	.69
9. A sexual education curriculum should include all sexual orientations.	MH	07	.56	.06	25	.49
Feachers should try to reduce their student's prejudice toward homosexuality. ^a		01	.51	04	36	.54
32. I find it desirable that homosexual individuals have become more visible in society. ^d	МН	35	.50	03	06	.59
30. Being raised in a homosexual home is quite different from being raised in a heterosexual home.	MH	09	.10	.80	.22	.63

(continue...)

Table 1 *(continuation)*

Items		Factor 1	Factor 2	Factor 3	Factor 4	h2
3. I believe same-sex parents are as capable of being good parents as heterosexual parents. ^d	МН	.06	.24	57	19	.54
13. Same-sex couples should be allowed to adopt children the same as heterosexual couples. ^b	МН	03	.30	56	16	.63
25. When I hear about a romantic relationship, I tend to assume that the partners are of the opposite sex. ^d	МН	.09	.02	.50	04	.28
19. Celebrations such as "gay pride day" are ridiculous because they assume an individual's sexual orientation should constitute a source of pride.	МН	.10	28	.49	26	.44
33. Legalization of same-sex marriages will dismantle the fundamental foundations of society. ^d	МН	.11	.01	.47	.28	.43
26. Gay men and lesbian women should stop shoving their lifestyle down other people's throats. ^f	МН	.24	19	.46	14	.45
22. Lesbians and gay men should undergo therapy to change their sexual orientation. ^a	PH	.15	09	.10	.70	.72
2. Homosexuality is a psychological disease. ^a	PH	.15	02	.20	.66	.68
20. Lesbians and gay men could be heterosexual if they really wanted to. ^a	PH	.09	11	.11	.56	.48
6. Homosexuality is an inferior form of sexuality. ^b	PH	.25	01	01	.55	.49
10. The increasing acceptance of homosexuality in our society is aiding in the deterioration of morals. ^c		.24	13	.27	.47	.69
% of Total Explained Variance		40.99	6.46	4.98	4.20	
Eigenvalues		12.30	1.94	1.50	1.26	
Cronbach's Alpha		.91	.83	.79	.86	

As shown in Table 1, all the items presented factor loadings equal to or above 0.45. Items No. 4, No. 16 and No. 32 loaded on more than one factor, and were therefore eliminated. Communality values were acceptable with the exception of those concerning items No. 19, No. 25 and No. 33.

The analysis of the Cronbach's alpha values revealed good internal consistency for the four dimensions (Table 1). Thus, we opted to keep the items with lower communalities in the factors to which they belonged. After suppressing items No. 4, No. 16 and No. 32, a new factor analysis was performed with 27 items, which confirmed the previous structure and explained 56.7% of total variance.

Given the fact that items that loaded on factor 2 referred to support to civil rights and admiration for lesbians and gay men, this factor was called "Support". To be consistent with the planned theoretical dimensions, the other three factors kept their names. Negative correlations between negative attitudes (Rejection of proximity, Modern heterosexism, and Pathologizing of homosexuality) and the positive attitude (Support) were statistically significant. Additionally, the two most traditional negative attitudes (Rejection of proximity

and Pathologizing of homosexuality) presented the highest correlation (Table 2).

Table 2
Pearson's Correlations Among all Attitude Scales

O			
	2.	3.	4.
1. Rejection of proximity	61*	.62*	.71*
2. Support		62*	57*
3. Modern heterosexism			.60*
4. Pathologizing of homosexuality			

Note: * p < .001

Differential Study

In relation to the differences due to sex, as shown in Table 3, men reported values significantly higher than women on the scales Rejection to proximity, Modern heterosexism, and Pathologizing of homosexuality; the opposite occurred on the scale Support.

Table 3

Differences due to Sex

	Woi	men	Men				
Variable	M	SD	M	SD	t	d.f.	p
Rejection of proximity	1.80	0.72	2.48	0.94	-7.46	249.57	<. 001
Support	4.82	0.76	4.10	1.04	7.31	256.80	<. 001
Modern heterosexism	3.33	0.93	3.95	0.92	-6.23	359	<. 001
Pathologizing of homosexuality	1.67	0.72	2.35	1.06	-6.75	238.25	<. 001

In relation to the differences due to interpersonal contact, 35% of the participants answered "yes", 31% answered "no", and 32% "do not know". The participants who reported not knowing whether they had lesbian or gay friends were considered as not having interpersonal contact with lesbians and gay men. The same pattern of differences between the scales' means (Table 4) already observed for

sex was now observed for interpersonal contact. Hence, the participants who did not have interpersonal contact with lesbians and gay men obtained values significantly higher than their counterparts with interpersonal contact on the scales Rejection of proximity, Modern heterosexism, and Pathologizing of homosexuality; the opposite occurred for the scale Support.

Table 4
Differences due to Interpersonal Contact with Lesbians and Gay Men

Variable	No co	No contact		Con	tact	4	1.0	
	\overline{M}	SD		M	SD	l	d.f.	p
Rejection of proximity	2.27	0.90		1.71	0.73	-6.30	311.60	< 0.001
Support	4.40	0.96		4.77	0.91	3.59	366	< 0.001
Modern heterosexism	3.76	0.96		3.23	0.89	-5.06	353	< 0.001
Pathologizing of homosexuality	2.07	0.97		1.67	0.74	-4.34	320.64	< 0.001

Discussion

The process of development and preliminary validation of an instrument to evaluate different types of attitudes toward lesbians and gay men was presented in this paper. The Multidimensional Scale of Attitudes Toward Lesbians and Gay Men is composed of three negative factors (Pathologizing of homosexuality, Rejection of proximity, and Modern heterosexism) and one positive factor (Support).

Pathologizing of homosexuality refers to a traditional attitude of moral condemnation and medicalization of homosexuality, still currently observable (Carneiro, 2006; "Recusa de Dádivas", 2009; Sanches, 2009). Rejection of proximity is a classical manifestation of prejudice that is related to the rejection of/avoidance to being with lesbians and gay men in diverse social circumstances and with the manifestation of negative emotions toward this population (Allport, 1954/1997; Lacerda et al., 2002; Marinho et al., 2004; Meertens & Pettigrew, 1999; Pereira et al., 2009; Pettigrew & Meertens, 1995; Quiles del Castillo et al., 2003).

Modern heterosexism includes items related to modern homonegativity (Morrison et al., 2005; Morrison & Morrison, 2002) and which are common to other contemporary

prejudices (Gaertner & Dovidio, 2000; Glick & Fiske, 2001; McConahay, 1986; Swim et al., 1995; Tougas et al., 1995). Opinions related to marriage among same-sex individuals, homosexual parenting and the visibility/expression of lesbian and gay identities are included in this subscale (Biernat et al., 1996; Hegarty, 2006; Herek, 2007; Moreno & Bodenhausen, 2001; Morin, 1997).

The initial prediction that the instrument would evidence three types of negative attitudes toward lesbians and gay men was only partially confirmed. The EFA indeed evidenced three types of hypothesized negative attitudes but a factor of a positive nature also emerged. This factor gathered items that belonged to the category modern heterosexism. Such items generally question the need for a movement to fight for equal rights for lesbians and gay men and the desirability of making visible one's homosexual orientation. Contrary to what was expected, these items did not load the factor Modern heterosexism and grouped into a separate dimension. In fact, support for lesbian and gay rights is currently part of a range of attitudes toward this population. Hence, even though lesbians and gay men are still victims of prejudice and discrimination (Comissão Europeia, 2009; European Commission, 2008; Haas et al., 2011; Herek, 2009; Marshal et al., 2011; Nogueira & Oliveira, 2010), progress

has been observed in such attitudes (Andersen & Fetner, 2008; Carneiro & Menezes, 2007; Costa et al., 2010). One cannot disregard that the fact that this study was conducted in a time of intense political debate in Portugal, concerning marriage among same-sex individuals, may have contributed to the factor Support to emerge. In addition to negative attitudes, Massey (2009) also identified positive attitudes in his multidimensional conceptualization of attitudes toward lesbians and gay men. One such positive attitude referred to the valorization of the achievements of the gay movement. Using the instrument proposed by Massey, Costa et al. verified that this positive attitude was part of the spectrum of attitudes toward lesbians and gay men in a Portuguese sample. Therefore, the existence of this type of attitude does not contradict this study's assumptions. On the contrary, it indicates the complexity and multiplicity of contemporary attitudes toward lesbians and gay men (Gato et al., 2011).

In regard to the scale's reliability, the factors present high levels of internal consistency. The factors are statistically significant in their correlations and in the expected direction; moreover, the two most traditional attitudes show the highest correlation. The differential study also provided evidence of the instrument's construct validity. Consistently with the literature (Bowen & Bourgeois, 2001; European Commission, 2007; Evans, 2001; Herek & Capitanio, 1996; Iraklis, 2010; Kite & Whitley, 1996; Lemm 2006; Sakalli, 2002), women and those reporting interpersonal contact with lesbians and gay men endorsed less negative attitudes than men and those with no interpersonal contact with this population.

Conclusions

The analysis of this study's results should take into account some methodological limitations. First, a non-representative sample of the Portuguese population was used. Since less than 10% of the Portuguese population acquired a bachelor's degree (Instituto Nacional de Estatística [INE], 2002), the sample clearly differs from the general population.

Secondly, the sexual orientation of the participants was unknown. As non-heterosexual individuals are more likely to hold less stereotyped and hostile attitudes against their counterparts, the presence of lesbian and gay participants may have reduced the magnitude of differences observed in the attitudes due to one's sex and interpersonal contact. We should note, however, that while this limitation increases the probability of a type 2 error, it does not invalidate the results.

Thirdly, the fact that we classified the participants who did not know whether they had non-heterosexual friends as not having interpersonal contact with this population should also be considered a limitation. We note that the relationship between interpersonal contact and attitudes is probably reciprocal. If on the one hand, having non-heterosexual friends might facilitate deconstruction of stereotypes and

diminish prejudice, on the other hand, people who have gay and/or lesbian friends can, in turn, be more open and willing to establish social relationships regardless of the interlocutors' sexual orientation. Gay men and lesbians themselves may have an active role in this process, preferring to reveal their orientation to people they perceive to be less biased.

Finally, the presented factor structure needs confirmation in a different sample. Further studies should include confirmatory factor analysis of the instrument. The use of the Multidimensional Scale of Attitudes Toward Lesbians and Gay Men in other Portuguese-speaking countries should be preceded by semantic adaptation or rewording and its psychometric qualities should be evaluated by analyzing invariance (multi-group confirmatory factor analysis).

Considering that the coexistence of several types of attitudes toward lesbians and gay men can be better captured with instruments of a multidimensional nature, this multidimensional scale is an instrument with good psychometric characteristics that can be used with this purpose in mind.

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Received: Jan. 15th 2011 Ist revision: May 19th 2011 Approved: Sept. 18th 2011