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## ORIGINAL ARTICLE

# Sexism and sexual risk behavior in adolescents: Gender differences



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### KEYWORDS

Adolescence;  
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Ex post facto study

**Abstract** *Background/Objective:* This study examines whether there are differences in the maintenance of ambivalent sexist beliefs on the basis of gender and sexual experience in adolescents. The study also investigates whether the sexist beliefs themselves are linked to sexual risk behaviors. *Method:* A representative sample of 2,703 Spanish adolescents was carried out in public and private secondary schools, with an age range of 14 to 20 years old ( $M = 15.89$ ;  $SD = 1.29$ ). *Results:* Males maintain more hostile, benevolent and ambivalent sexist beliefs compared to females. Sexual experience (both coital and non-coital) is linked to a greater degree of hostile and benevolent sexist beliefs, but only within the male group. In males, greater benevolent sexism is linked to vaginal sex initiation at an earlier age, while greater hostile sexism is linked to a lower proportion of condom use. In females, greater hostile sexism is linked to a greater number of sex partners. *Conclusions:* It is necessary to include specific actions on sexist beliefs in programs for the prevention of sexually transmitted infections and HIV.

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### PALABRAS CLAVE

Adolescencia;  
sexismo;  
conducta sexual;  
VIH;  
estudio ex post facto

## Sexismo y conducta sexual de riesgo en adolescentes: diferencias en función del género

**Resumen** *Antecedentes/Objetivo:* Se examina si existen diferencias en el mantenimiento de creencias sexistas ambivalentes en función del género y de la experiencia sexual en adolescentes. Además, se investiga si las propias creencias sexistas se asocian con la emisión de

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comportamientos sexuales de riesgo. *Método:* Se llevó a cabo en una muestra representativa de 2.703 adolescentes españoles procedentes de centros de Secundaria públicos y privados con edades entre 14 y 20 años ( $M = 15,89$ ;  $DT = 1,29$ ). *Resultados:* Los varones mantienen más creencias sexistas hostiles, benevolentes y ambivalentes que las mujeres. La experiencia sexual (coital y no coital) se asocia con una mayor adhesión a las creencias sexistas hostiles y benevolentes, pero sólo en el grupo de varones. En varones, un mayor sexismo benevolente se asocia con una edad de inicio sexual vaginal más temprana, mientras que un mayor sexismo hostil con una menor proporción en el uso del preservativo. En mujeres, un mayor sexismo hostil se asocia con un mayor número de parejas sexuales. *Conclusiones:* Existe la necesidad de incluir la intervención específica sobre creencias sexistas en programas de prevención de infecciones de transmisión sexual y VIH.

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Each day around the world, more than one million people contract a Sexually Transmitted Infection (STI), which represents a serious public health problem (World Health Organization WHO, 2016b). In Spain, STI incidence rates have increased in recent years. Specifically, cases of chlamydia have tripled and cases of gonorrhoea have doubled in the past five years, affecting young people between the ages of 15 and 34 to a greater extent (Ministerio de Sanidad, Servicios Sociales e Igualdad MSSSI, 2017). In the specific case of HIV infections, in Spain, the overall rate of new HIV infections diagnosed is higher than the European Union average. Of the total number of new cases of HIV diagnosed in 2015, 55.8% occurred in young people aged between 15 and 34, and sexual contact represents the main mode of transmission (Ministerio de Sanidad, Servicios Sociales e Igualdad MSSSI, 2016). Therefore, ensuring that adolescents engage in safe sexual practices would reduce the spread of STIs/HIV and unwanted pregnancies. To this end, the global strategy of the health sector against STIs 2016-2021 highlights the need to intervene in the prevention of sexual risk behaviors, taking into account a gender perspective, in order to counteract the effects of gender-based inequality and discrimination (World Health Organization WHO, 2016a).

Consistent and correct condom use is one of the most effective forms of prevention against STIs/HIV and unwanted pregnancies (UNAIDS, 2016). Despite this, several studies demonstrate that condoms are used inconsistently by adolescents (Espada, Morales, & Orgilés, 2014; García-Vega, Menéndez, Fernández, & Cuesta, 2012). For example, a study conducted among Spanish adolescents reveals that that condoms are used inconsistently and that females use them less frequently than males (Teva, Bermúdez, Ramiro, & Ramiro-Sánchez, 2013). Furthermore, starting sexual relations at an early age and having a greater number of sex partners are considered sexual risk behaviors for STIs/HIV (Fernandes de Araújo, Teva, & Bermúdez, 2014; Teva, Bermúdez, & Buela-Casal, 2011). In this sense, certain studies show differences according to gender, such as that males engage in sexual behavior at an earlier age (Ramiro-Sánchez, Ramiro, Bermúdez, & Buela-Casal, 2018; Teva et al., 2013) and have a greater number of sex partners (Teva, Bermúdez, & Buela-Casal, 2009). Furthermore, females have less nego-

tiation power in the case of condom use, less self-efficacy to decline safe sex and less power when making decisions of a sexual nature (Bermúdez, Castro, Gude, & Buela-Casal, 2010; Bermúdez, Ramiro, Sierra, & Buela-Casal, 2013; Crosby et al., 2013; Ramiro, Bermúdez, & Buela-Casal, 2013). A possible explanation for the differences that exist between males and females in terms of sexual behavior is the existence of traditional gender roles. In fact, several studies find positive associations between adherence to traditional gender roles and sexual risk behaviors and beliefs, such as inconsistent condom use, less self-efficacy when using condoms or negative attitudes towards their use, both in males and females (De Meyer et al., 2014; Grose, Grabe, & Kohfeldt, 2014; Lotfi, Ramezani, Salehifar, & Dworkin, 2016; Santana, Raj, Decker, La Marche, & Silverman, 2006).

The theory of ambivalent sexism (Glick & Fiske, 1996) states that the tension between male social domination and the necessary interdependence towards women, in order to maintain intimate relations, produces two forms of sexist ideology that translate into ambivalent sexism (AS). On one hand, hostile sexism (HS) that entails attitudes that emphasize the inferiority and weakness of women compared to men. These hostile attitudes towards women prevent men from satisfying their relational needs, and there is thus a second series of attitudes that form benevolent sexism (BS) to address these intimate needs. BS is a series of attitudes based on a stereotypical and limited vision of women, but with a positive emotional tone towards the recipient. This positive emotional tone is achieved by emphasizing the protection given by men to women and heterosexual intimacy as key elements of romantic relationships. Thus, HS and BS work together to maintain gender inequality by shaping the structure of heterosexual relationships and limiting the extent to which women can gain social power (Glick & Fiske, 1996).

The existence of sexist attitudes among Spanish adolescents has been corroborated by certain studies (Carrera-Fernández, Lameiras-Fernández, Rodríguez-Castro, & Vallejo-Medina, 2013; De Lemus, Castillo, Moya, Padilla, & Ryan, 2008; Ferragut, Blanca, Ortiz-Tallo, & Bendayan, 2017). Some studies show that adolescent males

present a higher degree of HS than females and females present a higher degree of BS than males (De Lemus et al., 2008; De Lemus, Moya, & Glick, 2010; Silván-Ferrero & Bustillos, 2007). However, although other studies find similar results in gender differences in the case of HS, they find no differences between males and females in terms of BS (Montañés, Megías, De Lemus, & Moya, 2015; Viejo, Ortega-Ruiz, & Sánchez, 2015) or they find that males present a higher degree of BS (Ferragut, Blanca, & Ortiz-Tallo, 2013; Rodríguez, Lameiras, Carrera, & Fálde, 2010).

Within the context of romantic relationships, the existence of sexist attitudes among males and females has been linked to damaging forms of intimate interaction between adolescents (Hébert, Blais, & Lavoie, 2017; Moyano, Monge, & Sierra, 2017; Sánchez, Muñoz-Fernández, & Vega-Gea, 2017; Vega-Gea, Ortega-Ruiz, & Sánchez, 2016), as more positive attitudes towards partner violence (García-Cueto et al., 2015), greater emotional dependence in the relationship (Pradas & Perles, 2012) and poorer quality in romantic relationships (Viejo et al., 2015). With regards to research into the maintenance of sexist beliefs and sexual risk behaviors in Spanish adolescents, little studies are available. In other countries, studies have been conducted among adult women belonging to racial minorities and university women, which show the link between greater exposure and perception to sexism and greater sexual risk behaviors (Choi, Bowleg, & Neilands, 2011; Fitz and Zucker, 2014).

Therefore, in terms of sexual relations, the existence of sexist attitudes could be linked to sexual risk behaviors. On one hand, it is more likely for hostile sexist males to neglect to use condoms during sexual relations, in order to exercise the control and power that they hold in the relationship as men (Glick & Fiske, 1996). Furthermore, the positive emotional tone associated with BS for females, could cause males who present a higher degree of BS to initiate sexual relations at an earlier age and to have a greater number of sex partners. Hostile sexist females, on the other hand, may agree not to use a condom in order to fulfill their role of submission and accommodate the desires of the person who holds the decision-making power (Gavey, 2005). In the case of BS, given that it provides females with benefits such as male protection (Glick & Fiske, 1996), females who show greater BS could be expected to engage in sexual relations at an earlier age and have a greater number of sex partners. In light of the above, the objectives of this ex post facto study (Montero & León, 2007) were to ascertain whether there are differences in the ambivalent sexist beliefs of Spanish adolescents: (1) on the basis of gender and (2) sexual experience; and (3) whether actual sexist beliefs are associated with sexual risk behaviors in adolescence, such as an early age of the first vaginal sexual contact, the number of lifetime sex partners and the proportion of condom use. All of the above will make it possible to obtain relevant information for the development of STI/HIV prevention or sex education programs, taking into account a gender and including specific intervention in terms of gender equality, as recommended by the World Health Organization (World Health Organization WHO, 2016a).

## Method

### Participants

It was a representative sample of 2,703 Spanish adolescents from public (58.6%) and private (41.4%) secondary schools from the 17 Spanish autonomous communities. Ages ranged from between 14 and 20 years old ( $M = 15.89$ ;  $SD = 1.29$ ). In total, 49.9% of participants were males ( $M = 15.95$ ;  $SD = 1.30$ ) and 51.1% females ( $M = 15.83$ ;  $SD = 1.28$ ). Overall, 33% of the adolescents had never had a partner, 41.5% had had one in the past and 25.2% had a partner at present. With regards to sexual experience, 27.3% of participants reported having no experience, 27% had had penetrative sexual contact and 45.7% non-penetrative sexual contact.

### Instruments

Questionnaire on socio-demographic data and sexual behavior (Teva et al., 2009). It included socio-demographic aspects (gender, age and type of school [public/private]) and aspects regarding the sexual relations maintained by adolescents. In terms of sexual relations, there were questions on relationship experience (never had a partner, has had a partner in the past or has a partner at present), and sexual experience (never had sexual experience, has had non-penetrative sexual experience such as kissing, fondling or touching, or has had penetrative sexual experience). Adolescents who have had penetrative sexual contact answered questions such as the age of their first vaginal sexual contact and the number of lifetime sex partners with whom they have had penetrative vaginal sex. With regards to the past two months, they were asked about the number of times they have had penetrative vaginal sexual contact; the number of different partners with whom they have had penetrative vaginal sexual contact and the number of times they used a condom.

Inventory of Ambivalent Sexism for Adolescents (ISA; De Lemus et al., 2008). An instrument consisting of 20 items to evaluate AS, divided into two subscales measuring HS and BS. With a response format from 1 (*strongly disagree*) to 6 (*strongly agree*), high scores on this scale reflect greater sexist beliefs. The first 10 items evaluated HS (for example, "boys should control with whom their girlfriends interact"), and the remaining 10 items evaluated BS (for example, "girls should be loved and protected by boys"). De Lemus et al. (2008) reported an internal consistency of  $\alpha = .81$  for the AS scale,  $\alpha = .84$  for the HS subscale and  $\alpha = .77$  for the BS subscale. In this study, an internal consistency of  $\alpha = .88$  for the AS scale,  $\alpha = .83$  for the HS subscale and  $\alpha = .81$  for the BS subscale was obtained.

### Procedure

A stratified random sampling was carried out, taking into account the 17 Spanish autonomous communities and the type of school (public and private). Sample size was established with a 97% confidence level and a 3% estimation

**Table 1** Means of the variables hostile sexism, benevolent sexism and ambivalent sexism, gender differences.

	Males (n = 1,350)		Females (n = 1,353)		Comparison by gender			Total (N = 2,703)	
	M	SD	M	SD	t(df)	d	95% CI	M	SD
Hostile sexism	3.05	0.88	2.50	0.79	17.146(2701)**	0.66	[0.58, 0.74]	2.77	0.88
Benevolent sexism	3.45	0.92	3.10	0.95	9.614(2701)**	0.37	[0.29, 0.46]	3.27	0.95
Ambivalent sexism	3.25	0.79	2.80	0.78	14.880(2701)**	0.57	[0.50, 0.65]	3.02	0.81

Note. SD = Standard deviation; t = value of the t-student statistical; df = degrees of freedom; d = Cohen's d; CI = confidence interval. \*p < .05, \*\* p < .01.

error. The schools were selected randomly from the national register of non-university teaching centers (Ministerio de Educación, Cultura y Deporte, 2016). Specifically, one public school and one private school was selected from each of the 17 Spanish autonomous communities, except in the autonomous community of Andalusia where two public schools were selected due to the high number of adolescents attending school there, and with the aim of ensuring the representativeness of the sample in said autonomous community. The schools selected were then contacted by email and telephone in order to request their collaboration. If a school declined to participate, we selected another school at random. The rejection rate of the schools was 40.6%. Adolescents completed the questionnaires during school hours. The participants all received the same instructions and they were informed that their participation was voluntary and that their responses were confidential and anonymous. The adolescents' informed consent by legal guardians and/or parents was obtained from the directors of the schools prior to the assessment. The study has the approval of the Ethics Committee in Human Research of the university of origin of the authors.

## Results

The means of the HS, BS and AS scores were first calculated for males and females. Furthermore, an analysis was

carried out to ascertain whether there were differences in such variables on the basis of gender. Statistically significant differences were found for the three variables evaluated (see Table 1).

The variance was then analyzed to determine whether there were differences in HS, BS and AS based on the sexual experience variable, considering three levels in this study (no sexual experience, non-penetrative sexual experience and penetrative sexual experience). Analyses were carried out separately for males and females, due to the differences encountered previously. Statistically significant differences were found in the three variables evaluated in the male group, but not in the female group (see Table 2).

Subsequently, in order to establish the levels corresponding to the differences in the male group with respect to sexual experience, Bonferroni's multiple comparison test was employed. The results are shown in Table 3.

Finally, a linear regression analysis was carried out in order to determine the influence of the predictor variables (HS and BS) on the dependent variables: age of the first vaginal sexual contact, number of lifetime sex partners and proportion of condom use in the past two months. Three linear regressions were carried out for the male group and three for the female group, in which the method of selecting variables to include in the model was introduction. With regards to the age of the first vaginal sexual contact, the model was significant for males ( $F_{(2, 345)} = 4.72, p = .009$ ,

**Table 2** Means and mean difference in hostile sexism, benevolent sexism and ambivalent sexism according to sexual experience in males and females.

	No sexual experience		Non-penetrative sexual experience		Penetrative sexual experience		Comparison by sexual experience			
	M	SD	M	SD	M	SD	F(df)	d	95% CI	
<b>Males</b>										
Hostile sexism	2.81	0.90	3.10	0.85	3.21	0.87	20.76(2; 1347)**	-0.33	[-0.46, -0.20]	
Benevolent sexism	3.29	0.96	3.46	0.89	3.58	0.92	9.35(2; 1347)**	-0.19	[-0.32, -0.06]	
Ambivalent sexism	3.05	0.82	3.28	0.76	3.40	0.78	18.73(2; 1347)**	-0.29	[-0.42, -0.16]	
<b>Females</b>										
Hostile sexism	2.42	0.80	2.52	0.78	2.55	0.81	2.927(2; 1350)	-0.12	[-0.25, 0.00]	
Benevolent sexism	3.07	0.93	3.10	0.97	3.14	0.96	0.517(2; 1350)	-0.03	[-0.16, 0.10]	
Ambivalent sexism	2.75	0.78	2.81	0.79	2.84	0.79	1.636(2; 1350)	-0.09	[-0.21, 0.04]	

Note. SD = standard deviation; F = value of the F-statistic of the ANOVA; df = degrees of freedom; d = Cohen's d; CI = confidence interval. \*p < .05, \*\* p < .01.

**Table 3** Mean difference in hostile sexism, benevolent sexism and ambivalent sexism according to sexual experience, among the three levels: No Sexual Experience (NSE), Non-Penetrative Sexual Experience (NPS) and Penetrative Sexual Experience (PSE), in males.

	Males			
	Mean Diff.	<i>p</i>	<i>d</i>	95% CI
<i>Hostile sexism</i>				
NSE-NPS	-0.28	<.001	-0.33	[-0.46, -0.20]
NSE-PSE	-0.40	<.001	-0.45	[-0.60, -0.30]
NPS-PSE	-0.12	.099	-0.13	[-0.26, 0.00]
<i>Benevolent sexism</i>				
NSE-NPS	-0.17	.010	-0.19	[-0.32, -0.06]
NSE-PSE	-0.29	<.001	-0.31	[-0.46, -0.16]
NPS-PSE	-0.11	.176	-0.13	[-0.26, 0.00]
<i>Ambivalent sexism</i>				
NSE-NPS	-0.22	<.001	-0.29	[-0.42, -0.16]
NSE-PSE	-0.34	<.001	-0.44	[-0.59, -0.29]
NPS-PSE	-0.11	.064	-0.16	[-0.29, -0.03]

Note. Mean Diff. = Mean Difference; *p* = *p*-value; *d* = Cohen's *d*; CI = confidence interval.

$R^2 = .027$ ) but not for females ( $F_{(2, 363)} = 0.68, p = .503, R^2 = .004$ ). In relation to the number of lifetime sex partners, the model was significant for males ( $F_{(2, 345)} = 3.48, p = .032, R^2 = .020$ ) and also for females ( $F_{(2, 363)} = 3.37, p = .035, R^2 = .018$ ). Finally, the predictive model of the proportion of condom use in the past two months was significant for the male group ( $F_{(2, 345)} = 5.85, p = .003, R^2 = .042$ ) but not for the female group ( $F_{(2, 363)} = 1.30, p = .272, R^2 = .008$ ). The standardized coefficients, *t*-values and the tolerance index, to take into account the possible effect of multicollinearity, of HS and BS in linear regressions are shown in Table 4.

## Discussion

Regarding the first objective of the study, the results show that males report greater hostile, benevolent and ambivalent sexist beliefs compared to females. In comparison with other studies carried out among Spanish adolescents, the results are in line with those found by Ferragut et al. (2013) and Rodríguez et al. (2010). However, although other studies coincide in that males report a greater degree of HS, they do not find differences in BS on the basis of gender (Montañés et al., 2015; Viejo et al., 2015) or they find that females report a greater degree of BS than males (De Lemus et al., 2008, 2010; Silván-Ferrero & Bustillos, 2007). It is worth noting that the advantage of this study compared to those mentioned above is that the sample is representative of the Spanish adolescent population as opposed to the incidental samples of the other studies.

A second objective was to discover whether there are differences in sexist beliefs depending on sexual experience. Within the male group, those who have had some type of sexual experience (penetrative and non-penetrative) reported a greater degree of HS, BS and AS compared to those who have had no sexual experience. The same cannot be said for the female group, in which no differences were found in any of the types of sexism (HS, BS and AS)

based on sexual experience. According to the theoretical approach proposed by Glick and Hilt (2000), sexual interdependence appears during adolescence. Therefore, the first intimate encounters during this stage of development could encourage BS, both in males and females, maintaining the competitive gender differentiation that is characteristic of HS. This approach could be consistent with the results of this study within the male group, given that HS would coexist with BS, enabling them to fulfill their desires of engaging in intimate relations during adolescence. In Spain, studies have been conducted among adolescents to investigate the connection between sentimental experience - including both sexual experience and the number and quality of romantic relationships - and the existence of sexist beliefs. The results of such studies strengthen the hypothesis that sentimental experience in adolescence increases sexism, particularly of the benevolent type, among adolescents (De Lemus et al., 2010; Montañés et al., 2015). Nevertheless, the results found within the female group of this study are not in line with the postulations of Glick and Hilt (2000) or with the results of studies on sentimental experience and sexism in Spain (De Lemus et al., 2010; Montañés et al., 2015). In relation to sexist beliefs in females, certain studies reveal that girls socialize from early ages, at least through play and the media (Holland & Eisenhart, 1990; Martínez & Vélez, 2006) with traditional gender identities, fulfilling their role of submission and passivity in the presence of men (Seabrook, Ward, Cortina, Giaccardi, & Lippman, 2017), and supporting benevolent romantic ideals by searching for a man who treats them with chivalry, care and protection (Rudman & Glick, 2008). Therefore, the fact that there were no differences in the sexist beliefs of the female adolescents in this study based on their sexual experience could be explained because females acquire gender identities from a very young age that foster both HS and BS, without the need for this to change upon the initiation of sentimental and sexual relations.

**Table 4** Standardized coefficients and t-values of hostile sexism and benevolent sexism in the linear regressions of the age of the first vaginal sexual contact, of the number of lifetime sex partners and of the proportion of condom use in the past two months.

	Age first vaginal sexual contact						No. of lifetime sex partners						Proportion of condom use in past 2 months					
	Males			Females			Males			Females			Males			Females		
	Beta	t	Tolerance	Beta	t	Tolerance	Beta	t	Tolerance	Beta	t	Tolerance	Beta	t	Tolerance	Beta	t	Tolerance
Hostile Sexism	0.003	0.04	0.74	-0.011	-0.17	0.67	0.062	1.00	0.74	0.164	2.58**	0.67	-0.232	-3.38**	0.76	-0.103	-1.45	0.64
Benevolent Sexism	-0.165	-2.68**	0.74	-0.054	-0.85	0.67	0.099	1.61	0.74	-0.079	-1.25	0.67	0.080	1.17	0.76	0.021	0.29	0.64

Note. Beta = Standardized regression coefficient; t = value of the t-student statistical. \*  $p < .05$ , \*\*  $p < .01$ .

The third objective was to determine whether sexual risk behaviors such as the age of vaginal sex initiation, the number of sex partners and the proportion of condom use are linked to the maintenance of hostile and benevolent sexist beliefs, both in males and females. The results obtained demonstrate that the males who engage in vaginal sex at an earlier age are those who report a greater level of BS. This result could be explained due to the fact that, as claimed by Glick and Hilt (2000), adolescent males need to display their benevolent beliefs in order to fulfill their desires and maintain intimate relations. Therefore, those who maintain benevolent sexist beliefs to a greater extent are those who engage in vaginal sexual contact at an earlier age. Furthermore, a study conducted among Spanish adolescents (Montañés, De Lemus, Moya, Bohner, & Megías, 2013) demonstrates that females find benevolent sexist males more attractive, and therefore the benevolent sexist beliefs of males could facilitate an early sexual initiation.

This study also shows that the males who report a lower proportion of condom use are those who maintain HS to a greater extent. A possible explanation for this is that, with the objective of conforming to their traditional gender roles and in order to exercise power over women in the decision-making process, including in sexual relations (Martínez-Catena & Redondo, 2017; Pulerwitz, Gortmaker, & DeJong, 2000), the most hostile sexist males use condoms less frequently during sexual relations. In fact, a positive association has been identified between traditional gender ideology and sexual risk behaviors and beliefs, such as inconsistent condom use, less self-efficacy when using condoms or negative attitudes towards their use (De Meyer et al., 2014; Grose et al., 2014; Lotfi et al., 2016; Santana et al., 2006).

Another of the results found in the study has been that, within the female group, those who reported having a greater number of lifetime partners also reported a greater degree of HS. This result contrasts with the initial hypothesis which predicted that support of BS among females would be linked to a greater number of sex partners. In fact, at first, we could think that this result is contradictory to the hostile sexist ideology, as women with a traditional ideology would be expected to behave in accordance with their passive role in sexual relations (Vannier & O'Sullivan, 2012). However, Montañés et al. (2013) have found that Spanish male adolescents describe females who report a high degree of HS as more likable and attractive compared to those with a low rate of HS. This may explain why adolescent females maintain greater HS have a greater number of sex partners. Furthermore, traditional gender ideology or HS also entails submission and acceptance of the power held by males in the decision-making process compared to females (Gavey, 2005). Therefore, the hostile sexist beliefs of females could be linked to less self-efficacy to refuse sexual relations, which would imply a greater number of sex partners. Nevertheless, the initial hypotheses on the link between BS and an early age of sexual initiation, and between HS and a lower proportion of condom use, within the female group, are not present in this study. From a cognitive perspective, these results could indicate that the sexual beliefs of females are not sufficient to explain their sexual risk behavior, and it is possible that other cognitive variables, such as

irrational beliefs regarding romantic relationships (Coleman & Ganong, 1987) or the type of attitudes towards love (Zeng, Pan, Zhou, Yu, & Liu, 2016) influence the spread of sexual behaviors.

This study is an important contribution to research on sexism and sexual behavior in adolescents, but it is not without its limitations which should be mentioned and studied in future research. It is worth mentioning that the adolescents surveyed were of Spanish nationality, and therefore the results and conclusions drawn from the study on sexism and adolescent sexual behavior should not be extrapolated to other populations given that, as stated in certain studies, the cultural values of society influence both sexist beliefs (Glick & Fiske, 1996) and sexual behaviors (Bermúdez, Castro, & Buela-Casal, 2011). Therefore, as a future line of research, it would be advisable for other researchers to ascertain whether the results of this study also apply within other cultural environments.

In general, the results are indicative of the importance of sexist beliefs in relation to sexual risk behaviors, particularly in the case of males. It is therefore recommended to include specific intervention and/or prevention of sexist beliefs in STI/HIV prevention programs, taking into account a gender perspective. Such programs should be conducted at an early age, before adolescents have their first coital relationship (Reis, Ramiro, Matos, & Dínez, 2013).

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## References

- Bermúdez, M. P., Castro, A., & Buela-Casal, G. (2011). Psychosocial correlates of condom use and their relationship with worry about STI and HIV in native and immigrant adolescents in Spain. *Spanish Journal of Psychology*, *14*, 746–754. [http://dx.doi.org/10.5209/rev\\_SJOP.2011.v14.n2.22](http://dx.doi.org/10.5209/rev_SJOP.2011.v14.n2.22)
- Bermúdez, M. P., Castro, A., Gude, F., & Buela-Casal, G. (2010). Power relationship on the couple and double standard as predictors of the risk of sexually transmitted infections (STI) and HIV: Multicultural and gender analysis. *Current HIV Research*, *8*, 172–178.
- Bermúdez, M. P., Ramiro, M. T., Sierra, J. C., & Buela-Casal, G. (2013). Construcción de un índice de riesgo para la infección por el VIH y su relación con la doble moral y el poder diádico en adolescentes. *Anales de Psicología*, *29*, 917–922.
- Carrera-Fernández, M. V., Lameiras-Fernández, M., Rodríguez-Castro, Y., & Vallejo-Medina, P. (2013). Bullying among Spanish secondary education students: The role of gender traits, sexism, and homophobia. *Journal of Interpersonal Violence*, *28*, 2915–2940. <http://dx.doi.org/10.1177/0886260513488695>
- Choi, K. H., Bowleg, L., & Neilands, T. B. (2011). The effects of sexism, psychological distress, and difficult sexual situations on U.S. women's sexual risk behaviors. *AIDS Education and Prevention*, *23*, 397–411. <http://dx.doi.org/10.1521/aeap.2011.23.5.397>
- Coleman, M., & Ganong, L. H. (1987). Sex, sex-roles, and irrational beliefs. *Psychological Reports*, *61*, 631–638.
- Crosby, R. A., Diclemente, R. J., Salazar, L. F., Wingood, G. M., McDermott-Sales, J., Young, A. M., & Rose, E. (2013). Predictors of consistent condom use among young African American women. *AIDS and Behavior*, *17*, 865–871. <http://dx.doi.org/10.1007/s10461-011-9998-7>
- De Lemus, S., Castillo, M., Moya, M., Padilla, J. L., & Ryan, E. (2008). Elaboración y validación del Inventario de Sexismo Ambivalente para Adolescentes. *International Journal of Clinical and Health Psychology*, *8*, 537–562.
- De Lemus, S., Moya, M., & Glick, P. (2010). When contact correlates with prejudice: Adolescents' romantic relationship experience predicts greater benevolent sexism in boys and hostile sexism in girls. *Sex Roles*, *63*, 214–225. <http://dx.doi.org/10.1007/s11199-010-9786-2>
- De Meyer, S., Jaruseviciene, L., Zaborskis, A., Decat, P., Vega, B., Cordova, K., Temmerman, M., Degomme, O., & Michielsen, K. (2014). A cross-sectional study on attitudes toward gender equality, sexual behavior, positive sexual experiences, and communication about sex among sexually active and non-sexually active adolescents in Bolivia and Ecuador. *Global Health Action*, *7*. <http://dx.doi.org/10.3402/gha.v7.24089>. Advance Online Publication
- Espada, J. P., Morales, A., & Orgilés, M. (2014). Riesgo sexual en adolescentes según la edad de debut sexual. *Acta Colombiana de Psicología*, *17*, 53–60. <http://dx.doi.org/10.14718/ACP.2014.17.1.6>
- Fernandes de Araújo, L. F., Teva, I., & Bermúdez, M. P. (2014). Psychological and socio-demographic variables associated with sexual risk behavior for sexually transmitted infections/HIV. *International Journal of Clinical and Health Psychology*, *14*, 120–127. [http://dx.doi.org/10.1016/S1697-2600\(14\)70045-6](http://dx.doi.org/10.1016/S1697-2600(14)70045-6)
- Ferragut, M., Blanca, M. J., & Ortiz-Tallo, M. (2013). Psychological values as protective factors against sexist attitudes in preadolescents. *Psicothema*, *25*, 1–7. <http://dx.doi.org/10.7334/psicothema2012.85>
- Ferragut, M., Blanca, M. J., Ortiz-Tallo, M., & Bendayan, R. (2017). Sexist attitudes and beliefs during adolescence: A longitudinal study of gender differences. *European Journal of Developmental Psychology*, *14*, 32–43. <http://dx.doi.org/10.1080/17405629.2016.1144508>
- Fitz, C. C., & Zucker, A. N. (2014). Feminist with benefits: College women's feminist beliefs buffer sexual well-being amid hostile (not benevolent) sexism. *Psychology of Women Quarterly*, *38*, 7–19. <http://dx.doi.org/10.1177/0361684313504736>
- García-Cueto, E., Rodríguez-Díaz, F. J., Bringas-Molleda, C., López-Cepero, J., Páino-Quesada, S., & Rodríguez-Franco, L. (2015). Development of the Gender Role Attitudes Scale (GRAS) amongst young Spanish people. *International Journal of Clinical and Health Psychology*, *1*, 61–68. <http://dx.doi.org/10.1016/j.ijchp.2014.10.004>
- García-Vega, E., Menéndez, E., Fernández, P., & Cuesta, M. (2012). Sexuality, contraception and unsafe sexual behavior in adolescents. *International Journal of Psychological Research*, *5*, 79–87.
- Gavey, N. (2005). *Just sex? The cultural scaffolding of rape*. New York: Routledge.
- Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, *70*, 491–512.
- Glick, P., & Hilt, L. (2000). From combative children to ambivalent adults: The development of gender prejudice. In T. Eckes, & M. Trautner (Eds.), *Developmental social psychology of gender* (pp. 243–272). Mahwah, NJ: Lawrence Erlbaum.

- Grose, R. G., Grabe, S., & Kohfeldt, D. (2014). Sexual education, gender ideology, and youth sexual empowerment. *Journal of Sex Research, 51*, 742–753. <http://dx.doi.org/10.1080/00224499.2013.809511>
- Hébert, M., Blais, M., & Lavoie, F. (2017). Prevalence of teen dating victimization among a representative sample of high school students in Quebec. *International Journal of Clinical and Health Psychology, 17*, 225–233.
- Holland, D. C., & Eisenhart, M. A. (1990). *Educated in romance: Women, achievement, and college culture*. Chicago: University of Chicago Press.
- Lotfi, R., Ramezani, F., Salehifar, D., & Dworkin, S. L. (2016). Predictors of condom use among Iranian women at risk of HIV. *Archives of Sexual Behavior, 45*, 429–437. <http://dx.doi.org/10.1007/s10508-015-0603-4>
- Martínez, M. C., & Vélez, M. (2006). Valores de género en la educación de niñas y niños. Los juegos y juguetes. *Meridiam, 38*, 52–55.
- Martínez-Catena, A., & Redondo, S. (2017). Psychological treatment and therapeutic change in incarcerated rapists. *The European Journal of Psychology Applied to Legal Context, 9*, 41–49. <http://dx.doi.org/10.1016/j.ejpal.2016.11.001>
- Ministerio de Educación, Cultura y Deporte (2016). *Registro estatal de centros docentes no universitarios*. Retrieved from <https://www.educacion.gob.es/centros/home.do>.
- Ministerio de Sanidad, Servicios Sociales e Igualdad MSSSI (2016). *Vigilancia epidemiológica del VIH/sida en España. Actualización a 30 de junio de 2016*. Retrieved from <https://www.msssi.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/vigilancia/InformeVIH.SIDA.2016.pdf>.
- Ministerio de Sanidad, Servicios Sociales e Igualdad MSSSI (2017). *Vigilancia epidemiológica de las infecciones de transmisión sexual, 1995-2015*. Retrieved from <https://www.msssi.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/vigilancia/Vigilancia.ITS.1995.2015.pdf>.
- Montañés, P., De Lemus, S., Moya, M., Bohner, G., & Megías, J. L. (2013). How attractive are sexist intimates to adolescents? The influence of sexist beliefs and relationship experience. *Psychology of Women Quarterly, 37*, 494–506. <http://dx.doi.org/10.1177/0361684313475998>
- Montañés, P., Megías, J. L., De Lemus, S., & Moya, M. (2015). Influence of early romantic relationships on adolescents' sexism. *Revista de Psicología Social, 30*, 219–240. <http://dx.doi.org/10.1080/21711976.2015.1016756>
- Montero, I., & León, O. G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology, 7*, 847–862.
- Moyano, N., Monge, F. S., & Sierra, J. C. (2017). Predictors of sexual aggression in adolescents: Gender dominance vs. rape supportive attitudes. *The European Journal of Psychology Applied to Legal Context, 9*, 25–31. <http://dx.doi.org/10.1016/j.ejpal.2016.06.001>
- Pradas, E., & Perles, F. (2012). Relación del sexismo y dependencia emocional en las estrategias de resolución de conflictos de los adolescentes. *Quaderns de Psicologia, 14*, 45–60.
- Pulerwitz, J., Gortmaker, S. L., & DeJong, W. (2000). Measuring sexual relationship power in HIV/STD research. *Sex Roles, 42*, 637–660. <http://dx.doi.org/10.1023/A:100705150697>
- Ramiro, M. T., Bermúdez, M. P., & Buela-Casal, G. (2013). Power dynamics in adolescent couple relationships and risk of sexually transmitted infections and HIV. *Current HIV Research, 11*, 536–542.
- Ramiro-Sánchez, T., Ramiro, M. T., Bermúdez, M. P., & Buela-Casal, G. (2018). Analysis of coital and non-coital sexual behavior in adolescents: Spain, 2016. *Sexuality Research & Social Policy, http://dx.doi.org/10.1007/s13178-018-0317-1*. Advance Online Publication
- Reis, M., Ramiro, L., Matos, M. G., & Diniz, J. A. (2013). Nationwide survey of contraceptive and sexually transmitted infection knowledge, attitudes and skills of university students in Portugal. *International Journal of Clinical and Health Psychology, 13*, 127–137.
- Rodríguez, Y., Lameiras, M., Carrera, M., & Fálde, J. (2010). Evaluación de las actitudes sexistas en estudiantes españoles/as de educación secundaria obligatoria. *Psychologia: Avances de la Disciplina, 4*, 11–24.
- Rudman, L. A., & Glick, P. (2008). Love and romance. In L. A. Rudman, & P. Glick (Eds.), *The social psychology of gender* (pp. 204–230). New York: Guilford.
- Sánchez, V., Muñoz-Fernández, N., & Vega-Gea, E. (2017). Peer sexual cybervictimization in adolescents: Development and validation of a scale. *International Journal of Clinical and Health Psychology, 17*, 171–179.
- Santana, M. C., Raj, A., Decker, M. R., La Marche, A., & Silverman, J. G. (2006). Masculine gender roles associated with increased gender risk and intimate partner violence perpetration among young adult men. *Journal of Urban Health, 83*, 575–585.
- Seabrook, R. C., Ward, L. M., Cortina, L. M., Giaccardi, S., & Lippman, J. R. (2017). Girl power or powerless girl? Television, sexual scripts, and sexual agency in sexually active young women. *Psychology of Women Quarterly, 41*, 240–253. <http://dx.doi.org/10.1177/0361684316677028>
- Silván-Ferrero, M. P., & Bustillos, A. (2007). Benevolent sexism toward men and women: Justification of the traditional system and conventional gender roles in Spain. *Sex Roles, 57*, 607–614. <http://dx.doi.org/10.1007/s11199-007-9271-8>
- Teva, I., Bermúdez, M. P., & Buela-Casal, G. (2009). Characteristics of sexual behavior in Spanish adolescents. *Spanish Journal of Psychology, 12*, 471–484. <http://dx.doi.org/10.1017/S1138741600001852>
- Teva, I., Bermúdez, M. P., & Buela-Casal, G. (2011). Búsqueda de sensaciones sexuales, estilos de afrontamiento, estrés social y su relación con la conducta sexual adolescente. *Annals of Psychology, 27*, 35–46.
- Teva, I., Bermúdez, M. P., Ramiro, M. T., & Ramiro-Sánchez, T. (2013). Sexual behavior and adolescents. *Current HIV Research, 11*, 512–519.
- UNAIDS (2016). *Prevention Gap Report*. Retrieved from [http://www.unaids.org/sites/default/files/media\\_asset/2016-prevention-gap-report-en.pdf](http://www.unaids.org/sites/default/files/media_asset/2016-prevention-gap-report-en.pdf).
- Vannier, S. A., & O'Sullivan, L. F. (2012). Who gives and who gets: Why, when, and with whom young people engage in oral sex. *Journal of Youth Adolescence, 41*, 572–582. <http://dx.doi.org/10.1007/s10964-012-9745-z>
- Vega-Gea, E., Ortega-Ruiz, R., & Sánchez, V. (2016). Peer sexual harassment in adolescence: Dimensions of the Sexual Harassment Survey in boys and girls. *International Journal of Clinical and Health Psychology, 16*, 47–57.
- Viejo, C., Ortega-Ruiz, R., & Sánchez, V. (2015). Adolescent love and well-being: The role of dating relationships for psychological adjustment. *Journal of Youth Studies, 18*, 1219–1236. <http://dx.doi.org/10.1080/13676261.2015.1039967>
- World Health Organization WHO. (2016a). *Global health sector strategy on sexually transmitted infections 2016-2021*. Towards ending STIs. Retrieved from <http://apps.who.int/iris/bitstream/10665/246296/1/WHO-RHR-16.09-eng.pdf?ua=1>.



World Health Organization WHO. (2016b). *Nota descriptiva N° 110*,. Agosto de 2016 [Descriptive Note No. 110. August 2016]. Retrieved from <http://www.who.int/mediacentre/factsheets/fs110/es/>.

Zeng, X., Pan, Y., Zhou, H., Yu, S., & Liu, X. (2016). Exploring different patterns of love attitudes among Chinese college students. *PLoS ONE*, *11*, e0166410. <http://dx.doi.org/10.1371/journal.pone.0166410>