

Evolution of Gender Stereotypes in Spain: Traits and Roles

Mercedes López-Sáez, J. Francisco Morales and Ana Lisbona
Universidad Nacional de Educación a Distancia (Spain)

The aim of this study is twofold: to determine whether (and how) gender stereotypes have changed over time through a comparison of two different sets of data collected in 1993 (N = 1255) and 2001 (N = 1255) from a representative sample of the Spanish population, and to examine the relation between gender traits and roles and its stability over time. In addition, special attention is paid to the psychometric properties of the measures of gender traits and roles used in the study. The content of gender stereotypes was found to remain stable over the target period of time, confirming the classical typology (a higher assignment of expressive-communal traits to women and of instrumental-agentic traits to men). The structure of the gender-role questionnaire allows us to distinguish between family-role and work-role stereotyping. Gender-role stereotyping shows a marked decline between 1993 and 2001, a result that contrasts with the stability of trait-role stereotyping. The fact that a very low correlation is observed at the two time points between these two components of gender stereotyping strongly suggests their independence.
Keywords: gender stereotypes, instrumental traits, expressive traits, role stereotypes

En este estudio se persigue un doble objetivo: comprobar la evolución de los estereotipos de género en dos aplicaciones, efectuadas en 1993 (N = 1255) y 2001 (N = 1255), ambas con muestras representativas de la población española, y analizar la relación que existe entre rasgos y roles, examinando si se han producido cambios en esa relación con el paso del tiempo. Asimismo, se analizan las propiedades psicométricas de las medidas de rasgo y de rol empleadas. Los resultados muestran que el contenido de los estereotipos de rasgo no se ha modificado, confirmándose la clásica tipología en la que se asignan más rasgos expresivo-comunales a las mujeres que a los hombres y, por el contrario, más rasgos instrumental-agentes a los hombres. La estructura del cuestionario de roles, permite diferenciar entre estereotipia de rol familiar y estereotipia de rol laboral. Al comparar la evolución de los estereotipos en este periodo, se observa un descenso en la estereotipia de la población española, más acusada en el componente de rol que en el de rasgo. La correlación entre ambos componentes es muy baja o no significativa, sin que se observen cambios importantes en la evolución de esa relación. Estos resultados parecen corroborar la independencia entre los componentes de rasgo y de rol.
Palabras clave: estereotipos de género, rasgos instrumentales, rasgos expresivos, estereotipia de rol de género

The sampling of this investigation was financed by the Instituto de la Mujer.

Correspondence concerning this article should be addressed to the authors: Facultad de Psicología, UNED, Departamento de Psicología Social y de las Organizaciones, C/ Juan del Rosal, 10, 28040 Madrid (Spain). E-mails: mlopez@psi.uned.es; folco_and@yahoo.es; amlisbona@psi.uned.es Translation: Virginia Navascués Howard

How to cite the authors of this article: López-Sáez, M., Morales, J.F. and Lisbona, A.

In 1992, thanks to the initiative of the Instituto de la Mujer [Women's Institute], various specialists elaborated a system of indicators to appraise the situation of Spanish women in comparison to men. Among the indicators were included gender stereotypes. This study, in its key aspects, is based on the proposal of gender stereotyping indicators of Morales and López-Sáez (1993, 1994). The idea behind the inclusion of these subjective measures is that the internalization of stereotypes affects behavior and is the origin of gender differences. One of the main goals of this system of indicators was periodic assessment, in order to obtain a diagnosis of the situation at a concrete point in time and to determine the evolution over time. In this article, changes in gender stereotyping between the first administration of the indicators—1993—and the last one with available data for the time being—2001—are verified.

Within the system of indicators, two components were used to measure gender stereotyping: personality traits and roles (Morales & López-Sáez, 1993, 1994). Trait stereotypes reflect psychological characteristics that are more frequently attributed to men or women, whereas role stereotyping focuses on beliefs about the activities considered more appropriate for men and for women. The theoretical framework that supports the choice of this measurement of indicators is integrated within the relation that various authors have established between trait and role gender stereotypes (Eagly & Wood, 1991, 1999; Eagly, Wood & Diekmann, 2000; Wood & Eagly, 2002). The social changes in women's roles throughout the 20th century are indisputable. Currently the cultural models tend to equate both genders, and the roles of men and women are very similar, especially in the professional area. It seems logical to think that such social changes will affect the beliefs about the characteristics of both genders. Specifically, in Spain, for over more than a decade, more women than men are studying university careers. However, the inequalities persist: the percentage of women who study architecture and engineering only reaches 27%; among university graduates, the number of unemployed women is twice that of men, and the number of women hired at the highest level of university professors does not even reach 14%. There is only 2.8% of women on the boards of administration of the main Spanish companies. Moreover, women's salary is 27.2% less than men's for the same job, and women who work outside of the home devote more than twice the time to housework than men do. In posts of political power, despite the advances in equality, women only have 29% of the representation in all the city halls, Parliaments, and Senate (Source: Instituto de la Mujer-INI [Women's Institute-National Institute of Statistics]).

Gender studies reveal the persistence of inequalities between men and women and these differences can largely be partially explained by the persistence of stereotypes related to work (Alter & Seta, 2005; Glick, Larsen, Johnson, & Branstiter, 2005; Selwyn, 2007; White & White, 2006)

or to leadership (Eagly & Karau, 2002; Killen, López-Zafra, & Eagly, 2006; Powell, Butterfield, & Parent, 2002; Sczesny, Bosak, Neff, & Schyns, 2004), to mention some examples from recent research. For the investigators of gender inequalities, the following question is unavoidable: If reality changes, do stereotypes change?

Gender stereotypes and social reality. Initially, investigations of gender stereotypes focused on the differentiation of two kinds of traits: expressive-communal traits, associated with femininity, and the instrumental-agentic, associated with masculinity (Bem, 1974; Spence, 1993; Spence & Buckner, 2000; Spence & Helmreich, 1978). At the beginning of the 1980s, within the framework of the schema theories, a series of approaches were developed that deal with the relation between masculine and feminine personality traits and gender stereotyped behaviors. These theories are based on identifying the social prescriptions of femininity and masculinity. Sandra Bem (1974) developed a measurement of gender identity based on personality traits, the Bem Sex Role Inventory (BSRI), choosing the traits that were significantly more desirable for women than for men and those that were significantly more desirable for men than for women. The BSRI measures individual differences in the internalization of the prescriptions of femininity and masculinity. The self-schema gender theory of Bem (1981) predicts differences between people who identify with the traditional traits of their sex—that is, women with high identification with femininity and men with high identification with masculinity—and the rest of the people, when processing gender-related information. Only such sex-typified people would process gender information, even self-related information, schematically. From a similar approach, for Markus and collaborators, behavior would depend on the type of stimulus, and people's sex would not affect it (Markus, Crane, Bernstein, & Siladi, 1982): People who highly identify with femininity are schematic when processing information associated with feminine aspects, whereas people who highly identify with masculinity will only be schematic when processing information related to masculine features.

The theories of gender schemas are strictly cognitive, as they focus on the way people process information about gender as a function of their identity, without taking into account the way the context may affect such processing. Although the social gender identity is relatively stable, and men tend to identify more with the traditionally masculine stereotypes and women with the feminine ones, people's self-perception varies as a function of the situation in which they find themselves. Echebarria & González (1999), using a version of the BSRI, found changes in the pattern of gender identity as a function of whether or not the context was public or private: In a professional situation, men and women identified more with instrumental traits, whereas in a private context, both groups identified more with expressive characteristics.

Not only does the proximate context affect gender differences. The role of social structures is crucial for the maintenance or change of men-women differences. There is mutual influence between beliefs and structures, so that society changes when citizens' beliefs change, but also, changes in society contribute to changing beliefs. Therefore, a relation is established between sexist beliefs and structural inequalities between men and women. For example, regarding sexist attitudes, Glick et al. (2000) found that the countries that scored high in sexist attitudes had the worst indicators of women's equality. Along these lines, in a representative sample of the population of Galicia (Spain), Glick, Lameiras, and Rodríguez-Castro (2002) confirmed the influence on sexist attitudes of two very important institutions in any culture: the educational system and religion. These authors found a negative correlation between the educational level and hostile or benevolent sexism, and a positive one between Catholic religiosity and benevolent sexism. This empirical evidence, found in correlational works, was corroborated in an experimental study by Jost and Kay (2005) that showed that the activation of gender stereotypes contributes to justify system inequalities in gender roles.

From a clearly psychosocial approach, the social role theory postulates a relation between roles and stereotypes, so that perceivers attribute to the people who play a certain role, specific internal dispositions that are coherent with that role (Eagly & Wood, 1991, 1999; Eagly et al., 2000; Wood & Eagly, 2002). According to this proposal, the origin of descriptive gender stereotypes lies in the inference of correspondence between what men and women do and their internal dispositions. The social distribution of roles has traditionally assigned tasks that require instrumental-agentic characteristics to men and tasks that demand expressive-communal qualities to women. Therefore, from this theoretical approach one would expect a high relation between role and trait stereotypes and, as role assignment becomes more egalitarian, the psychological differences attributed to men and women should gradually disappear.

But the cross-cultural study of Williams and Best (1990) does not corroborate that social changes lead to a change in the stereotypes of men's and women's characteristics. These authors found a high consensus among countries in trait stereotypes that reproduced the two classic dimensions: expressiveness associated with women and instrumentality with men. According to their data, the differences among countries was more closely related to the system of values or religious beliefs than to structural aspects that reflected real changes, such as women's education or their rates of activity.

Content of gender stereotypes and the perception of people. The measurement of gender stereotypes poses the problem of whether there is an abstract representation of men and women in general, or whether this representation

is organized around the subtypes of both social categories. In the perception of people, categories other than gender—family and professional role, affiliation groups, ideology, physical appearance, or personality—may be used to classify people (Carpenter & Trentham, 1998, 2001). Moreover, the characteristics of the situation may enhance the use of certain subtypes when perceiving other people or oneself (Glick et al., 2005; Echebarria & González, 1999).

Investigation of the subtypes of men and women has found some consistent patterns (Deaux, Winton, Crowley, & Lewis, 1985; Six & Eckes, 1991). Among the women's subtypes are included professionals, housewives, athletes, and sexy women, and among men's, macho-men, business men, athletes, and family men. This division suggests that a person's gender affects the categorization made when they are classified in a subtype. Some investigations on subtypes support the idea that the supraordinal category of gender, as a salient characteristic, has primacy in people's perception (Brewer & Lui, 1989; Stangor, Lynch, Duan, & Glas, 1992). Although classifying people according to subtypes can be more informative than doing so by broad categories such as gender, when knowledge about the person is minimal or the characteristics of the situation equate men and women as belonging to a same subtype (i.e., professionals or parents), dimensions such as gender are used to classify people. A woman is more closely associated with feminine characteristics and, therefore, does not match a role associated with masculine characteristics, because she will be perceived as having fewer traits related to the competence demanded for a traditionally masculine task. This explains the differences maintained between men and women despite the formal equalities, in essential facets such as work, salary, couple violence, choice of career, power, or attention to dependent people. It has been confirmed that gender stereotypes play an important role in the expectations of success and satisfaction in the selection of a job applicant, depending on whether the post is traditionally feminine or masculine (see Alter & Seta, 2005; also and using a qualitative methodology, discourse of women in traditionally masculine posts is analyzed by López-Sáez, Lisbona, and Sáinz, 2004).

The present study has a dual purpose: (a) to compare the results obtained in the measurement of gender stereotypes in the last two applications, effected in 1993 and 2001, both with representative samples of the Spanish population, in order to determine how they have evolved during this period; and (b) to study in depth the relation between traits and roles, to determine whether changes in this relation have occurred over time. The psychometric properties of the measurements proposed as indicators by Morales and López-Sáez (1993, 1994) will also be analyzed. Although these measuring instruments have been used periodically, the results of the psychometric assessment had not been published, although they had been included in the reports sent to the Women's Institute.

Method

Participants

We compared two representative samples of the Spanish population, over 18 years old, obtained 8 years apart: in 1993 and 2001. The type of sampling was polystage, stratified cluster according to the habitat where they resided in the first stage and to the home in the second stage. In the last stage, the people from each home were selected to obtain the sampling quotas of sex, age, and occupation corresponding to each sample section. The size of each of the samples was as follows: 653 women and 602 men in 1993; 640 women and 615 men in 2001.

Instruments and Procedure

We used a questionnaire that included measurements of trait and role stereotyping, in addition to other indicators, and sociodemographic characteristics. Data were collected in the interviewees' homes, by professionals who were duly trained for this purpose.

Personality traits. To measure trait stereotyping, in two sections of the questionnaire, participants were asked to indicate the percentage of men and women in general who possess each one of the 17 traits (see Table 1 in the Results section). These items were selected in three successive phases. From the traits of the BSRI of Bem (1974), the 14 items with the most gender stereotyping in two different samples were selected (Morales & López-Sáez, 1994). In addition, 6 negative items were included, which were extracted from the review of other works. Of the 20 traits selected in 1993, the results showed that 17 were stereotypical, and they were selected for subsequent applications.

Trait stereotyping was calculated following the procedure of Martin (1987). For each trait and each participant, a diagnostic ratio (DR) was calculated by dividing the percentage of men to whom the trait was attributed by the percentage of women to whom it was attributed, and subsequently performing a mathematical transformation to equate the range of the original ratio measurements (OR). In each case, if the quotient obtained was higher than or equal to 1, it was transformed by subtracting 1 ($DR = OR - 1$). If the quotient was less than 1, the inverse of the original ratio was subtracted from 1 ($DR = 1 - 1/OR$). With this transformation, the absence of stereotyping receives a score of 0, positive scores indicate that the trait is attributed more to men, and negative scores indicate that it is attributed more to women. Once the transformation is performed, the DR used as an indicator is the mean DR for the sample. A mean DR of 0 indicates that in that population, there is no stereotyping of that trait. If the mean DR is significantly higher than 0 (p of the t statistic), it can be concluded that the trait is stereotypically masculine. If it is significantly

less than 0, it is stereotypically feminine. The DR is conceived as a stereotyping measurement that allows one to predict the probability of assigning a characteristic of one group to another (Allen, 1996; McCauley, Stitt, & Segal, 1980). With this kind of measurement, some of the problems associated with general measurements of gender stereotypes are overcome. If the proportion of women who have a trait is twice that of the men, in the absence of other specific data about each person, the probability of assigning that characteristic more to a woman than to a man will be twice as high in any context.

Roles. The measurement of role stereotyping is based on a selection of items from the Questionnaire of Sexual Role Ideology (Moya, Navas, & Gómez, 1991). In the 1993 application, 15 items from this questionnaire were used (López-Sáez & Morales, 1995). After exploratory factor analysis, the items that met the criterion of factor loadings over .50 were selected. Thus, in the 2001 application, a 9-item scale was used (see Table 2 in the Results section). Participants were asked to rate their degree of agreement, ranging from 1 (*disagree completely*) to 5 (*completely agree*).

Statistical Analyses

A t -test was used to compare each DR with 0. The evolution of the differences between the two years was verified by means of ANOVA if the variances were homogeneous (Levene's test nonsignificant), and with a nonparametric test, Wilcoxon's W , if this assumption was not met. The reliability of the scales was calculated by means of Guttman's split halves if the items were a ratio measurement, and with Cronbach's alpha if the items were in scalar format. We used Cohen's test to compare correlations. We performed confirmatory factor analysis using Amos 5.0 on the data from the 2001 sample to verify the fit to a model of the dimensions of trait and role stereotyping.

Results

Trait Stereotyping

Firstly, we analyzed the content of the trait stereotypes in 2001, verifying whether the DR of each characteristic was significantly different from 0.

The content of the beliefs about which characteristics are possessed by men more than by women had not changed substantially in the interval analyzed. In the two samples, in all the traits, the stereotypes that assign more instrumental and agentic characteristics to men than to women were maintained. Therefore, the content of masculine trait stereotyping observed in 1993 still occurred in 2001 (see Table 1). The differences between the two years was verified by means of Wilcoxon's W . Regarding the changes produced between 1993 and 2001, in masculine trait stereotyping, the decrease in all the traits

was noteworthy, except for “aggressive,” which increased ($p < .05$ in all cases), and for the traits “hard-hearted,” “strong personality,” and “athletic,” which did not undergo significant changes. Regarding personality traits associated more with women than with men, in both samples, traditional feminine trait stereotyping was repeated, with more expressive-communal characteristics assigned to women. When comparing the results of 1993 and 2001, the increase in the strength of the stereotypes in the traits of “tender,” “compassionate,” “warm,” and “affectionate” was notable ($p < .05$ in all cases); “submissive” did not change, and stereotyping in the rest decreased ($p < .05$ in all cases).

Confirmatory factor analysis was performed to verify the psychometric fit to a two-dimensional model: instrumentality-agency and expressiveness-communality. The estimation method used was maximum likelihood, which is more adequate than unweighted squared minimums for large sample sizes (Ximénez & García, 2005). The model based on DRs of the 9 masculine items presented good fit indicators: goodness of fit index (GFI = .99), adjusted goodness of fit index (AGFI = .97), and the root mean square error of approximation (RMSEA = .05). The indicator based on chi-square was not taken into account as it is not adequate for samples of over 1000 cases. Likewise, the fit of the model based on the 8 feminine items was also confirmed: GFI = .98, AGFI = .95, RMSEA = .06. The

absolute value of r (.54) allowed us to verify the structure of a conjoint model of two correlated dimensions, those corresponding to the masculine and feminine items. This model presented the following goodness-of-fit indexes: GFI = .95, AGF = .94, RMSEA = .05. Therefore, it can be concluded that, both theoretically and empirically, the items of this questionnaire are adequate to measure the two classic dimensions of trait stereotyping in Spanish populations.

Once the appropriateness of the questionnaire had been verified, for subsequent analyses, we calculated a global mean of masculine trait stereotyping (MTS) and in feminine trait stereotyping (FTS), by adding the DRs of the items defined as masculine or feminine, respectively, and weighting as a function of the number of items. High scores in MTS and low scores in FTS (because of the negative sign of these DRs) indicate that the participants stereotype traditionally.

We also obtained a global mean of trait stereotyping (GTS), by calculating the mean of MTS and FTS (in absolute values). High scores in this measure indicate more stereotyped responses in both kinds of traits. The 1993 mean of the masculine traits (mean MTS = 1.27, $SD = 3.6$; Guttman = .57) was significantly higher ($z = 2.59$, $p < .01$) than the 2001 mean (mean MTS = .95, $SD = 2.4$; Guttman = .65). A decrease in the global FTS was also observed, because the 1993 mean (mean FTS = .91, $SD = 2.48$, Guttman = .74) was significantly more stereotyped ($z = 1.09$,

Table 1

Diagnostic Ratios (DR) and t-Values comparing Stereotypically Masculine and Feminine Traits Measured in 1993 and 2001

Traits	1993		2001	
	DR	<i>t</i>	DR	<i>t</i>
Masculine Traits				
Acts like a leader	1.47	8.31**	1.07	10.78**
Adventurous	2.76	9.79**	1.48	8.69**
Egotistic	.66	4.27**	.56	3.92**
Individualist	.65	3.78**	.59	3.20**
Hard-hearted	1.36	6.50**	.84	6.85**
Aggressive	1.48	7.25**	1.67	7.30**
Strong personality	.22	1.92*	.30	2.50*
Athletic	1.87	7.27**	1.46	8.69**
Feminine Traits				
Submissive	-1.24	5.23**	-1.42	6.50**
Loves children	-.56	3.67**	-.53	6.00**
Soft-hearted	-.62	5.00**	-.85	6.00**
Understanding	-.46	5.56**	-.37	7.00**
Compassionate	-.37	2.77**	-.44	3.91**
Sensitive	-.36	2.47**	-.39	12.67**
Cries easily	-4.01	10.56**	-2.85	9.34**
Warm	-.30	10.00**	-.53	3.86**
Affectionate	-.26	3.13**	-.56	4.00**

* $p < .05$. ** $p < .01$.

$p < .04$) than the 2001 mean (mean FTS = .87, $SD = 2.36$, Guttman = .60). However, in the GTS, no significant differences were observed between 1993 (mean GTS = 2.17, $SD = 3.6$, Guttman = .63) and 2001 (mean GTS = 1.84, $SD = 3.93$, Guttman = .72). The reliability coefficients of the scales were satisfactory and, in general, an improvement was observed in the 2001 application.

These results show that the global content of the trait stereotypes has not changed substantially. However, it is noteworthy that, in all the stereotypically masculine traits except for "aggressive," the DR decreased from 1993 to 2001, which indicates that in our society, there is a tendency to perceive men and women as more equal in the characteristics of the instrumental-agentic dimension. This tendency was not observed in stereotypically feminine traits, as they decreased only in three traits and four traits increased.

Role Stereotyping

To explore the structure of this scale, we conducted an exploratory factor analysis with principal component method and varimax rotation. The factor structure was the same in both samples, although the loadings varied in the two applications. Conjointly, the two factors explain 33% of the variance of 1993 and 48.6% of that of 2001. Table 2 displays the results of these analyses, with the items arranged

according to the loadings obtained from the 2001 data. The first factor extracted was called Family Role Stereotyping and the second one Work Role Stereotyping. These two factors represent different dimensions of gender stereotyping, with theoretically different contents. Therefore, in addition to the total of the scale, we considered each one of the two dimensions as subscales of the measurement of stereotyping. The reliability of each scale was acceptable or good, and an improvement was observed in the 2001 sample compared to the 1993 sample. Confirmatory factor analysis allowed us to determine that the structure of the two dimensions, Family Role and Work Role, which were correlated ($r = .62$), corresponded to a model with good fit indicators: GFI = .97, AGFI = .95, RMSEA = .06.

According to the one-factor within-subject ANOVA, Family Role Stereotyping was higher than Work Role Stereotyping (see Table 3), both in the 1993 sample, $F(1, 1179) = 1543$, $p < .0001$, and in the 2001 sample, $F(1, 213) = 1673$, $p < .0001$. When comparing 1993 with 2001 (Wilcoxon's W), we observed that stereotyping in the total scale decreased ($z = 7.82$, $p < .0001$), as well as in the Family Role ($z = 6.61$, $p < .0001$) or the Work Role subscales ($z = 10.56$, $p < .0001$). To sum up these results, in role stereotyping, the changes are important, especially those referring to aspects related to work roles, but the changes in family role stereotyping are less intense.

Table 2
Factor Structure of the Role Gender Stereotyping Scale

Factors and Items	1993	2001
FACTOR 1: FAMILY ROLE: % explained variance (Cronbach α of subscale)	23.7% (.75)	39.0% (.81)
	Factor loadings	
If a child gets sick and both parents work, it is generally better for the mother to ask for time off at work to care for the child.	.67	.76
It is better for a woman to try to achieve security by encouraging her husband at work rather than to get ahead of him in her own career.	.66	.66
It is more important for a woman than for a man to be a virgin until she marries.	.65	.61
I think it is much more disagreeable for a woman to swear and use vulgar language than it is for a man to do so.	.60	.59
It's natural for men and women to perform different tasks.	.59	.58
Maternity is the greatest source of satisfaction a woman can have.	.61	.44
FACTOR 2: WORK ROLE: % explained variance (Cronbach α of subscale)	9.7% (.53)	9.6% (.80)
When a high percentage of women begin to have access to a profession, it tends to lose social prestige.	.72	.76
The woman who limits herself to her profession tends to adopt masculine traits and behaviors.	.56	.72
At work, women do not usually have original ideas because they are too concerned about their labor security.	.54	.70
Total Role: % explained variance (Cronbach α of total scale)	33.4% (.76)	48.6% (.84)

Table 3
Evolution of Role Stereotyping. Means and Standard Deviations (in Brackets)

	1993	2001
Total Scale	2.92 (.79)	2.64 (.90)
Family Role	3.32 (.96)	3.03 (1.04)
Work Role	2.16 (.85)	1.84 (.96)

Relation between Trait Stereotyping and Role Stereotyping

In Table 4 can be seen the correlations between the different subscales of trait stereotyping (absolute values) and role stereotyping. The upper part of the matrix displays the data from the 1993 sample; the lower part, those corresponding to 2001, in boldface. There were no significant correlations between the components of trait and role stereotyping in the 1993 sample, and the magnitude was very low (never higher than .12) in the 2001 sample. The correlation found in the total trait and role stereotyping of 1993 ($r = .04$) was not significantly different ($z = 1.5$, $p < .13$) from that of 2001 ($r = .10$). According to these results, we could not corroborate the hypothesis of the relation between trait stereotyping and role stereotyping, and although the correlation tended to increase, the difference was not significant.

However, the correlations between the subscales of the same component—feminine and masculine traits, or family and work roles—were much higher (never less than .35). The association established between feminine and masculine traits in 1993 ($r = .37$) was not significantly different ($z = 0.55$, $p < .29$) from that found in 2001 ($r = .35$). The correlation between role stereotyping—family and work—in 2001 ($r = .50$) was significantly higher ($z = 3.28$, $p < .001$) than the one obtained in 1993 ($r = .39$).

Discussion

The consistency of the results obtained in the measurement of stereotyping, both of traits and roles, in two applications at different moments in time reveals the usefulness of the instruments employed to measure stereotyping in the Spanish population, both because of their psychometric properties and their theoretical validity. Regarding the content of trait stereotypes in Spanish samples, confirmatory factor analysis ratifies the validity of the classical dimensions of expression-communality, attributed more to women, and instrumentality-agency, attributed more to men, as well as the currency of these stereotypes. This content has not changed substantially over eight years. Our results corroborate those found in a recent study carried out by Spence and Buckner (2000), using items from the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978) and the BSRI (Bem, 1974). These authors found that the dimensions of trait stereotyping (instrumentality associated with men and expressiveness with women) that were used to elaborate the PAQ and the BSRI in the 1970s were maintained in 1996. Moreover, our data show that society evolves to equate men and women in the traits traditionally considered “masculine,” but not so much in those traditionally considered “feminine.” No doubt, the fact that women have adopted the characteristics associated with the instrumental-agentic dimension to a greater extent than men have assumed the related expressive-communal qualities has influenced this change and, therefore, this aspect of trait stereotyping has decreased.

Regarding roles, gender stereotyping is higher in the features linked to the family—where, according to our data, the role assigned to women is still very traditional—than in aspects related to paid work. It seems that this family facet is the most acute role stereotyping phenomenon, and it is also the most immovable. However, the remarkable decrease in role stereotyping between 1993 and 2001 is noteworthy, especially with regard to work roles.

Table 4
Correlations among Trait and Role Stereotyping in 1993 and 2001 (in Boldface)

	1993					
	Masculine traits	Feminine traits	Total traits	Family role	Work role	Total roles
Masculine traits	—	.37**	.89**	.04	.04	.05
Feminine traits	.35**	—	.75**	.01	.03	.01
Total traits	.83**	.81**	—	.03	.05	.04
Family role	.09**	.05	.08**	—	.39**	.94**
Work role	.10**	.08**	.12**	.50**	—	.67**
Total roles	.10**	.06*	.10**	.95**	.74**	—

2001

* $p < .05$. ** $p < .01$.

The lack of a relation between trait stereotyping and role stereotyping found in the 1993 sample ($r = .04$) was significant in 2001 ($r = .10$), although the magnitude was very low, and the difference between these two moments in time was not statistically significant. Correlations between feminine and masculine trait stereotypes were found, which shows that people who stereotype instrumental traits traditionally, assigning more of these traits to men, also do so with the expressive traits, assigning more of them to women. The correlations between the two dimensions of role stereotyping were also high in both samples. These results coincide with those obtained in various samples of university students by Spence and Buckner (2000), whose correlations between instrumental and expressive stereotypes ranged between .26 and .43. However, the correlations found by these same authors between stereotypes and attitudes were significant only in the case of masculine trait stereotyping and only in men. According to their conclusions, this kind of results lends strength to the idea of independence between the different components of gender stereotypes and supports the multidimensional models in the analysis of gender (see Spence, 1993).

Our results point in the same direction as those obtained by Deaux and Lewis (1984) and other investigators (see Burgess & Borgida, 1999) concerning the independence of the diverse components of stereotypes (physical traits, personality traits, roles, or occupations), and they seem to point to processes that are related to stereotyping, but different. In this sense, our data do not support the theoretical proposal of Eagly and collaborators, because their postulates indicate that such a relation should exist (Diekmann & Eagly, 2000; Eagly et al., 2000).

For Williams and Best (1990), trait stereotyping justifies and explains role stereotyping and, therefore, beliefs about personality characteristics should be more resistant to change. This would explain why there is no relation between the new roles performed by men and women and the traits attributed to them, as the results of our study seem to corroborate. Various authors have argued in favor of the role of the differentiation of gender to maintain the *status quo*. The model of the content of stereotypes (Glick & Fiske, 1999) considers that sociability and competence are central dimensions in the perception of others. The content of these dimensions is very similar to the central dimensions of gender stereotyping: expressiveness and instrumentality. According to these authors, men and high-status groups are perceived as being competent and instrumental, but as being low in the dimensions of sociability and expressiveness. The opposite occurs with women and low-status groups, which are perceived as high in sociability and low in competence. In fact, low-status groups, for instance, women, are considered by the members of their own group as being high in sociability and low in competence, in comparison to high-status groups (Betancor, Rodríguez, Rodríguez, Leyens & Quiles, 2005). Moreover, the traits attributed to men and women are complementary and there are positive

and negative aspects in the content of both of them. The stereotype of women, tender and oriented toward interpersonal relations, is very positive, but high-status groups are not associated with such communal characteristics; however, they are associated with the instrumental characteristics that are typical of masculine stereotypes, whereas as low-status groups are associated with communal characteristics, but not with instrumental ones, as occurs with women. Thus, the assignment of expressive traits to women and instrumental traits to men would provide a psychological explanation to the distribution of roles and would contribute to maintaining them. This justification of roles contributes to legitimizing the inequalities of the system (Burgess & Borgida, 1999; Jost & Kay, 2005).

Our study was planned with the purposes of describing stereotyping in the Spanish population, assessing the possible changes that have occurred in an eight-year interval, and determining the validity of the instruments employed. Therefore, from our data, we cannot reach any conclusions that allow us to determine why we found no relation between trait stereotypes and role stereotypes. Future research should study this aspect in depth to seek possible explanations.

References

- Allen, B.P. (1996). African Americans' and European Americans' mutual attributions: Adjective generation technique (AGT) stereotyping. *Journal of Applied Social Psychology, 26*, 884-912.
- Alter, R.J., & Seta, C.E. (2005). Compensation for inconsistencies: The effects of stereotype strength on expectations of applicants' job success and satisfaction. *Sex Roles, 53*, 79-87.
- Bem, S.L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.
- Bem, S.L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364.
- Betancor, V., Rodríguez, A., Rodríguez, R., Leyens, J.P., & Quiles, M.N. (2005). El efecto del estatus en la atribución de las dimensiones estereotípicas de sociabilidad y competencia. *Psicothema, 17*, 297-302.
- Brewer, M. B., & Lui, L. N. (1989). The primacy of age and sex in the structure of person categories. *Social Cognition, 7*, 262-274.
- Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotypes and sex discrimination. *Psychology, Public Policy, and Law, 5*, 665-692.
- Carpenter, S., & Trentham, S (1998). Subtypes of women and men: A new taxonomy and an exploratory categorical analysis. *Journal of Social Behavior and Personality, 13*, 679-696.
- Carpenter, S., & Trentham, S. (2001). Should we take "gender" out of gender subtypes? The effects of gender, evaluative valence and context on the organization of person subtypes. *Sex Roles, 45*, 455-480.
- Deaux, K., & Lewis, L.L. (1984). Structure of gender stereotypes: Interrelationship among components and gender labels. *Journal of Personality and Social Psychology, 46*, 991-1004.

- Deaux, K., Winton, W., Crowley, M., & Lewis, LL. (1985). Level of categorization and content of gender stereotypes. *Social Cognition, 3*, 145-167.
- Diekmann, A.B., & Eagly, A.H. (2000). Stereotypes as dynamic constructs: Women and men of the past, present and future. *Personality and Social Psychology Bulletin, 26*, 1171-1188.
- Eagly, A.H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573-598.
- Eagly, A. H., & Wood, W. (1991). Explaining sex differences in social behavior: A meta-analytic perspective. *Personality and Social Psychology Bulletin, 17*, 306-315.
- Eagly, A.H., & Wood, W. (1999). The origins of sex differences in human behavior. Evolved dispositions versus social roles. *American Psychologist, 54*, 408-423.
- Eagly, A.H., Wood, W., & Diekmann, A.B. (2000). Social Role theory of sex differences and similarities: A current appraisal. In T. Eckes & H.M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). Mahwah, NJ: Erlbaum.
- Echebarria, A., & González, J.L. (1999). The impact of context on gender social identities. *European Journal of Social Psychology, 29*, 287-304.
- Glick, P., & Fiske, S.T. (1999). Sexisms and other "isms": Interdependence, status and the ambivalent content of stereotypes. In W.B. Swann, J.H. Langlois, & L.A. Gilbert (Eds.), *Sexism and stereotypes in modern society* (pp. 193-221) Washington, DC: American Psychological Association.
- Glick, P., Fiske, S.T., Mladinic, A., Saiz, J., Abrams, D., Masser, B., et al. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology, 79*, 763-775.
- Glick, P., Lameiras, M., & Rodríguez-Castro, Y. (2002). Education and Catholic religiosity as predictors of hostile and benevolent sexism toward women and men. *Sex Roles, 47*, 433-441.
- Glick, P., Larsen, S., Johnson, C., & Branstiter, H. (2005). Evaluations of sexy women in low- and high-status jobs. *Psychology of Women Quarterly, 29*, 389-395.
- Instituto de la Mujer – Instituto Nacional de Estadística. *Mujeres y hombres en España 2006*. Retrieved in 2007 from http://www.mtas.es/mujer/mujeres/estud_inves/index.htm
- Jost, J.T., & Kay, A.C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: Consequences for specific and diffuse forms of system justification. *Journal of Personality and Social Psychology, 88*, 498-509.
- Killen, L.A., López-Zafra, E., & Eagly, A.H. (2006). Envisioning oneself as a leader: Comparisons of women and men in Spain and the United States. *Psychology of Women Quarterly, 30*, 313-322.
- López-Sáez, M., Lisbona, A., & Sáinz, M. (2004). Mujeres ingenieras: percepciones sobre su vida profesional. *Revista de Psicología General y Aplicada, 57*, 161-180.
- López-Sáez, M., & Morales, J.F. (1995). Gender stereotypes in the Spanish population: Looking toward the future. In L. Amâncio & C. Nogueira (Eds.), *Gender, management and science* (pp. 151-168). Braga, Portugal: Instituto de Educação e Psicologia, Universidade do Minho.
- Markus, H., Crane, M. Bernstein, S., & Siladi, M. (1982). Self-schemas and gender. *Journal of Personality and Social Psychology, 42*, 38-50.
- Martin, C.L. (1987). A ratio measure of sex stereotyping. *Journal of Personality and Social Psychology, 52*, 489-499.
- McCauley, C., Stitt, C.L., & Segal, M. (1980). Stereotyping: From prejudice to prediction. *Psychological Bulletin, 87*, 195-208.
- Morales J.F., & López-Sáez, M. (1993). Bases para la construcción de un sistema de indicadores sociales de estereotipia de género. *Psicothema, 5*, 123-132.
- Morales, J.F., & López-Sáez, M. (1994). Estereotipos de género y valores. In M. Alvaro (Ed.), *Propuesta de un sistema de indicadores sociales de igualdad entre géneros* (pp. 375-400). Madrid: Instituto de la Mujer.
- Moya, M.C., Navas, M.S., & Gómez, C. (1991, September). Escala sobre la Ideología del Rol Sexual. Santiago de Compostela, Spain: *Libro de comunicaciones del III Congreso Nacional de Psicología Social, 1*, 554-566.
- Powell, G.N., Butterfield, D.A., & Parent, J.D. (2002). Gender and managerial stereotypes: Have the times changed? *Journal of Management, 28*, 177-193.
- Sczesny, S., Bosak, J., Neff, D., & Schyns, B. (2004). Gender stereotypes and the attribution of leadership traits: A cross-cultural comparison. *Sex Roles, 51*, 631-645.
- Selwyn, N. (2007). E-learning or she-learning? Exploring students' gendered perceptions of education technology. *British Journal of Educational Technology, 38*, 744-746.
- Six, B., & Eckes, T. (1991). A closer look at the complex structure of gender stereotypes. *Sex Roles, 2*, 457-471.
- Spence, J.T. (1993). Gender-related traits and gender ideology: Evidence for a multifactorial theory. *Journal of Personality and Social Psychology, 64*, 624-635.
- Spence, J.T., & Buckner, C.E. (2000). Instrumental and expressive traits, trait stereotypes, and sexist attitudes. *Psychology of Women Quarterly, 24*, 44-62.
- Spence, J.T., & Helmreich, R.L. (1978). *Masculinity and femininity: Their psychological dimensions, correlates and antecedents*. Austin, TX: University of Texas Press.
- Stangor, C., Lynch, L., Duan, C., & Glas, B. (1992). Categorization of individuals on the basis of multiple social features. *Journal of Personality and Social Psychology, 62*, 207-218.
- White, M. J., & White, G. B. (2006). Implicit and explicit occupational gender stereotypes. *Sex Roles, 55*, 259-266.
- Williams, J.E., & Best, D.L. (1990). *Measuring sex stereotyping: A multinational study*. Newbury Park, CA: Sage.
- Wood, W., & Eagly, A. H. (2002). A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. *Psychological Bulletin, 128*, 699-727.
- Ximénez, M.C., & García, A.G. (2005). Comparación de los métodos de estimación de máxima verosimilitud y mínimos cuadrados no ponderados en el análisis factorial confirmatorio mediante simulación Monte Carlo. *Psicothema, 17*, 528-535.

Received April 26, 2007

Revision received January 8, 2008

Accepted January 19, 2008