I'm just joking! Perceptions of sexist humour and sexist beliefs in a Latin American Context

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Abstract

Previous research has stated a relationship between sexist ideologies and humour

appreciation. However, most research has been done in North America and Europe. In

the present study, we aimed to approach in an exploratory way to the social perceptions

of sexist humour in Costa Rica. Data was gathered through an online survey, participants

(N = 323; 220 females) completed measures to characterize expressions of sexist humour.

The main measures included perceived funniness, frequency and means of exposure, and

perceived offensiveness, as well as completing the Ambivalent Sexism Inventory (ASI).

Overall, previous exposure to this kind of humour was remarkably high. No significant

differences were observed between women's and men's perceptions of the frequency,

means and places of exposure, but emotional and behavioural reactions to sexist humour

were gender-based. Women reported higher displeasure, more confrontation and felt

angrier and more offended than men when exposed to this type of humour. Data support

existing evidence of the relationship with sexist ideology. Specifically, hostile sexism was

found to be a significant predictor of perceived funniness and offensiveness of the sexist

jokes. An interaction effect between hostile sexism and the sex of participants was found,

showing that as hostile sexism increased, perceived offensiveness decreased, but more

rapidly for men. Results are discussed considering the practical implications and

limitations, as well as the need for more research in the Latin American context.

Keywords: sexist humour, sexism, ASI, gender stereotypes, social perceptions.

Introduction

Sexist humour is understood as a type of denigrating or disparaging humour that "demeans, insults, stereotypes, victimizes, and/or objectifies a person on the basis of his or her gender" (LaFrance & Woodzicka, 1998, p. 62). This paper focuses on humour which targets the female gender, its abilities or capacities, as it is more common for women to be the target of sexist humour than men (Bell et al., 2002). Even though humour can be used to denigrate individuals belonging to any social group, it is perceived as more threatening when it targets people belonging to historically oppressed groups (e. g., women, immigrants) than toward members of historically privileged groups (e. g., men, high status groups) (Schneider et al., 2002).

Research shows that disparaging sexist humour may allow for the expression of negative attitudes and the tolerance of violence against women. In this regard, Ford & Ferguson (2004) stated in their Prejudiced Norm Theory (PNT) that disparaging humour promotes a climate of tolerance for the expression of prejudice and discrimination, as it expands the limits of what is socially acceptable, becoming an outlet to show the prejudices that people or groups (ingroups) have towards others different from them (outgroups). In the case of sexist humour, this provides a situational norm of levity that suggests that discrimination, and expressions of violence against women, might be acceptable.

Ford (2000) found that the activation of a non-judgmental mind-set is fundamental for sexist humour to amplify tolerance for sex discrimination. When this did not occur, the harmful effects of sexist humour were cancelled out among the highly sexist participants. Similarly, Siddiqi et al. (2018) indicate that sexist humour can cultivate this tolerance of sexist attitudes by making it seem less offensive because humour highlights funny aspects, hiding the derogatory contents of the stereotypes (see also Parrott & Hopp,

2019). Besides, it has been observed that online sexist memes generate complex cognitive and emotional processes, having the potential to trigger negative emotions (e.g., anger) to defend women's image (Paciello et al., 2021).

Furthermore, Woodzicka et al. (2015) found that sexist humour is not confronted because it is not considered as serious as other types of discriminatory messages transmitted through humour. In their study, racist communications were perceived as more offensive and confrontational than sexist communications, and sexist jokes were perceived as less uncomfortable than racist ones and the teller was rated as more likeable. Also, Mallet et al. (2016) found that humour decreases the perception of sexist attributes regarding the message conveyed by it, rendering it more tolerable, reducing its confrontation and increasing tolerance for displays of sexism and sexual harassment.

Moreover, exposure to sexist jokes –versus neutral jokes– has been associated with a greater proclivity in men toward rape and a higher tendency to blame the victim (Romero-Sánchez et. al, 2010; Viki et al, 2007).

Psychosocial predictors of sexist humour

Research points out that gender and sexist ideologies play a key role in humour appreciation. Regarding gender, findings presented by Hoffman et al (2020) in a systematic review analysing sex differences in humour appreciation showed that seven out of eight studies reported that men appreciated sexual humour more than females, sometimes in jokes with mixed targets. In contrast, no significant differences have been observed in the appreciation of neutral, or nonsense humour (i.e. Ferstl et al. 2017; Kohler & Ruch 1996).

Specifically, studies have shown that when exposed to sexist humour, men are more likely

to accept this kind of humour than women, and also tend to perceive it as funnier and less offensive than women (Parrot & Hopp, 2019; Romero- Sánchez et. al., 2019). Overall, research indicates that women feel more socially threatened by sexist humour than men, even when comparing with jokes in which both men and women were the targets (Lawless et al., 2020).

Furthermore, literature provides evidence that ingroup identification moderates joke funniness (e.g., Argüello-Gutiérrez et al. 2018; Abrams et al., 2015; Kochersberger et al., 2014; Thomae & Pina, 2015). That is, those who presented a low ingroup identification were more likely to enjoy disparaging humour against the group. In sexist humour studies, it has been observed that women with high gender identification are more likely impacted by critical messages about themselves than those with low gender identification (Abrams & Bippus 2014). Conversely, women's amusement with sexist jokes has been related to the degree to which they dis-identified with women as a general social category (LaFrance & Woodzicka, 1998). This in line with Social Identity Theory (SIT, Tajfel & Turner, 1986), manifesting in ingroup biases by liking in a greater extent humour that denigrates the outgroup. Given that humour promotes a reduced use of cognitive resources for content analysis or by threatening their social identity, high group identifiers subsequently find jokes targeting the ingroup as more offensive, and by extension, may find outgroup derogation through humour less offensive.

Given than women are most often the target of sexist humour, the consequences of exposure to sexist humour are different than those for men. In this sense, Ford et al (2015a) found that women (but not men) reported greater state self-objectification following exposure to sexist comedy clips than neutral comedy clips, following that exposure to this kind of humour may promote women to engage in more body surveillance compared to neutral humour. Sexist humour can act as a subtle, contextual

cue to induce state self-objectification by depicting women in traditional gender roles or reducing women to sex objects (Greenwood & Isbell, 2002; Ford et al., 2015a), and also, by playing upon specific sexist stereotypes of inferiority (Bemiller & Schneider, 2010; Ford, 2008).

Several studies have shown consistent results with the notion that individual differences observed in the enjoyment of group-based humour are linked to ideological orientations (e.g., Baltiansky et al., 2021; Hodson et al. 2010; Hunt & Gonsalkorale 2014). In this regard, ambivalent sexism is a fundamental factor related to both funniness and offensiveness perceptions of humour.

Ambivalent sexism is defined as an ideology composed of both a "hostile" prejudice and "benevolent" stereotyped attitudes toward women (Glick & Fiske, 1996). Hostile sexism is a derogatory view of women, based on resentment and distrust, and the perception that women are seeking control over men. Benevolent sexism is a subjectively positive view of women as "pure creatures", who need to be protected and adored, based on the perception of women as weak, and therefore best relegated to traditional gender roles.

According to the Ambivalent Sexism Theory (AST, Glick & Fiske, 1996) sexism is not always expressed as open hostility but often as a profound ambivalence due to the special relationship between men and women. Specifically, AST argues that ambivalence between sexes stems from social and biological conditions common to human societies: patriarchy, gender differentiation, and sexual reproduction. AST highlights the fact that male dominance (to a greater or lesser extent) is widespread across agricultural and industrial societies. Also, across cultures, men and women occupy (more or less) differentiated social roles in several domains. Finally, sexual reproduction is a biological imperative for humans that promotes intimate relationships between men and women.

Thus, according to AST, these factors, especially power difference (in favor of men) and intimate interdependence (between men and women) simultaneously create both hostile and benevolent ideologies about both sexes (see also Glick & Fiske, 1997, 1999, 2001a, 2001b, 2011).

Benevolent and hostile sexisms are indeed ideologies about gender differentiation that reinforce stereotyped views of men and women and the subordination of women. Specifically, hostile sexism is rooted in competitive gender differentiation (i.e. men are more competent than women); while benevolent sexism is rooted in complementary gender differentiation (i.e. women are pure and warm, and match "perfectly" with men, who are more capable and competent). The coexistence of hostile and benevolent ideologies allows the reproduction of gender imbalance and hierarchies, by legitimizing traditional gender roles, and stereotypes about women (Glick & Fiske, 2011).

As pointed before, sexist humour can be considered one important mechanism to transmit sexist ideologies in a more "accepted" way. In fact, research has shown that for men high in hostile sexism, exposure to sexist jokes led to a perceived norm of tolerance of a sexist event compared to exposure to sexist statements or neutral jokes. Men endorsing higher levels of hostile sexism experienced more positive affect after exposure to sexist jokes than men low in hostile sexism; and overall, showed a greater acceptance of current gender relations and gender status quo (Ford et al., 2001; Ford et al., 2013). Thomas and Esses (2004) also found that male participants were more amused and less offended by sexist jokes to the degree that they scored high in hostile sexism. Moreover, their mediational analyses showed that the perceived funniness of the female-disparaging jokes mediated the relation between hostile sexism and the likelihood of repeating the jokes. In other words, individuals who were higher in hostile sexism were more likely

than low scorers to repeat the female-disparaging jokes to a friend because they found these jokes to be funnier.

Likewise, Kochersberger et al. (2014) found that enjoyment of sexist humour was greater among participants with higher levels of hostile sexism and lower levels of identification with women. Additionally, Greenwood and Isbell (2002) found that when exposed to "dumb blonde" jokes, participants high in hostile sexism rated the jokes as more amusing and less offensive than those low in hostile sexism. Furthermore, in another study, women who scored higher on hostile sexism against women rated sexist jokes told at the expense of women as funnier than women who scored lower on hostile sexism (Prusaczyk & Hodson, 2020).

Cultural context

Like most of Latin American countries, Costa Rica is considered as a collectivistic society (Hofstede, 1980, 2022). In collectivistic countries, trust, loyalty, personal relations, and networking are essential. Like other countries in the region, Costa Rica is also characterized by the ideological pattern of "machismo", understood as a set of expectations for males in a culture where they exert dominance and superiority over women (Perilla, 1999). Given this context this is an opportunity to explore the meanings and perceptions of sexist humour in a less studied cultural context.

As shown, most of the studies done in these lines of research have been conducted in Europe and North America. Less research has been conducted in more collectivist non-industrialized cultures (Henrich, et al., 2010; Hofstede, 1980; Triandis, 1995). According to these authors, culture-specific influences related to collectivism and individualism in the interpretation of sexist ideology must be considered.

In this regard, it has been observed that despite being a universal experience, the use and perception of humour is culturally shaped and varies across societies (Martin & Ford, 2018; Yue, 2010). Evidence has been gathered in a series of studies showing important differences in humour perception (i.e. Jiang et al., 2019; Yue et al., 2016).

Even though there are many humour styles classifications (see Heintz & Ruch, 2019 for a review) one of the most used is the four types of humour proposed by Martin et al. (2003) that differentiates the use of humour among self-enhancing, affiliative, self-defeating, and aggressive humour. From this perspective, several studies have shown differences in the way in which humour is used between collectivist and individualistic oriented societies (Kazarian & Martin, 2006, Hiranandani & Yue, 2014; Lu et al., 2019).

Also, in a systematic review from Kazarian and Martin (2004) the relationships between culture and the use of the four types of humour was analyzed. They observed that individuals from collectivist cultures are more likely to use affiliative humour, whereas those from collectivist cultures are more likely to employ self-defeating humour.

Taking all the above, perception and usage of sexist humour is culturally shaped, and it is important to acknowledge contextual awareness.

The present research

Considering the ideas presented above, the aim of the present research was to characterize the prevalence and exposure to sexist humour in the Costa Rican context. Basing our prediction in existing literature, this study explores and describes, for the first time, how sexist humour is perceived in Costa Rica, analysing some of the social perceptions that surround it, while considering gender and sexist ideologies as key variables. The main underlying assumptions are that sexist beliefs are associated with social perceptions of sexist humour and that gender moderates this relationship.

Specifically, in line with existing research, we predicted that hostile sexism, but not

necessarily benevolent sexism, will be associated with higher funniness scores and lower

offensiveness ratings. Also, we expected a moderation effect of gender and sexism,

therefore men higher in hostile sexism (vs. benevolent) will perceive sexism humour as

funnier and less offensive. Given the nature of sexist humour, we expected that the

feelings and reactions towards sexist humour exposure will be different for women and

men. Finally, given the context of the research, we presumed that the prevalence of

exposure of sexist humour will be very high, being present in several places and means.

In summary, our main research questions (RQ) were:

RQ1: How prevalent is sexist humour in the Costa Rican context?

RQ2: How do people in Costa Rica react to sexist humour?

RQ3: Is humour appreciation related to sexism?

RQ4: Does humour appreciation vary according to sexism and gender?

Method

An exploratory online survey was created using LimeSurvey. In the first section

participants responded to the Ambivalent Sexism Inventory (ASI). Then they were

presented with an example of a sexist joke (i.e. a joke representing women as

incompetent) to establish their mindset in the kind of humour they will evaluate. On this

basis, several questions regarding both frequency and means of exposure were asked.

Social perception and offensiveness were measured. Then participants were instructed to

recall an experience in which they were exposed to sexist humour. Finally, they answered

several questions related to how they feel and react in this situation. The survey was

accessible for 30 days and participation was voluntary for Costa Rican residents. The

survey was advertised via the university channels (social networks) and via a paid add in

Facebook covering all national territory. Participants were invited to a collaborate in a "research on interpersonal relations".

Participants

Three hundred twenty-three people from the Costa Rican general population (220 females) aged between 18 and 74 years old ($M_{women} = 31.51$ years; SD = 10.88; $M_{men} = 30.91$ years; SD = 9.08) completed the online survey. Participation was voluntary. Participants not fulfilling inclusion criteria were excluded. Specifically, 10 participants were not Costa Rican, were minors, or did not complete 70% of the survey.

Materials and Procedure

Perceived exposure to sexist humour

Participants were asked about the frequency, places, and means of exposure to sexist humour and who shares it. To measure frequency of exposure participants were directly asked to rate their perceived frequency of exposure from rarely to very often (in a scale rating from 1 to 5). As part of the introduction participants were presented with an example of sexist humour in order to anchor their idea of humour type (Appendix 1). Places of exposure were measured by a multiple response item using the question "Where do you see/listen to this kind of humour?" with the following options: "Workplace or study environments", "entertainment or commercial establishments", "sporting events", "pubs, bars or nightclubs", "family settings", or "other". Means of exposure were measured by a multiple response item using the question "by which means are you exposed to this kind of humour? with the following means: "social networks", "email", "television", "Newspapers/magazines", "Radio", "others". To measure who shares this

kind of humour the categories were: "work and study colleagues", "family", "friends", "unknown people", and "other".

Reported feelings and reactions when exposed to sexist humour

Two multiple-response questions on feelings and reactions towards sexist humour were presented to participants. Specifically, participants were asked to report how they felt when exposed to sexist jokes, the following response options were: "angry", "offended", "I felt nothing", "amused" and "other"; and how they reacted towards these kind of jokes, with the following response options: "I laughed", "I ignored it, "I confronted it", I expressed my displeasure openly" "I did nothing".

Perceived funniness of sexist humour

A single item was developed to measure to what extent participants considered sexist humour to be funny ("I believe this kind of humour is very funny), which was rated along a 5-point Likert scale from 1 ("Totally disagree") to 5 ("Totally agree").

Perceived Offensiveness of sexist humour

Six items were developed to measure beliefs associated with the perceived offensiveness of sexist humour. Examples of the items are: "Women should not feel bothered by jokes like these" or "In the end it is only a joke, one must not take it seriously". Participants rated their perception in a 5-point Likert scale from 1 ("Totally disagree") to 5 ("Totally agree"). Items were combined into a single "perceived offensiveness" score, which loaded onto one factor, with an Eigenvalue of 3.50, explaining 58.42 % of the variance (See Appendix 2).

Ambivalent Sexism

Participant's sexist attitudes were assessed using Ambivalent Sexism Inventory (ASI; Expósito, Moya & Glick, 1998; Fiske & North, 2014; Glick & Fiske, 1996) adapted to the Costarrican version (Zamora-Araya et al., 2018). The 22-item inventory is made up of two subscales measuring two related but relatively distinct constructs (HS and BS). HS measures sexist antipathy towards women based on the perception that women are seeking control over men, while BS measures the concept of women as, "delicate creatures", confined to limited roles. Examples of HS items are "Women seek to gain power by getting control over men" and "Women exaggerate problems they have at work". Examples of BS items are "Many women have a quality of purity that few men possess" and "Women should be cherished and protected by men". Participants responded to the items by using a six-point Likert scale from 0 (totally disagree) to 5 (totally agree).

Statistical Analyses

Descriptive statistics for the whole sample, and Chi Square Analysis on Multiple Response items to test gender differences were performed using SPSS 19. Regression analyses on evaluative scores using the macro PROCESS for SPSS developed by Hayes (model 2, 2013) were performed to test the predictive role of ambivalent sexism and gender on perceived funniness and perceived offensiveness. Preliminary analyses showed no significant regression weights for age (all $\beta s < .002$, all ps > .96), therefore age was not included in the main tests.

Results

Descriptive statistics for the sociodemographic variables are presented in Table 1. No significant contingencies of education level by sex or age differences by sex were found ($\chi^2_{(6)} = 4.14$, p = .66, $t_{(308)} = .47$, p = .64,) showing that demographic characteristics for men and women were comparable. Participants selecting "other" in the sex question were excluded for the analyses given their low number. Main results will be presented following the research questions and hypotheses.

Table 1Descriptive demographics for the whole sample

	n (%) / Mean (SD)
Age	31.48 (10.46)
Sex	
Female	220 (68%)
Male	97 (30%)
Other	6 (2%)
Education Level	
Elementary school	1 (.3%)
Highschool	11 (3%)
Technical	7 (2%)
University	298 (94%)

Note. No significant contingencies of education level by sex or age differences by sex were found ($\chi_{(6)}$ = 4.14, p = .66, $t_{(308)}$ = .47, p = .64,) showing that demographic characteristics for men and women were comparable. Participants selecting "other" in the sex question were excluded for the analyses given their low number.

¿How prevalent is sexist humour in the Costa Rican context?

For the whole sample N=323, exposure to sexist humour was very common. Specifically, 14.2% reported their exposure to this humour daily, 9.9% from four to five days a week, 24.5% twice a week and 25.4% once a week and 26.0% almost never. For further analysis, these categories were recoded into 1= rarely; 2= Often; 3=Extremely Often. When comparing the perception of frequency of exposure between women and men, data showed no significant gender contingency, $\chi^2_{(2)} = 2.242$, p = .326.

An additional item assessing frequency of exposure in a different manner using the statement: "It is common to see/listen to jokes like this", with a 5-point Likert response scale from 1 ("Totally disagree") to 5 ("Totally agree"), again showed no significant differences between men and women, $M_{men} = 3.97$, SD = 1.00; $M_{woman} = 4.06$, SD = 1.04; $t_{(314)} = .754$, p = .451, d = .09.

Regarding the places of exposure to sexist humour, participants (n = 295) reported more exposure in pubs, bars or nightclubs (65.8%), followed by entertainment or commercial establishments (56.3%), and workplace or study environments (51.9%); while family settings (34.2%), and sporting events (32.5%), were those places in which participants are less exposed to this kind of humour. There were no significant distribution differences by gender, χ^2 (4) = 8.756, p = .067.

In terms of the means of exposure (n = 312) social networks were the most mentioned means (41.8%), followed by television (22.5%), radio (17.6%), newspapers and magazines (13.3%), and the least frequent means was email (4.3%). When analyzing this data by gender no significant gender contingency was observed, $\chi^2_{(4)}$ = 3.90, p =.419.

Participants (n = 318) were asked to report who shared this humour with them.

The most commonly reported case was that sexist humour was shared by people they did

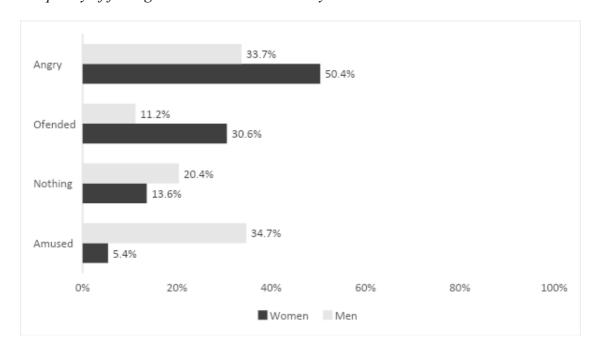
not know (58.8%), friends (53.5%), work/study colleagues (52.8%), family members (42.5%), and no answer (1.3%). Also, no significant gender contingency was observed $\chi^2_{(3)} = 6.0271$, p = .110.

How do people in Costa Rica react to sexist humour?

When asked about what they feel when exposed to sexist humour (n = 307), most participants indicated they felt angry (53.7%), offended (29.6%), nothing (18.2%), amused (16.0%), I do not know (4.9%). In this case, gender contingency in emotional reactions was significant, $\chi^2_{(3)}$ = 63.034, p < .001, Cramer's V = .26. Specifically, women were more likely to report feelings of anger than men, and men were more likely to express amusement than women.

Figure 1

Frequency of feelings towards sexist humour by sex

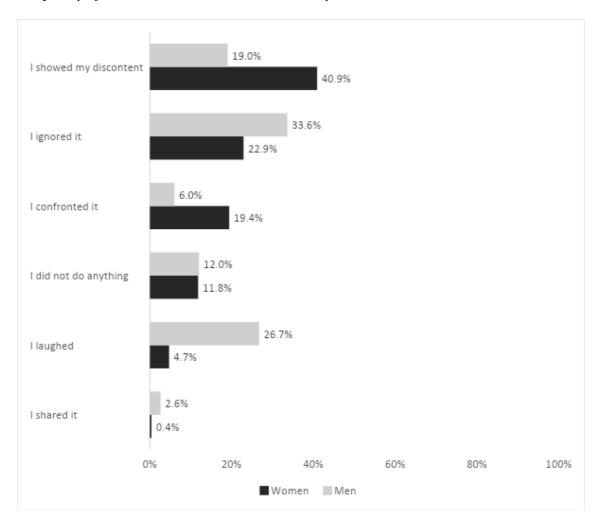


In terms of reactions when exposed to sexist humour, participants (n=307) reported that they showed their displeasure (45.3%), ignored it (34.2%), confronted it

(20.2%), did not do anything (16.0%), laughed (14.7%) and shared it (1.3%). Reactions were gender based, $\chi^2(4) = 62.40$, p < .001, Cramer's V = .22, showing that women were less willing than men to laugh, and more eager to confront than men.

Figure 2

Frequency of reactions towards sexist humour by sex



Is humour appreciation related to sexism?

Descriptive statistics, internal consistencies and correlations for Sexism, Perceived Funniness and Perceived Offensiveness are presented in Table 2.

Table 2

Descriptive statistics, internal consistencies and correlations among Sexism, perceived funniness, and perceived offensiveness

Measures	M (SD)	α	1	2	3	4
Total						
1 ASI	1.01 (.89)	.91				
2 HS	1.18 (1.10)	.88	.92***			
3 BS	.86 (.87)	.82	.90***	.65***		
4 Funniness	1.65 (1.11)	-	.38***	.36***	.32***	
5 Offensiveness	4.22 (.89)	.81	48***	45***	41***	68****
Women						
1 ASI	.88 (.77)	.89				
2 HS	1.03 (.97)	.83	.91**			
3 BS	.75 (.75)	.81	.89**	.64**		
4 Funniness	1.43 (.91)	-	.18**	.18**	.15*	
5 Offensiveness	4.34 (.83)	.83	26***	31***	33***	73**
Men						
1 ASI	1.30 (1.04)	.92				
2 HS	1.54 (1.27)	.91	.91***			
3 BS	1.11 (1.05)	.81	.90***	.64***		
4 Funniness	2.14 (1.37)	-	.50***	.48***	.42***	
5 Offensiveness	3.93 (.94)	.79	60***	60***	49***	59***

Notes. ASI = The Ambivalent Sexism Inventory, HS = Hostile Sexism subscale, BS = Benevolent Sexism subscale. Degrees of freedom ranged from 316 to 323 due to missing values. *p < 0.05. **p < 0.01. ***p < 0.001.

Overall, internal consistencies of the measurements were adequate, with Cronbach's Alphas ranging from .79 to .92, across measures, among both men and women.

Statistically significant gender differences in ASI were found, $t_{(315)} = 3.96$, p < .001. Specifically, men (M = 1.30; SD = 1.04) hold greater sexist beliefs than women (M = .88; SD = .77), $t_{(315)} = 3.96$, p < .001, d = .49. As for the subscales of ASI, results also showed significant differences for both HS and BS as a function of gender. Hostile Sexism means were higher in men than in women $M_{Men} = 1.54$; SD = 1.27; $M_{woman} = 1.03$; SD = .97; $t_{(315)} = 3.90$, p < .001, d = .49. The same pattern appeared with Benevolent Sexism: $M_{Men} = 1.11$; SD = .75; $M_{Women} = .75$; SD = .75; $t_{(315)} = 3.45$, p < .001.

Data also show that hostile sexist beliefs were endorsed more than benevolent sexism. For women, hostile sexism, M = 1.03, SD = .97, was endorsed significantly more than benevolent sexism, M = .75, SD = .75, t = 5.43, df = 219, p < .001. For men, hostile sexism, M = 1.54, SD = 1.27, was also endorsed more than benevolent sexism, M = 1.11, SD = 1.05; t = 4.15, df = 97, p < .001.

When analysing humour appreciation, funniness is a key element. In our sample, data showed that men found this type of humour significantly funnier than women. $M_{men} = 2.14$; SD = 1.36; $M_{Women} = 1.43$; SD = .91; $t_{(309)} = 5.33$, p < .001, d = .66.

Data also showed significant gender differences in perceived offensiveness, $t_{(315)} = 3.81$, p < .001; d = .46. Men perceived less offensiveness in sexist humour, M = 3.93, SD = .94, than women, M = 4.34, SD = .83.

Correlational analyses for total sample showed a high correlation between ASI and HS $r_{(323)} = .92$, p < .001, ASI and BS $r_{(323)} = .90$, p < .001 and between HS and BS $r_{(323)} = .65$, p < .001. On the other hand, ASI was significantly correlated with funniness $r_{(317)} = .38$, p < .001, and with offensiveness $r_{(322)} = -.48$, p < .001. HS also correlated significantly with funniness $r_{(322)} = .36$; p < .001, and offensiveness $r_{(322)} = -.31$, p < .001.

In summary, the data show that hostile sexism is endorsed more than benevolent sexism across genders, but that men elicit more sexist beliefs (particularly hostile sexism) than women. Data also show that men find sexist humour funnier and consider sexist humour less offensive than women. Finally, correlational analyses show that hostile and benevolent sexist beliefs are highly correlated with each other, and that both types of sexist beliefs are associated with higher perceived funniness and lower perceived offensiveness, for the whole sample, and for both men and women.

Does humour appreciation vary according to sexism and gender?

A series of hierarchical, moderated regression analyses were run on perceived funniness and perceived offensiveness, respectively, to test for differences in the relationships between sexist beliefs and humour appreciation variables across gender groups. In Step 1, we included Hostile and Benevolent sexism scores as continuous predictors and sex as a binary predictor. In Step 2, the two-way interaction terms for each sexism subscale and sex were entered. In Step 3 the three-way interaction terms were entered. All continuous variables were centred. The binary predictor sex was dummy coded (0 = women, 1 = men). A summary of the results is presented in Table 3.

 Table 3

 Summary of hierarchical regression analyses on funniness and offensiveness

	F	unnine	SS			Off	fensiver	ness	
Predictors	В	SE B	β	p		В	SE B	β	p
Step 1 HS BS	.236 .164	.069 .087	.230 .128	.001 .061		230 221	.053 .067	284 216	<.001 .001
Gender	.514	.127	.213	< .001		203	.097	106	.036
R^2 F (3, 308)	.178 23.519)		<.001	R^2 F (3, 314)	.233 33.022			< .001
Step 2 HS BS Gender HS x Gender BS x Gender	.133 .073 .436 .250 .178	.091 .118 .155 .137 .172	.131 .057 .181 .174 .093	.145 .536 .005 .069 .302		139 255 088 213 .082	.070 .090 .119 .106 .133	171 250 046 185 .053	.049 .005 .460 .046 .538
R^2	.203				R^2	.239			
$F(5, 306) R^2$	16.776	,		< .001	F (5, 312)	20.928	}		< .001
ΔR^2	.029				ΔR^2	.011			
$F(5, 306)$ for ΔR^2	5.68			.004	$F(5, 314)$ for ΔR^2	2.359			.096
Step 3 HS BS Gender	.133 .073	.091 .118	.131 .057	.145 .537 .008		139 255 167	.070 .090	171 250 087	.048 .005
HS x Gender	.251	.138	.174	.070		217	.106	189	.041
BS x Gender	.189	.206	.099	.358		066	.158	043	.678
Bs x HS x Gender	007	.070	008	.920		.092	.054	.134	.089
R^2	.200				R^2	.244			
$F(6, 306) R^2$	13.967	1		< 0.001	F(6, 311)	18.030)		< .001
ΔR^2	.000				ΔR^2	.007			
$F(6, 305)$ for ΔR^2	.01			.920	$F(6, 311)$ for ΔR^2	2.902			.089

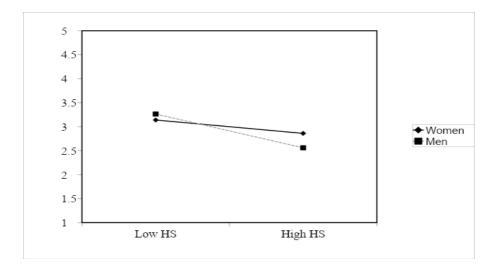
Note. HS = Hostile Sexism, BS = Benevolent Sexism. HS and BS were centred. Gender was dummy coded (Female = 0, Male = 1).

For perceived funniness, a significant effect of hostile sexism, B = .24 (.07); $\beta = .23$, t = 3.43; p = .001, and gender, B = .51 (.13); $\beta = .21$, t = 3.92, p < .001, was found in Step 1 accounting for 18% of the variance; $R^2 = .18$, $F_{(3, 308)} = 23.52$, p < 0.001. No significant two-way or three-way interactions were found.

For perceived offensiveness, results for Step 1 yielded a significant main effect of both hostile sexism, B = -.23 (.05); $\beta = -.28$, t = -4.34; p < .001, benevolent sexism, B = -.22 (.07); $\beta = -.22$, t = -2.28; p = .001, and gender, B = -.20 (.10); $\beta = -.11$, t = -2.09; p = .036, explaining 23% of the variance; $R^2 = 0.22$; $F_{(3,314)} = 33.02$, p < .001. In step 2, the results showed a significant effect for the two-way interaction term between hostile sexism and gender, B = -.21 (.11); $\beta = -.18$, t = -2.01; p = .046. No significant effects for the three-way interactions were found. Simple slope analyses showed that as hostile sexism increased, perceived offensiveness decreases, but more rapidly for men, B = -.35 (.08), $\beta = -.23$, t = -4.49; p < .001, than for women, B = -.14 (.07); $\beta = -.16$, t = -1.97; p = .050. (See Figure 3).

Figure 3

Interaction between hostile sexism and gender on Offensiveness



Note. HS= Hostile Sexism

Discussion

The main goal of the present study was to characterize expressions of sexist humour in Costa Rica, and to explore the role of gender and sexism in the prediction of the appreciation of sexist humour. As the first approach contributing to analyse social perceptions of sexist humour in a Latin America context, results followed expected paths, contributing to replicating research findings beyond North American and European settings.

Regarding the prevalence of sexist humour (RQ1), data showed that this type of humour is frequently observed in Costa Rica, as part of social media interaction, social activities and in the workplace. Overall, participants' exposure to sexist humour is very common across different means of exposure and places, but the emotional and behavioural reactions to sexist humour were gender-based with women perceiving more distress when exposed to this humour than men and confronting it more frequently than men. On the other hand, men perceived less offensiveness and more funniness in sexist humour than women did (RQ2). Similar results were found by Ford et al. (2015a), Parrot & Hopp (2019) and Romero-Sánchez et al. (2019). However, our results were gathered outside the laboratory, contributing to the external validity of results within this line of research.

As hypothesized, our study supports previous findings linking sexist humour to sexist beliefs (Ford et al., 2013; Greenwood & Isbell, 2002; Siddiqi, et al., 2018). Supporting recent theoretical models of sexism (Glick & Fiske, 1996) and disparagement humour (Ford & Ferguson, 2004), our data show that holding sexist beliefs, especially hostile sexism, shapes the way in which sexist humour is communicated, perceived and judged (RQ3). Our results further showed that the role of sexism in minimizing offensiveness is stronger among men than women (RQ4). Importantly, our data

correspond to a Latin-American context, expanding insights surrounding the phenomenon.

These findings suggest that sexist humour is a way to transmit gender stereotypes, contributing to a justification of power asymmetry between men and women (Abrams et al., 2015; Jost & Banaji, 1994; Woodzicka & Ford, 2010). Future research could continue this line by testing the degree in which sexist humour affect people's willingness to actually discriminate against the targeted group in specific contexts (e.g., Ford et al., 2015; Romero-Sánchez et al., 2010; Mendiburo-Seguel & Ford, 2019). Also, previous research has shown that holding stereotypical beliefs might have important implications on women's self-perceptions (i.e. self-esteem, self-objectification and confrontation strategies; Ford et al., 2015b; Mallet et al., 2016) and might contribute to a higher tendency to accept discrimination towards women (Ford et al., 2008). An interesting line of research should analyze this important relationship and explore possible causes and means of exposure.

Additionally, our study contributes to the methodological issues involved in capturing the perceived offensiveness of the sexist jokes. We clustered several items that focus on social and interpersonal situations that are sensitive to perceived offensiveness. This scale can work as a complementary approach to sexist humour studies. The construct of perceived offensiveness can be a valuable way to investigate beliefs that might be underlying the idea of the "just joking effect" of humour. This is important because when people have not perceived the offensiveness and sexism contained in humour, they are more willing to share it, ignore it or not express their displeasure with it. Furthermore, additional psychometric research is necessary to determine appropriate items to be used.

In this research, we believe that offensiveness can act as a proxy of aversiveness and captures a more specific aspect of the ambivalence that we want to analyze. Also, the negative predicted correlation between factors was also observed and reported. However, other studies should also test if there is a perceived difference among aversiveness and offensives; and evaluate if cultural aspects of language might interfere in the final scores.

Finally, it is worth mentioning that although the general levels of sexism in the sample were very low, levels of benevolent sexism were slightly higher than hostile sexism among both men and women. Previous research has shown that benevolent sexism generally tends to be more endorsed than hostile sexism because it is difficult to detect as sexism and that women are more prone to reject hostile sexism than benevolent sexism because benevolent sexism represents a subjectively positive attitude that might be perceived as beneficial for them (Glick & Fiske, 2001a, 2001b). We believe our unexpected result might reflect sample idiosyncrasies as our participants were mainly composed of female university students around 30 years old. Previous research has also shown that participants around this age and people with higher levels of formal education become more aware of the subtleties of ambivalent sexism and question rigid stereotypical gender patterns (Fernández et al., 2004). Therefore, participants in this sample may be more aware that benevolent attitudes toward women are also sexist and might reject them more than participants from a general population sample.

Practical implications

Our research provides evidence of the mechanisms through which sexist ideologies might affect women's life via sexist humour. Results show the remarkable prevalence of sexist humour in several domains of everyday life in Costa Rica as well as the specific places and ways in which sexist humour is shared. Generally, our results show medium to large effect sizes showing robust associations for the field of social psychology, as suggested by Lovakov & Agadullina (2021). All this information can orient educational campaigns to prevent the potential negative effects of sexist humour

precisely in those places where sexist humour occurred more frequently and create awareness on the harmful consequences of this type of sexism. Overall, these results justify the need of more research on these issues in Latin American contexts.

Limitations

Our work is not exempt from a few limitations. Our data is of exploratory and correlational nature, gathered by self-reporting methods on subjective perceptions of sexist humour. Therefore, more research which explores the subject in terms of experimental approaches is needed to explore causality and control for other variables such as social desirability biases. Secondly, even internet penetration in Costa Rica is relatively high with 81% of the population having access to internet (World Bank, 2020), gathering information online is always coupled with self-selection biases and given that there are no restrictions on who can participate, and it is up to the individual to choose to participate (Fricker, 2017). Also, the participants accessed voluntarily the survey, (i.e. no incentive were offered) so it could implicate a selection biases. Those that are likely to be intrinsically interested in the topic of the research could have more representation. In our case, it could be reflected in the low levels if sexism, indicating people with high education levels and perhaps a more liberal mindset. Overall, in our sexism levels were below the average, in comparison with similar research done in Costa Rica (i.e.Smith-Castro et al, 2019). This could suggest, that although there are representativeness biases, the interactions effects are there even with low level of sexism. However, this should be tested with wider and more representative samples. Therefore, future studies should seek possible solutions to this problem to make the results more generalizable. Additionally, our study only explored perceptions and reactions towards sexist humour that represent women as lacking competence (i.e., less intelligent, clumsy), leaving unexplored other dimensions of impression formation (such as beliefs,) that might have different effects on

the way people perceive humour (see Fiske et al.,2002, Prusaczyk, el al., 2020; Sayans-Jiménez et al., 2017). Therefore, testing the humour our stimulus within other contents and with other formats (i.e., videos, memes...) would be important, at the methodological level, to allow more precision by anchoring participants to other specific types of sexist humour, and, at the conceptual level, by providing insights into the reactions towards different contents and formats.

Despite these limitations, our results followed expected paths, contributing to the replication of research findings in a social context not previously considered by this line of research, and expanding the cross-cultural suitability of current humour theories by providing data from a not that frequently studied context. More research is still necessary to analyse differences in the consequences of exposure to sexist humour.

Compliance with ethical standards section

Funding: The authors have no funding to disclose.

Compliance with Ethical Standards: All procedures performed were in accordance with the ethical standards of the institutional research committee of the University of Costa Rica (Cómité Ético Científico de la Universidad de Costa Rica), where data were collected, as well as with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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Informed Consent: Informed consent was obtained from all individual adult participants included in the study.

Statement of each individual author's contributions. Conception and design: CAG and VSC. Collection, analysis, and interpretation of data: ACC; FF, DM, PS. Drafting the article and revising it critically for important intellectual content: all authors.

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Appendix 1

As part of the introduction of the online survey we include this:

"We are aware that humour plays an important role in costarrican society. Generally, we use humour to express ourselves, share ideas and laugh at different situations. There are several types of humour, however, in this survey we want to know your opinion about humour targeting women (i.e. jokes, puns, memes, etc.).

An example of this kind of humour would be

Why is it said that beer has female hormones?
-Because when you drink beer, you drive badly and say stupid things.

This joke was taken from a pilot study of humour appreciation where 34 jokes (17 sexist and 17 neutral) were tested in terms of funniness and aversiveness. The study involved 123 participants (58 female) with a mean age of 21.22 years (SD = 3.36). Each joke was evaluated on two dimensions: funniness and aversiveness. For each dimension, participants recorded responses on a five-point unipolar scale, funniness (0 not funny at all to 4 very funny) and aversiveness (0 not aversive at all to 4 strong aversiveness).

The selected example joke showed an average score in funniness and aversiveness $(M_{\text{fin}}=.84=1.16; M_{\text{av}}=1.90, SD=1.75)$. Funniness scores ranged from .31 (SD=.67) to 2.03 (SD=1.51), whereas aversiveness scores ranged .23 (SD=.66) to 3.59 (SD=1.10).

Appendix 2

Items for perceived offensiveness of sexist humour.

English version of the items	Original items in Spanish
I find this humour very funny	Este tipo de humor me parece muy
	gracioso y divertido
Women should not feel upset by this kind of	Las mujeres no deberían sentirse molestas
jokes	con este tipo de chistes
This kind of humor is offensive towards women	Este tipo de humor es ofensivo hacia las
	mujeres
It is understandable that a woman feels	Es entendible que una mujer se sienta
bothered by jokes like this	molesta por chistes como éstos
The aim of this type of jokes is to offend	El objetivo de este tipo de chistes es
women	ofender a las mujeres
At the end of the day, it is just a joke, you	Al fin y al cabo es sólo un chiste, no hay
should not take it very seriously	que tomárselo muy en serio