Taboo Words in Expressive Language: Do Sex and Primary Language Matter?

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Abstract

In the present study, we examined whether sex differences exist in the number and categories of taboo word expressions used by college students when the intended recipient is defined by sexual affiliation and the medium is either one's primary or secondary language. English-Spanish bilingual participants reported the taboo words that they or their friends use to refer to men and women. Across both sexes, taboo words referring to deviance of a social, psychological or physical nature were most frequent, followed by taboo words involving sexual references. Spanish references to deviance were more likely to be attributed to men than to women, whereas English taboo words were evenly ascribed to both sexes. Neither differences in age of acquisition nor subjective knowledge accounted for the more numerous Spanish deviations attributed to men.

Keywords: Taboo words, bilingualism, sex differences

The term *taboo words* refers to 'offensive emotional language' (Jay, 2009; Pinker 2007) for which a 'ban or inhibition resulting from social custom or aversion' exists (The American Heritage Dictionary of the English Language, 2000). Most research on taboo words in expressive language has claimed the persistence of such differences in the face of socio-cultural change (Jay, 1980; Jay, 2009; McEnery, 2006; Mehl & Pennebacker, 2003; Simkins & Rinck, 1982; Thelwall, 2008). For instance, even though women have reported experiencing and expressing emotions more intensely and frequently than men (Feldman Barrett, Robin, Pietromonaco, & Eyssell, 1998), men have been found to know more taboo words (Foote & Woodward, 1973; Kutner & Brogan, 1974), be more likely to swear in public (Mehl & Pennebaker, 2003), and use 'stronger' terms (Jay, 2009) than women. They have also been reported to recall more taboo words than neutral words (Grosser & Walsh, 1966).

If the defining property of taboo words is that they epitomize 'offensive emotional language' (Jay, 2009), reports of sex differences are truly informative only when reference is made to the pragmatic context upon which the male or female speaker relies to justify the use of such words (Jay & Janschewitz, 2007; 2008; Locker & Watts, 2005; Mabry, 1974; Selnow, 1985; Wells, 1989). Support for the notion that the speaker's pragmatic context is relevant to emotional expression comes from finding that sex differences in self-reported intensity of emotional experience are more likely to emerge from interactions that involve the opposite sex than the same sex (Feldan Barrett et al., 1998). Further support comes from finding that females use formal terms (i.e., clinical descriptions) to discuss sexual matters in same-sex interactions more than males who prefer more colloquial (slang) terms, whereas both sexes favor formal terms in mixed-sex interactions (Simkins & Rinck, 1982). Type of social interaction, however, is not the only defining property of the speaker's pragmatic context that deserves consideration. Choices of expressive language, including taboo words, are dependent, among other factors, on the characteristics of the intended recipient (see Fine & Johnson, 1984; Risch, 1987).

Even though the intended recipient is critical in defining the speaker's pragmatic context of taboo word expression, evidence of sex differences has emerged mostly from studies investigating the production of taboo words without any specific reference to the sex of the intended recipient (see Jay, 1980; Selnow, 1985). As a result, above and beyond the fact that some taboo words appear to be specific to (or more appropriate for) either male or female targets (Jay 2009), it is unclear whether there are differences in the number of taboo words that women and men use to refer to others either of same sex or of a different sex.

It is also unclear whether certain categories of taboo words are preferentially used to refer to either sex. Conceptual categories for obscenity may comprise a variety of themes (see Jay, 2009), including sexual allusions (e.g., cunt), profane or blasphemous terms (e.g., goddamn), scatological or disgusting objects (e.g., shit), ethnic/racial slurs (e.g., nigger), ancestral allusions (e.g., bastard), and references to psychological, social or physical deviance (e.g., pig and wimp). Because research indicates people generally favor in-group members over out-group members (Tajfel & Turner 1979; Turner 1987), we hypothesized that if taboo word expression constitutes 'offensive emotional language', an in-group bias should exist that favors one's sex. Thus, we predicted that a larger variety of taboo words should be used to refer to the opposite sex than the same sex. Sex differences might also reflect the preferential use of specific categories for male and female targets.

A factor that is likely to modulate the predicted in-group bias in taboo word expressions is the language medium upon which speakers rely to convey such expressions. Evidence exists that taboo words in one's primary language elicit, or are perceived as eliciting, stronger emotional responses than taboo words in one's secondary language (Aycicegi & Harris, 2004; Caldwell-Harris, Tong, & Lung, 2010; Dewaele, 2004a; Harris, Aycicegi, & Berko Gleason, 2003), and that the choice of language for taboo expressions is usually one's primary language (Dewaele, 2004b). Therefore, we hypothesized that one's primary language would render a greater variety of taboo words than a secondary language. We also predicted that if there is an in-group bias favoring one's sex, the greater emotional connotation of taboo words in the primary language might further reduce the use of these words for one's sex when the primary language is the communication medium.

The ability of a language medium to modulate the predicted in-group bias may depend on the age of acquisition of the medium (Dewaele, 2006; Hakuta, Bialystok, & Wiley, 2003). A language acquired considerably earlier in life than another language may be more likely to serve as a vehicle to express negative emotions (Dewaele, 2006), albeit it is unclear whether this preference is due to taboo words eliciting stronger emotions in the earlier-acquired language (Caldwell-Harris & Aycicegi-Dinn, 2009; Dewaele, 2004b; Eilola, Havelka, & Sharma, 2007; Harris, 2004; Harris, Aycicegi, & Berko Gleason, 2003). Of course, another factor that may influence a speaker's primary-language preference for the expression of taboo words is his/her relative competence in the primary and secondary language (Dewaele, 2004b; Register, 1996; Vaid, 2006).

The reason may be that appropriate use of taboo words requires knowledge of not only the linguistic, but also the social and pragmatic conventions that dictate the form and mode of use of taboo expressions within a given speech community (see Bardovi-Harlig, 2001). As a result, ample opportunity to practice a language is critical for learning not only taboo word expressions but also their appropriate use (Dewaele, 2004b). Age of acquisition can be assumed to denote the extent of one's opportunity to practice a language whereas competence may be considered as reflecting more directly the outcome of such practice. Thus, we hypothesized that if indeed there is a primary-language preference for taboo words, then the greater the difference in the age of acquisition of the primary language and secondary language, and/or the greater the difference in competence between the two languages, the greater this preference might be.

In the present study, we tested the above-mentioned hypotheses by examining taboo word expressions that English-Spanish bilingual speakers attribute to themselves or to their friends (i.e., social network). The distinction between 'I' and 'Friends' was introduced to assess the extent to which a bias to minimize reports of 'offensive emotional language' for oneself was operative. Respondents were offered 'intended targets' defined by a key property of social interactions (Feldman Barrett et al., 1998): sex (i.e., men and women). Our main goal was to determine whether self-attribution (i.e., 'I') of taboo word expression was sensitive to the sex of the respondent and of his/her intended target (male vs. female), and to the language medium used for expression (English vs. Spanish). The open-ended response technique allowed us to measure not only the number of taboo word expressions used by the two sexes for male and female targets, but also the categories of taboo words most frequently used in reference to such targets. The population selected for the present investigation was young college students because they were expected to be less prone to under-report their use of obscenity than the general adult population (see Fine & Johnson, 1984; Jay, 2009; Nerbonne & Hipskind, 1972) and could be assumed to be the likely carriers of social change, thereby offering results that had both current and predictive relevance.

Method

Participants

Thirty male (age: *M* = 21.57; range: 18-31) and thirty female (age: *M* = 21.07; range: 18-32) New Mexico Highlands University students who were New Mexico natives volunteered to participate. They reported themselves to be English-Spanish bilingual speakers. Their average educational level was 14.44 years (*SEM* = .33). Thirty-two participants (17 females and 15 males) reported English as their primary language. Their estimated age of acquisition for English was 2.28 (*SEM* = .32), whereas for Spanish was 2.34 (*SEM* = .52). Twenty-eight participants (13 females and 15 males) reported Spanish as their primary language. Their estimated age of acquisition for Spanish was 1.07 (*SEM* = .05), whereas for English was 8.00 (*SEM* = .84). There were no significant differences in chronological age, age of acquisition for English and Spanish, and years of education between male and female participants, *t*s ≤ 1.09.

Procedure and Materials

Participants were asked to complete the following forms:

Mood Questionnaire

To assess participants' current emotional state, the abbreviated version of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) was used. The test consists of 20 adjectives describing either positive or negative emotions (10 per type). Participants' task was to indicate the extent to which each adjective described his/her current mood on a 4-point scale, from 1 = very slightly to 4 = extremely.

Language Questionnaire

A language questionnaire was constructed to assess participants' knowledge of the Spanish and English language. Questions for each language were asked separately. Four questions required participants to estimate their competence in spoken and written English/Spanish (see Delgado, Guerrero, Goggin, & Ellis, 1999): How well do you speak English/Spanish? How well do you understand spoken English/Spanish? How well do you read written English/Spanish? How well do you write in English/Spanish? Answers were to be reported on a 4-point unmarked scale from 0 (not at all) to 4 (fluently). A question asked participants to estimate the age-of-acquisition of English/Spanish. In the questionnaire, age of acquisition was operationalized as the age at which participants had begun to be exposed to either English or Spanish for a substantial amount of time. Another question asked participants to indicate what they considered their primary language.

The Use-of-Taboo-Word Questionnaire

Each student was given the following instructions: 'We are interested in studying *taboo words* in English and Spanish. There are many taboo words that people use to refer to women and men, which may be considered offensive and disparaging. Can you think of words that you or your friends use? Turn the page when you are ready to start the questionnaire. Please do not worry about the spelling of each word.' The instructions were followed by 8 pages, 4 for English terms and 4 for Spanish terms, which contained on each page directions for reporting taboo words: 'taboo words I use to refer to WOMEN', 'taboo words I use to refer to MEN', 'taboo words My Friends use to refer to WOMEN', and 'taboo words My Friends use to refer to MEN'.

Language was always blocked so that all questions pertaining to either English or Spanish would be asked together. The speaker ('I' or 'My Friends') was always blocked so that the sex of the referent ('WOMEN' or 'MEN') could be varied. The order in which language of taboo words (Spanish-English or English-Spanish), speaker ('I' followed by 'My Friends' or vice versa), and the sex of the referent ('WOMEN' followed by 'MEN' or vice versa) were presented was randomized separately for each participant.

Vocabulary Test

At the completion of the Use-of-Taboo-Word Questionnaire, participants were asked to complete a 40-item vocabulary test (Shipley, 1941; Shipley, & Burlingame, 1941). The scope of the test was to assess participants' English and Spanish vocabulary. Half of the 40 items were presented in English and the other half were presented in Spanish. The assignment of items to language was counterbalanced across participants so that when odd items appeared in English, even items appeared in Spanish or vice versa.

Results

For all the analyses presented below, effects are considered significant if $p < .05$ unless otherwise reported. A*rcsine transformations* were applied to all proportions prior to the analyses. For simplicity, descriptive statistics display untransformed proportions.

Linguistic Knowledge and Mood

Two measures of participants' knowledge of English and Spanish were taken: subjective estimates provided by the answers to the language questionnaire and objective estimates illustrated by vocabulary scores. Estimates for 'speak', 'read', 'understand', and 'write' in the language questionnaire were averaged and then transformed into proportions. A separate 2 (sex of respondent: male vs. female) x 2 (primary language of the respondent: English vs. Spanish) analysis of variance (ANOVA) was conducted on the participants' subjective estimates of knowledge of English and Spanish (i.e., transformed proportions).

Female and male respondents did not differ in their English and Spanish subjective knowledge estimates, Fs < 2.83, *ns*. However, a main effect of primary language was observed on both English estimates, $F(1, 56) = 11.44$, $MSE = .092$, $p = .001$, $\eta^2_{partial} = .170$, and Spanish estimates, $F(1, 56) = 43.18$, $MSE = .119$, $p < .001$, $\eta^2_{partial} = .435$, which indicated higher subjective knowledge in the language selected as primary (interactions: Fs < 1). Estimates of English competence were greater for participants who reported English as their primary language ($M = .98$, $SEM = .01$) than for participants who reported Spanish as their primary language ($M = .88$, $SEM = .03$). Similarly, estimates of Spanish competence were greater for participants who reported Spanish as their primary language ($M = .94$, $SEM = .03$) than for participants who reported English as their primary language ($M = .67$, $SEM = .04$).

Comparable analyses were conducted on participants' vocabulary scores (i.e., transformed proportions) for English and Spanish separately. Although female and male respondents did not differ in their English and Spanish scores, Fs < 2.36, *ns*, a main effect of primary language was observed on both English scores, $F(1, 56) = 4.26$, $MSE = .046$, $p = .044$, $\eta^2_{partial} = .071$, and Spanish scores, $F(1, 56) = 17.02$, $MSE = .049$, $p < .001$, $\eta^2_{partial} = .233$, which illustrated higher performance in the language selected as primary (interactions: Fs ≤ 1.02). On the English vocabulary test, participants who reported English as their primary language scored higher ($M = .70$; $SEM = .03$) than participants who reported Spanish as their primary language ($M = .62$, $SEM = .03$). On the Spanish vocabulary test, participants who reported Spanish as their primary language scored higher ($M = .68$, $SEM = .03$) than participants who reported English as their primary language ($M = .50$, $SEM = .04$).

In sum, there was no evidence of linguistic knowledge differences between male and female respondents. Greater knowledge, both subjective and objective, was associated with the language participants identified as primary, indicating that the distinction between primary and secondary language reflected a genuine difference in linguistic knowledge. Participants' mood at the start of the study (as measured by the PANAS; Watson, Clark, & Tellegen, 1988) was overall positive, as indicated by the differences between scores on the adjectives describing positive emotions and scores on the adjectives describing negative emotions, $M = 13.72$ ($SEM = .90$). No effect of sex or primary language of respondent existed, Fs < 1, suggesting that mood could not account for group differences in taboo word expression if such differences were observed in the analyses described below.

Is There a Self-Report Bias ('I' vs. 'Friends')?

The first question we asked was whether an in-group bias led to fewer reports of taboo words for 'I' than for 'Friends'. To answer this question, a 2 (sex of respondent: female vs. male) x 2 (stimulus language: English vs. Spanish taboo words) x 2 (alleged respondent: 'I' vs. 'Friends') x 2 (sex of the target: women vs. men) x 2 (primary language of the respondent: English vs. Spanish) ANOVA was conducted on the transformed proportions of English and Spanish taboo words reported by participants. In this analysis, sex and primary language of the respondent were between-subjects factors, whereas the remaining factors were manipulated within-subjects.

We found a main effect of alleged respondent, $F(1, 56) = 11.15$, $MSE = .032$, $p = .002$, $\eta^2_{partial} = .166$, indicating that participants indeed attributed more taboo word expressions to friends ($M = .15$, $SEM = .01$) than to themselves ($M = .10$, $SEM = .01$).

This conservative bias against attributing taboo word expressions to oneself affected participants uniformly, irrespective of their sex and primary language (as indicated by the absence of any interaction involving this factor, Fs ≤ 1. 13). In contrast, an interaction between stimulus language and primary language was obtained, $F(1, 56) = 8.02$, $MSE = .032$, $p = .006$, $\eta^2_{partial} = .125$. Participants whose primary language was Spanish tended to produce more taboo words overall in Spanish ($M = .16$, $SEM = .01$) than in English ($M = .09$, $SEM = .01$), $t(58) = 3.15$, $p = .003$. Participants whose primary language was English displayed a similar pattern (English: $M = .14$, $SEM = .01$; Spanish: $M = .11$, $SEM = .01$), $t(58) = 3.14$, $p = .003$. No other factors (including sex of the respondent) or interactions were significant, Fs ≤ 2.98, *ns*. Since the in-group bias did not interact with other factors, the analyses described below focused on reports of taboo words attributed to 'I', as 'sex of the respondent', a factor of primary interest in the present investigation, appropriately applied to 'I' only.

Overall Production of Taboo Words for 'I'

A 2 (sex of respondent: female vs. male) x 2 (stimulus language: English vs. Spanish taboo words) x 2 (sex of the target: women vs. men) x 2 (primary language of the respondent: English vs. Spanish) ANOVA was conducted on the transformed proportions of English and Spanish taboo words reported by participants in reference to 'I' (number of taboo words reported for 'I'/number of taboo words reported; see Table 1 for descriptive statistics of untransformed proportions). This analysis yielded a main effect of stimulus language, $F(1, 56) = 4.70$, $MSE = .017$, $p = .035$, $\eta^2_{partial} = .077$, indicating that participants produced more Spanish than English taboo word expressions. An interaction between stimulus language and sex of the target was also obtained, $F(1, 56) = 5.42$, $MSE = .005$, $p = .024$, $\eta^2_{partial} = .088$. Spanish taboo words were more likely to refer to men than to women, whereas English taboo words were evenly produced in reference to the two sexes. No other factors (including sex of the respondent) or interactions were significant, Fs ≤ 3.97, *ns*.

We predicted a primary-language preference for taboo words. No evidence of the hypothesized preference was obtained. The absence of a primary-language preference for taboo word expression nullified the test of the ancillary hypothesis that the greater the difference in the age of acquisition of the two languages, and/or the greater the difference in competence, the greater this preference might be.

Could the effect of stimulus language and its interaction with sex of target be accounted for by differences in the age of acquisition or knowledge of English and Spanish? Age of acquisition was assumed to denote the extent of one's opportunity to practice a language whereas competence was considered as reflecting more directly the outcome of such practice. Unsurprisingly, as the age of acquisition of English decreased relative to Spanish, subjective knowledge of English relative to Spanish increased (or as the age of acquisition of Spanish decreased relative to English, subjective knowledge of Spanish relative to English increased), $r = -.69$, $n = 60$, $p < .001$. The same relationship applied to objective knowledge (as indexed by vocabulary scores), $r = -.56$, $n = 60$, $p < .001$. Differences in subjective and objective knowledge between English and Spanish were positively correlated, $r = +.64$, $n = 60$, $p < .001$, suggesting that estimates of linguistic competence tended to be based on actual vocabulary knowledge (see also Delgado et al. 1999). The fact that vocabulary scores accounted for 41% of the variance of subjective estimates indicated that participants relied not only on familiarity with individual words and their meaning but also on other types of linguistic knowledge (e.g., syntax) to estimate their linguistic competence, thereby making subjective estimates a more comprehensive index of linguistic competence than vocabulary knowledge.

To estimate whether age of acquisition differences (English – Spanish) or subjective knowledge differences (English – Spanish) could account for the results reported above, two separate analyses of co-variance (ANCOVA) were conducted. The correlation between the two covariates justified separate analyses.

When age of acquisition differences (English – Spanish) were entered as a covariate in the ANOVA described above, the effect of stimulus language and the interaction of this factor with sex of the target were no longer significant, Fs = 3.33, *ns*. In contrast, when subjective knowledge differences (English – Spanish) were entered as a covariate, the main effect of stimulus language was preserved, $F(1, 55) = 5.41$, $MSE = .017$, $p = .024$, $\eta^2_{partial} = .090$, along with the interaction of stimulus language and sex of target, $F(1, 55) = 4.52$, $MSE = .005$, $p = .043$, $\eta^2_{partial} = .076$. These findings indicated that individual differences in the age of acquisition of English and Spanish, but not differences in subjective knowledge, could account not only for the overall greater production of Spanish taboo words, but also for the greater production of Spanish taboo words for men than for women compared to the equivalent production of English taboo words for the two sexes.

When subjective knowledge differences (English – Spanish) served as the covariate, the effect of sex of the target, $F(1, 55) = 5.23$, $MSE = .007$, $p = .026$, $\eta^2_{partial} = .087$, and the interaction between sex of target and sex of respondent also reached significance, $F(1, 55) = 4.26$, $MSE = .007$, $p = .044$, $\eta^2_{partial} = .072$. Although participants tended to produce more taboo words for men than for women (as indicated by the main effect of sex of target), male respondents appeared to be the primary culprit (as indicated by the interaction of sex of target and sex of respondent). Male respondents tended to produce a greater number of taboo words for men than women, whereas female respondents yielded an equal proportion of taboo words for men and women (other Fs ≤ 1.65, *ns*).

Production of Taboo Words by Categories for 'I'

The absence of sex differences in the production of taboo words may conceal differences due to the use of specific categories of taboo words. Thus, taboo words reported by participants were organized into the following conceptual categories of obscenity (see Jay, 2009): sexual allusions (e.g., cunt), profane or blasphemous terms (e.g., goddamn), scatological or disgusting objects (e.g., shit), insults involving deviance of a social, psychological and physical nature (e.g., retard and wimp), ethnic/racial terms (e.g., nigger), and ancestral references (e.g., bastard). As suggested by Jay (2009), references to deviance of a psychological, social and physical nature were combined. In contrast to Jay (2009), animal names (e.g., bitch and ass) were assigned to the category that best represented their intended meaning such as sexual allusions for 'bitch' or deviance for 'ass'. Analyses of frequency of use indicated that references to deviance (72%) were more numerous than sexual allusions (18%), $t(59) = 8.56$, $p < .001$. The remaining categories had considerably low response rates (e.g., ethnic/racial slurs: 5%).

A 2 (sex of respondent: female vs. male) x 2 (stimulus language: English vs. Spanish taboo words) x 2 (sex of the target: women vs. men) x 2 (primary language of the respondent: English vs. Spanish) ANOVA was conducted on the transformed proportions of references to deviance and sexual allusions separately. The remaining categories were excluded because they had too many missing cells to ensure a meaningful analysis. Descriptive statistics of untransformed proportions are displayed in Table 2. For clarity, we collapsed across sex of the respondent, as this factor did not yield any significant effects or interactions in the analyses reported below.

When the dependent variable was the transformed proportion of English and Spanish references to deviance reported by participants (number of deviations reported for 'I'/number of taboo words reported for 'I'), this analysis yielded a main effect of stimulus language, $F(1, 56) = 13.91$, $MSE = .067$, $p < .001$, $\eta^2_{partial} = .199$, underscoring a larger number of Spanish than English expressions involving references to deviations. However, an interaction between stimulus language and primary language was also obtained, $F(1, 56) = 5.61$, $MSE = .067$, $p = .021$, $\eta^2_{partial} = .091$, suggesting that the effect of stimulus language was modulated by the respondent's primary language. Participants whose primary language was Spanish tended to produce more deviations in Spanish than in English. Instead, participants whose primary language was English did not exhibit any preference. Furthermore, there was an interaction of stimulus language and sex of target, $F(1, 56) = 17.98$, $MSE = .042$, $p < .001$, $\eta^2_{partial} = .243$, indicating that the production of English and Spanish deviations were not different when women were the target. In contrast, when men were the target, Spanish yielded a higher production of deviations than English. No other factors or interactions were significant, Fs ≤ 3.29, *ns*.

When the contribution of differences in the age of acquisition of English and Spanish was entered as a covariate in the ANOVA described above, the effect of stimulus language and the interaction of this factor with sex of the target were preserved, $F(1, 55) = 4.19$, $MSE = .067$, $p = .045$, $\eta^2_{partial} = .071$, and $F(1, 55) = 5.20$, $MSE = .041$, $p = .026$, $\eta^2_{partial} = .086$, respectively. Although a main effect of sex of the target was also found, $F(1, 55) = 4.65$, $MSE = .053$, $p = .035$, $\eta^2_{partial} = .078$, the interaction of stimulus language and primary language was no longer significant, $F < 1$, *ns* (other Fs ≤ 3.20, *ns*). When subjective knowledge differences between English and Spanish were used as a covariate, the main effect of stimulus language, $F(1, 55) = 21.34$, $MSE = .062$, $p < .001$, $\eta^2_{partial} = .280$, and the interaction of stimulus language and sex of target, $F(1, 55) = 14.44$, $MSE = .317$, $p < .001$, $\eta^2_{partial} = .208$, were also preserved, whereas the interaction of stimulus language and primary language was not, $F < 1$ (Fs ≤ 3.37). In sum, removing the contribution of differences in age of acquisition or subjective linguistic competence between English and Spanish did not eliminate the differences in the production of English and Spanish deviations in reference to men and women. Such differences accounted for the preference displayed by respondents whose primary language was Spanish for Spanish deviations and the absence of a preference by respondents whose primary language was English.

When the dependent variable was the transformed proportion of English and Spanish sexual allusions reported by participants (number of sexual allusions reported for 'I'/number of taboo words reported for 'I'), the analysis yielded a main effect of stimulus language, $F(1, 56) = 7.22$, $MSE = .177$, $p < .000$, $\eta^2_{partial} = .114$, illustrating a larger number of English than Spanish expressions involving sexual references. A main effect of sex of target was also obtained, $F(1, 56) = 17.51$, $MSE = .150$, $p < .001$, $\eta^2_{partial} = .238$, indicating more sexual allusions used to refer to males than females. No other factors or interactions were significant, Fs ≤ 2.85, *ns*. When the contribution of differences in the age of acquisition of English and Spanish was entered as a covariate in the ANOVA described above, the effect of sex of the target was preserved, $F(1, 55) = 16.27$, $MSE = .148$, $p < .001$, $\eta^2_{partial} = .228$, along with the main effect of stimulus language, $F(1, 55) = 10.73$, $MSE = .169$, $p = .002$, $\eta^2_{partial} = .163$ (other Fs ≤ 3.28, *ns*). When the contribution of differences in subjective competence of English and Spanish was entered as a covariate, the effect of sex of the target was preserved, $F(1, 55) = 8.55$, $MSE = .151$, $p = .005$, $\eta^2_{partial} = .135$, whereas the main effect of stimulus language was no longer significant, $F = 1.52$, *ns* (other Fs ≤ 3.84, *ns*). In sum, removing the contribution of differences in the age of acquisition or subjective linguistic competence of English and Spanish did not eliminate the preference for sexual allusions produced for male targets compared to female targets. Differences in subjective linguistic knowledge, however, accounted for the greater production of English sexual allusions.

Discussion

The main results can be summarized in four points: first, there was an in-group bias favoring the attribution of reports of obscenity to others but not to oneself. Second, respondents reported more taboo words overall in Spanish for men than for women targets. Instead, respondents claimed to use an equivalent number of English taboo words to refer to women and men. A specific type of obscenity, references to deviance, was primarily responsible for this pattern. Indeed, Spanish deviations were more numerous for male than female referents, whereas English deviations were equally numerous for both referents. Males, however, were merely more frequent recipients of sexual allusions than females. Neither differences in age of acquisition nor differences in subjective linguistic competence between English and Spanish could account for these findings.

Third, when differences in subjective linguistic competence were partialed out, male respondents emerged as more likely to produce taboo words (including all categories of obscenity) for other males than females, whereas female respondents were equal opportunity offenders. Fourth, references to deviance were the most numerous taboo words followed by sexual allusions. Nevertheless, Spanish deviations were overall more numerous than English deviations, whereas the opposite was true for sexual allusions. Neither differences in age of acquisition nor differences in subjective linguistic knowledge between English and Spanish accounted for the greater production of Spanish deviations, whereas differences in subjective linguistic knowledge accounted for the greater production of English sexual allusions. In contrast, both differences in age of acquisition and differences in subjective linguistic knowledge between English and Spanish accounted for deviations being more numerous when the language in which they were produced matched the primary language of the respondent. What do these results say about the use of taboo words in expressive language?

Although one may not be surprised by the presence of an in-group bias favoring the attribution of taboo words to friends, the absence of differences between males and females in the expression of taboo words (including deviations and sexual allusions) is rather remarkable. Can the differences reported in the literature between male and female respondents (see Jay, 2009; Mehl & Pennebaker, 2003) have collapsed in the face of socio-cultural changes? At first glance, the data regarding taboo words (including the two categories of obscenity examined separately) suggest that male and female respondents who are young college students do not experience different social constraints and in turn behave similarly in regard to the use of obscenities in their daily lives. However, when differences in English and Spanish subjective competence are ruled out, men are found to produce more taboo words for other men, whereas females do not seem to distinguish between male and female targets. The sex differences reported in the literature pertaining to men as knowing more taboo words (Foote & Woodward, 1973; Kutner & Brogan, 1974), being more likely to swear in public (Mehl & Pennebaker, 2003), and using 'stronger' terms (Jay, 2009) than women may have to be reconsidered as a function of the sex of the recipient. Namely, men may be expected to use more obscene language than women only if the recipient of the obscenity is another man. Furthermore, although women have been reported to experience and express emotions more intensely and frequently than men (Feldman Barrett et al., 1998), our data do not support earlier findings that taboo word expression is affected by differences in emotional experience or manifestation between the sexes.

It is important to note that although our findings do not support the notion of overall differences in the way males and females use taboo words, they suggest that language modulates the use of obscenities involving deviations of a social, psychological, or physical nature when the referents are males and females. Irrespective of individual differences regarding linguistic competence and age of acquisition, Spanish deviations appear to be more numerous for men than women, whereas English deviations seem to be more egalitarian. One important difference between Spanish and English is that Spanish is a Romance language in which grammatical gender exists for nouns, whereas modern English is an Anglo Saxon language where nouns are gender neutral. If gender-related information is more perceptually noticeable in Spanish than in English, gender stereotypes may be more likely to be activated when social interactions rely on Spanish. Consequently, assuming that male stereotypes exhibit a more liberal use of obscenities than female stereotypes (as it appears from the literature on sex differences in taboo expression reviewed in the introduction), respondents may not attempt to curb their use of obscene language when men are the recipients of Spanish obscenities. In contrast, for a language such as English where male and female stereotypes are less likely to be activated by the lexical entities of the language, respondents may curb their use of obscene language more evenly as general social constraints pertaining to the use of obscenities overshadow gender-specific constraints.

Notwithstanding the source of the interaction of stimulus language and sex of the recipient, it is important to note that the evidence we collected disconfirms the stereotype of men being more fluent in the use of obscenities than women, and reinforces the notion that obscenities are 'offensive emotional language' whose recipient is an integral component of their use. Our evidence indicates that sex differences may exist for the recipients of such expressions but not for the perpetrators when the latter are young college students. Language is also important in determining the extent to which the sex of the recipient matters. Of course, one may question the extent to which the results of our investigation reflect young college students' use of obscenities in different social contexts. The goal of future research will be to examine the relevance of the factors we identified as critical to taboo word expression when a variety of social interactions occur or are imagined.

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Table 1: Mean Proportions of Taboo Words and Standard Errors of the Mean (in Parentheses) Produced by Female and Male Respondents by Stimulus Language (English vs. Spanish Taboo Words), Sex of the Target (Women vs. Men) and Primary Language of the Respondent (English vs. Spanish).

Female Respondent	Stimulus Language	Sex of Target	Respondent's Language	*M (SEM)*	*M*
	English	Women	English	.12 (.02)	
		Women	Spanish	.06 (.02)	.090
		Men	English	.09 (.02)	
		Men	Spanish	.06 (.02)	.075
	Spanish	Women	English	.08 (.01)	
		Women	Spanish	.12 (.03)	.100
		Men	English	.09 (.02)	
		Men	Spanish	.15 (.04)	.120
Male Respondent	Stimulus Language	Sex of Target	Respondent's Language	*M (SEM)*	*M*
	English	Women	English	.07 (.02)	
		Women	Spanish	.07 (.02)	.070
		Men	English	.10 (.02)	
		Men	Spanish	.08 (.02)	.090
	Spanish	Women	English	.08 (.03)	
		Women	Spanish	.11 (.04)	.095
		Men	English	.15 (.05)	
		Men	Spanish	.16 (.03)	.155

Table 2: Mean Proportions of Social/Psychological Deviations (Panel 1), Sexual Allusions (Panel 2) and Standard Errors of the Mean (in Parentheses) by Stimulus Language (English vs. Spanish Taboo Words), Sex of the Target (Women vs. Men) and Primary Language of the Respondent (English vs. Spanish).

Deviations	Stimulus Language	Sex of Target	Respondent's Language	*M*	*(SEM)*	*M*
	English	Women	English	.23	(.04)	
		Women	Spanish	.17	(.04)	.200
		Men	English	.22	(.05)	
		Men	Spanish	.14	(.04)	.180
	Spanish	Women	English	.19	(.03)	
		Women	Spanish	.24	(.04)	.215
		Men	English	.21	(.03)	
		Men	Spanish	.35	(.05)	.280
Sexual Allusions	Stimulus Language	Sex of Target	Respondent's Language	*M*	*(SEM)*	*M*
	English	Women	English	.17	(.05)	
		Women	Spanish	.04	(.03)	.105
		Men	English	.31	(.07)	
		Men	Spanish	.30	(.08)	.305
	Spanish	Women	English	.05	(.03)	
		Women	Spanish	.05	(.02)	.050
		Men	English	.13	(.05)	
		Men	Spanish	.15	(.06)	.140