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Assessing sexism and gender violence in a sample of Catalan university students: A validity study based on the Ambivalent Sexism Inventory and the Dating Violence Questionnaire*

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Violence against women was recognized as a public health problem by the World Health Organization (WHO) in 1996, demonstrating that this enormous social problem has serious consequences for health and the health care system. This problem most frequently occurs in partner relationships (WHO, 1998) and, according to the Institut Català de la Dona (Catalan Institute for Women, 2013) is occurring increasingly earlier in relationships.

This study has three purposes. First, to confirm the psychometric properties (structure, dimensionality and measurement accuracy) of the Spanish version of the Ambivalent Sexism Inventory (ASI; Expósito et al. 1998) and to assess the properties of the Dating Violence Questionnaire (CUVINO; Rodríguez-Franco et al. 2007) for use amongst adolescents in Catalonia. Second, to undertake a validity assessment study based on the scores on both questionnaires. Finally, to assess whether the variables of sex, socioeconomic status, and experience of abuse in childhood are related to sexist attitudes and gender violence in the target population.

Analyses were based on a sample of 520 university students. The results confirmed the cross-cultural invariance of the ASI and the good psychometric properties of the CUVINO and indicated that the measures obtained in the Catalan sample were reasonably accurate and valid. The variables of sex, socioeconomic status and experience of abuse in childhood were related to levels in certain sub-domains of sexism and violence.

Keywords: *Ambivalent Sexism Inventory, Dating Violence Questionnaire, semi-confirmatory factor analysis, university students, sexism.*

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Evaluación del sexismo y violencia de género en una muestra de estudiantes universitarios catalanes: Un estudio de validez basado en el Inventario de Sexismo Ambivalente y el Cuestionario de Violencia entre novios

La violencia contra las mujeres fue reconocida como problema de Salud Pública por la Organización Mundial de la Salud (OMS) en 1996, poniendo de manifiesto las graves consecuencias que sobre la salud y el sistema sanitario tiene este enorme problema social. Un problema que se produce, sobre todo, en las relaciones de pareja (OMS, 1998) y, además, de forma cada vez más precoz (Institut Català de la Dona, 2013, 2014). En relación a esta situación, el presente estudio tiene tres objetivos principales. En primer lugar, comprobar las propiedades psicométricas (estructura, dimensionalidad y precisión en la medida) del inventario del sexismo ambivalente en su versión española (ASI; Expósito et al., 1998) y evaluar las propiedades del Cuestionario de Violencia entre novios (CUVINO; Rodríguez-Franco et al., 2007) para su utilización en adolescentes en Cataluña. En segundo lugar, llevar a cabo un análisis de validez basado en las puntuaciones en ambos cuestionarios. Finalmente, evaluar si las variables de sexo, status socioeconómico y experiencia de maltrato en la niñez están relacionadas con las actitudes sexistas y la violencia de género en la población de referencia.

Los análisis se basaron en una muestra de 520 estudiantes universitarios. Los resultados confirmaron la invariancia transcultural del ASI y las buenas propiedades psicométricas del CUVINO e indicaron que las propiedades de medida en la muestra catalana eran razonablemente buenas. Las variables de sexo, estatus socioeconómico y experiencia de maltrato en la niñez estaban relacionadas con los niveles en ciertas subdimensiones de sexismo y violencia.

Palabras clave: *Inventario de Sexismo Ambivalente, Cuestionario de Violencia entre novios, análisis factorial semi-confirmatorio, estudiantes universitarios, sexismo.*

It was once said that love is giving someone the ability to destroy you, but trusting them not to
(Bo Bennett**)**

Introduction

Studying the phenomenon of violence against women is not a new issue. Efforts have been made in this regard in many countries and international organizations. The WHO (2013), in collaboration with the London School of Hygiene and Tropical Medicine and the SA Medical Research Council, points out that violence against women is a global health problem of epidemic proportions that affects more than one-third of all women around the world.

In recent years there has been an alarming increase in cases of teen and young adult dating violence, as is published on a daily basis in the media. Recent studies by Muñoz-Rivas, Gomez, O'Leary and Lozano (2007), among others,

show that aggressive acts are used as a way of dealing with conflict within relationships between students in Spanish universities, and the study by Rodríguez-Franco, Antuña, Lopez-Cepero, Rodríguez-Díaz and Bringas (2012) describes new types of partner violence and frequency of occurrence in adolescent couples.

In 2013, the *Institut Català de la Dona* (Catalan Institute of Women) recorded 11.449 cases of gender violence in Catalonia that were not brought to trial. In the first four months of 2014, six women died. During the first term of 2014, there were 103 sexual assaults or major cases of gender violence in which 48 victims (46%) were under the age of 20 (Institut Català de la Dona, 2013 and 2014). This means that, as young people grow up, they have a high risk of experiencing gender violence. Therefore, it seems of interest to study the problem in this development stage and in the environments in which people usually find a stable partner.

Sexism and Gender Violence

The present study belongs to a line of research whose starting point is that sexism is an important predictor of gender violence (see León-Ramirez & Ferrando, 2013). At the general level, the term sexism is used to refer to attitudes about the roles and responsibilities considered appropriate for men and women, as well as beliefs regarding relationships (Moya, 2003). More specifically, Allport defined it in 1954 as an attitude of dislike that sets women aside as inferior. This "classic" view of sexism is characterized by a "prejudging attitude or discriminating conduct based on the assumption of inferiority or difference of women as a group" (Cameron, 1977), and is thought to influence people's judgements, evaluations and behaviour, and result in, discrimination.

According to Glick and Fiske (1996), Sexism is made up of two clearly differentiated, although related, components: Hostile Sexism (HS) and Benevolent Sexism (BS). Glick and Fiske (1996, 2001) also proposed to further differentiate three subcomponents within each HS and BS: Paternalism, Gender Differentiation and Heterosexuality. Empirical evidence, however, suggests that while the HS and BS differentiation is clear, strong and generalizable, the more fine-grained distinctions are not (e.g. León-Ramírez & Ferrando, 2013).

We now move on to discuss the rationale for considering sexism as a predictor of gender violence in young people. Sexism is thought to give rise to stereotyped positions about similarities and differences between men and women in which women are seen as inferior. These positions, in turn, lead to potentially violent behaviours when couples are in situations of conflict or disagreement (Bascón et al., 2013) because the "balance of power" between the boy and the girl is unequal. To improve this situation, it is recommended to give up universalist and stereotyped positions about similarities and differences between men and women (Crawford, 1995, 2003; Hyde, 2005).

If the sexism-violence relational structure discussed so far is correct, then accurate and valid assessment of sexism is a necessary first step when drawing up programs to prevent gender violence. In this respect, the best psychometric measurement tool, according to the literature in Spanish, is the Ambivalent Sexism Inventory (ASI), which has shown good psychometric properties in assessments made in different countries. In particular, the Spanish version used here has shown good psychometric properties in Spain (Expósito, Moya & Glick, 1998; Lameiras & Rodríguez, 2003; Rodríguez, Lameiras & Carrera, 2009), Chile (Cárdenas, Lay, González, Calderón & Alegría, 2010), Argentina (Vaamonde & Omar, 2012) and Mexico (León-Ramírez & Ferrando, 2013).

Purposes of the Study

As mentioned above, this study has three main purposes. First, to confirm the psychometric properties (structure, dimensionality and measurement accuracy) of the ASI as a sexism measure, and to assess the properties of a questionnaire for measuring dating violence in a sample of undergraduate students in Catalonia. Second, to undertake a validity study based on the scores on both questionnaires in accordance with the hypothesis that sexism is a predictor of dating violence. And finally, to assess whether the variables of sex, socioeconomic status, and experience of abuse in childhood are related to sexist attitudes and dating violence in the target population of undergraduate students.

Method

Participants and Procedure

An intentional (not probabilistic) sample made up of 520 students from a public Catalan university (145 boys, 375 girls) was used. The average age was 21.03 years and the predominant socioeconomic status was medium. It must be said that this sample was chosen on purpose since the interest of the study was to measure sexism in young, highly educated people.

Paper and pencil questionnaires were always given by the same person, and were voluntarily and anonymously administered to the various class groups. The only data required was age, sex, socioeconomic level and whether they had experienced any violence during childhood.

Instruments

We used the Spanish version of the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996) developed by Expósito, Moya and Glick (1998). This ver-

sion has the same number of items (22), item stems, and response format (6-point Likert) as the original English version. However, it differs from it in that all items are worded in the same direction (agreeing with the statements implies sexist opinions), since some previous Spanish adaptations had shown that the reversed items do not work correctly.

The second instrument used is the *Cuestionario de Violencia de Novios* (CUVINO; Questionnaire of Violence between Boyfriends and Girlfriends; Rodríguez-Franco et al., 2007), an assessment tool that samples behaviours that lead to violence in teenage relationships. It is made up of 42 behavioural samples and assesses the frequency of violent conducts as well as the associated levels of discomfort. The response format is 5-point Likert. The CUVINO has been studied in several countries, and is considered to be a useful tool for detecting experience of victimisation in young people. It aims to detect eight types of abuse: Affective, Punishment, Coercion, Physical Disregard, Gender, Humiliation, Instrumental and Sexual.

Independent variables

The independent variables used in the third part of the study were sex, types of course that students are currently taking, the experience of violence during childhood and socioeconomic level obtained as a self-report based on their own perception of their belonging to a specific level.

Hypothesis

Regarding the first part of the study we expect the clear bidimensional structure previously obtained for the ASI (León-Ramirez & Ferrando, 2013) to be replicated here. So, because a structural hypothesis already exists, this part of the analysis can be qualified as confirmatory. As for CUVINO, it is a fairly new tool and this the first time it has been applied in Catalonia. So, the study is more exploratory, and the structure originally proposed for the questionnaire is taken only as a reference.

In the second part of the study the relationships between the ASI scores (understood as antecedents or predictor variables) and the CUVINO scores (understood as consequent variables or criteria) are assessed. Given this differentiation and that both measures are administered at the same time, the general assessment can be considered to provide criterion-related or concurrent validity evidence (e.g. Elosua, 2003). Since the dimensionality and structure of the measures are the aim of evaluation, no specified hypothesis can be set out at this point. At a general level, and as discussed above, sexism is expected to behave as a predictor of violence in relationships.

In the third part of the study, the groups defined by the independent variables: (a) sex, (b) socioeconomic level, (c) violence during childhood and (d) types of course are assessed with regards to differences in the dependent variables of sexism (evaluated by ASI scores) and violence in relationships (evaluated by CUVINO scores). More specific predictions cannot be made in this case either. However, in the difference between sexes, men are expected to have higher scores in sexism. Those participants with a higher socioeconomic level are expected to show lower levels of sexism (Cárdenas et al., 2010). Finally, violence in childhood is expected to be associated to higher levels of sexism and violence in relationships.

Analyses and Results

Dimensional and Structural Assessments

Previous factorial analyses of the ASI (Glick and Fiske, 1996) suggest that its higher-order structure is bi-factorial, with a general factor of Hostile Sexism and a factor of Benevolent Sexism. This structure was also obtained with the Spanish version in Spain (Expósito et al., 1998) and Mexico (León-Ramirez & Ferrando, 2013), among other studies. On the basis of these results, the structure of the ASI in the present study was evaluated by using a Procrustes semi-confirmatory factor analysis procedure in which the initial solution in two-factors was analytically rotated against a partially specified target matrix by assuming correlated factors (Browne, 1972). The target hypothesis was that Hostile Sexism is mainly defined by items: 2, 4, 5, 7, 10, 11, 14, 15, 16, 18, and 21 whereas Benevolent Sexism is mainly defined by items: 1, 3, 6, 8, 9, 12, 13, 17, 19, 20 and 22.

As far as the CUVINO is concerned, first the most appropriate dimensionality was assessed by fitting solutions in the range 1 to 8 factors (which was the dimensionality considered by the original authors). Provided that clear dimensionality results are obtained, an analytical oblique solution is next performed on the chosen unrotated solution in *m* factors.

All the analyses in this first part of the study were carried out using the FACTOR 9.2 program (Lorenzo-Seva & Ferrando, 2013). The criterion for fitting the model was unweighted least squares (ULS), and in accordance with this criterion, the goodness-of-fit measures for assessing dimensionality were the gamma-goodness-of-fit index (GFI) and the root mean square of the standardized residuals, which was assessed in reference to Kelley's cut-off criterion (see Lorenzo-Seva & Ferrando, 2013; McDonald, 1999).

Results for the ASI are first summarized. Regarding data appropriateness, the distribution of the item scores was generally non-extreme, which justifies the use of the linear model. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy ob-

tained was 0.92, which suggests that the amount of common variance in the data matrix is rather high.

The left panel in table 1 shows the results of the dimensional evaluation based on models in 1, 2, or 3 factors. They are practically the same as the ones obtained in the previous study by León-Ramirez and Ferrando (2013) and suggest that:

- The one-dimensional solution has an almost reasonable fit.
- The fit of the two-factor solution is excellent.

TABLE 1. DIMENSIONALITY ASSESSMENT RESULTS OF THE ASI AND CUVINO SCORES.

ASI				***CUVINO***			
Nº of factors	*GFI*	*RMSR*	*Critical Value*	*Nº of factors*	*GFI*	*RMSR*	*Critical Value*
1 Factor	.96	.082	.043	1 Factor	.95	.083	.043
2 Factors	.99	.044	.043	2 Factors	.97	.064	.043
3 Factors	.99	.035	.043	3 Factors	.98	.057	.043

Note. GFI = Goodness of Fit Index, RMSR = Root Mean Square of Residuals.

The rotated Procrustes pattern is shown in table 2 (see next page) and is in good agreement with the hypothesized ASI structure. We considered the 0.30 value as the minimum cut-off for assuming that a loading had practical significance (e.g. McDonald, 1985), and so the loading estimates below this value are omitted in table 2. The remaining loadings are indeed statistically significant. In summary, the structure obtained is in good agreement with the hypothesized ASI structure, and the overall congruence between the target and the rotated solution was 0.98. The estimated inter-factor correlation was 0.58. Overall, the clear factorial solution in table 2 allows well defined HS and BS sub-scales to be obtained and used in Part 2 and Part 3 of the study. The estimated reliabilities for the scale scores (alpha coefficient) were 0.90 (HS), 0.84 (BS) and 0.91 for the total scale.

As discussed above, the factor analysis of the CUVINO scores was more exploratory. The KMO estimate for data adequacy was also 0.92. However, the variability of the item scores was rather low and most of the scores were towards the left-end of the response scale (i.e. a floor effect). Even though the original proposed structure for the CUVINO is 8-factor, the goodness-of-fit assessment results in table 1 suggest that a two-factor solution is appropriate enough, and that three factors give only a small improvement. Furthermore, an inspection of the three-factor rotated solution indicated that one of the factors was residual. In contrast, the solution with two factors (oblimin rotation) was very clear and interpretable.

TABLE 2. PROCRUSTES OBLIQUE PATTERN FOR THE BIDIMENSIONAL ASI ULS FACTOR ANALYSIS.

ITEM	***Factor 1***	***Factor 2***	***ITEM***	***Factor 1***	***Factor 2***
1		.680	12		.821
2	.673		13		.897
3		.294	14	.706	
4	.723		15	.647	
5	.792		16	.663	
6		.488	17		.496
7	.549		18	.576	
8		.563	19		.356
9		.486	20		.541
10	.657		21	.633	
11	.739		22		.555

Note. Loadings below |.30| are omitted.

TABLE 3. DIRECT-OBLIMIN ROTATED PATTERN FOR THE BIDIMENSIONAL CUVINO ULS FACTOR ANALYSIS.

ITEM	***Factor 1***	***Factor 2***	***ITEM***	***Factor 1***	***Factor 2***
1		.370	22		.759
2	.249		23		.556
3		.478	24		.548
4	.526		25		.540
5	.525		26	.519	
6		.502	27	.361	
7		.395	28	.791	
8		.346	29	.720	
9		.337	30		.789
10	.343		31		.669
11	.379		32		.641
12	.706		33		.705
13	.812		34		.424
14		.793	35	.440	
15		.701	36	.575	
16		.768	37		.519
17	.401		38		.514
18	.554		39	.768	
19		.429	40		.408
20	.990		41		.620
21	.819		42		.857

Note. Loadings below |.30| are omitted.

The solution in table 3 approaches simple structure and has an estimated inter-factor correlation of 0.66, a result that allows two well defined sub-scales to be obtained from the item scores. The first sub-scale to be denoted by CUVI-A is made up of items: 2, 4, 5, 10, 11, 12, 13, 17, 18, 20, 21, 26, 27, 28, 29, 35, 36 and 39. Inspection of the item content clearly suggests that the sub-scale measures physical violence, and includes the original 'a priori' *Sexual*, *Physical* and *Instrumental* factors. The second scale to be denoted as CUVI-B is formed by items: 1, 3, 6, 7, 8, 9, 14, 15, 16, 19, 22, 23, 24, 25, 30, 31, 32, 33, 34, 37, 38, 40, 41 and 42, and according to the item content measures emotional violence. It includes the original 'a priori' *Affective, Punishment, Coercion, Gender,* and *Humiliation* factors. The estimated reliabilities of the resulting sub-scale scores were: 0.90 (UVI-A) and 0.91 (CUVI-B).

Concurrent Validity Assessment

In the second part of the study the relations between the ASI-H and ASI-B scores on the one hand and the CUVI-A and CUVI-B scores on the other hand were assessed by using raw and disattenuated product-moment correlations. The results of the validity assessment are shown in table 4. The main diagonal contains the estimated reliabilities. The off-diagonal cells contain the raw product-moment correlation and, within brackets, the correlation corrected for measurement error by using the corresponding reliability estimates.

TABLE 4. RESULTS OF THE CONCURRENT VALIDITY ASSESSMENT.

	ASI – H	***ASI – B***	***CUVI – A***	***CUVI – B***
ASI – H	.90			
ASI-B	.58 (0.67)	.84		
CUVI – A	.23 (0.26)	.21 (0.24)	.90	
CUVI – B	.19 (0.21)	.13 (0.15)	.70 (.76)	.91

In summary, all the correlations in table 4 are statistically significant and go in the expected direction: higher levels in sexism are associated to higher levels of violence in the relationship. However, in practical terms, the predictive power of sexism regarding violence seems to be relatively low, a result which is discussed below. In terms of differential predictability, no clear differences appear although the results suggest that prediction is best when physical violence (CUVI-A) is predicted from hostile sexism (ASI-H), whereas the weakest prediction refers to emotional violence predicted from benevolent sexism. These results appear to be reasonable.

Assessment of Group Differences in Sexism and Violence

In the third part of the study, mean group differences were assessed for the ASI-H, ASI-B, CUVI-A and CUVI-B scores as dependent variables. Statistical significance of the mean differences was assessed by means of Student's *t*-Test. For those differences which were found to be statistically significant, practical significance was assessed by means of Cohen's *d* effect size measure. Results are in table 5 (gender), table 6 (childhood abuse), and table 7 (socioeconomic status).

TABLE 5. BETWEEN-GROUP COMPARISON RESULTS. INDEPENDENT VARIABLE: GENDER.

Scale	*Mean (Sd): Men*	*Mean (Sd): Women*	*t*	*Sig*	*Effect size*
ASI-H	26.78 (12.24)	17.28 (10.46)	8.80	.00	.87
ASI-B	21.55 (10.38)	17.72 (10.45)	3.73	.00	.40
CUVI-A	3.81 (7.98)	1.12 (2.48)	3.95	.00	.60
CUVI-B	15.81 (20.43)	6.70 (10.11)	5.12	.00	.73

TABLE 6. BETWEEN-GROUP COMPARISON RESULTS. INDEPENDENT VARIABLE: CHILDHOOD ABUSE.

Scale	*Mean (Sd) the person received abuse during his childhood*	*Mean (Sd) the person has not received any abuse during his childhood*	*t*	*Sig*	*Effect size*
ASI-H	23.26 (14.06)	19.49 (11.41)	1.93	.11	N.S.
ASI-B	20.73 (11.52)	18.51 (10.42)	1.37	.22	N.S.
CUVI-A	4.87 (9.40)	1.50 (3.80)	2.65	.00	.67
CUVI-B	18.75 (23.62)	8.08 (12.30)	5.12	.00	.79

TABLE 7. BETWEEN-GROUP COMPARISON RESULTS. INDEPENDENT VARIABLE: SOCIOECONOMIC STATUS.

Scale	*Mean (Sd) low socioeconomic status*	*Mean (Sd) high socioeconomic status*	*t*	*Sig*	*Effect size*
ASI-H	21.37 (11.21)	19.47 (11.71)	1.27	.49	N.S.
ASI-B	20.12 (10.34)	18.38 (10.57)	1.26	.29	N.S.
CUVI-A	2.04 (4.83)	1.83 (4.88)	.323	.57	N.S.
CUVI-B	10.13 (15.68)	9.12 (14.18)	.495	.23	N.S.

Results can be summarized as follows. First, significant differences by gender are observed in all the dependent variables: in all cases men have higher levels of both sexism and violence. Furthermore, in all cases the differences are highly relevant and effect sizes large. Second, as for childhood abuse rates all the results are

in the expected direction, but only the CUVINO differences are significant with medium-high effect sizes. This result is compatible with the hypothesis that childhood abuse to some extent predisposes to violence in a dating relationship. Finally, no significant differences were observed by socioeconomic status but this result might reflect a restriction-of-range attenuation effect because most of the respondents were middle class.

The independent variable of area of study was finally assessed graphically and the results are displayed in figures 1 to 4.

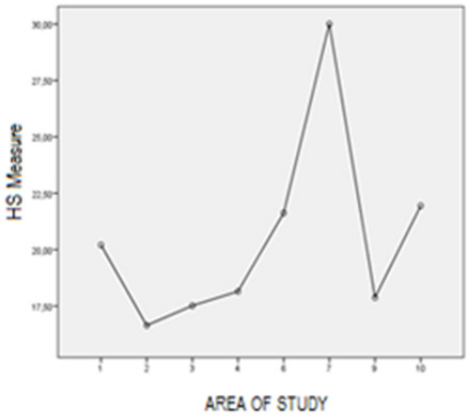

Figure 1. Mean scores in Hostile Sexism against area of study.

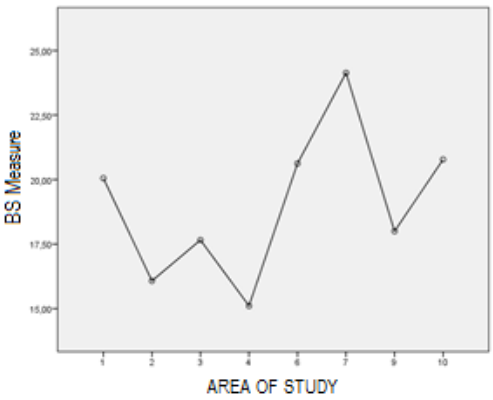

Figure 2. Mean scores in Benevolent Sexism against area of study..

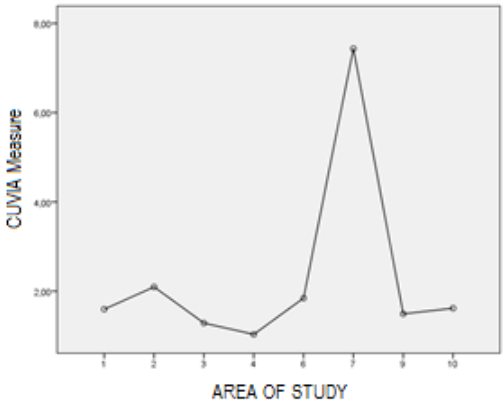

Figure 3. Mean scores in Physical Violence against area of study.

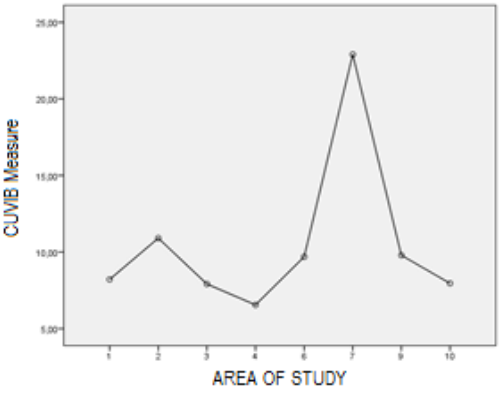

Figure 4. Mean scores in Emotional Violence against area of study.

Regarding Sexism, the results in figures 1 and 2 are consistent with the theory of gender stereotypes. "Tougher" or more masculine careers agree with the "masculinized or feminized" differentiations. In both Hostile and Benevolent Sexism, the career that proves to be most sexist – the peak in the graph – is Mechanical Engineering. For Hostile Sexism, the lowest score obtained is in Social Work, and for Benevolent Sexism the lowest score obtained is in the degree in Primary Education. As for violence (figures 3 and 4) Mechanical Engineering again shows the highest peaks in both cases while the lowest peaks are for Primary Education. It should be stressed however that the profile comparisons are purely descriptive.

Discussion and Conclusions

The first purpose of this study was to test the psychometric properties of the Ambivalent Sexism Inventory and to validate the psychometric properties of the Dating Violence Questionnaire so that they can be applied in the population of Catalan university students. Even though:

- We were interested in a population of young educated people.
- Many different degree courses were sampled.

The sample used here belongs to the same university. This intentional sampling limits the generalizability of the results, and is acknowledged as a limitation of the study. In spite of this shortcoming, however, we believe that the results are meaningful and positive. On the one hand, the well defined ASI structure obtained in previous studies was also replicated in the Catalan population. On the other hand, a clear and theoretically meaningful solution was obtained for the CUVINO. In both cases the solutions allowed 'clean' sub-scales to be constructed, and the corresponding scores showed acceptable reliabilities even for individual assessment. The only shortcoming that was detected was little variability in the CUVINO scores due to floor effects in most item responses.

Regarding the validity assessments in the second part of the study, all the results were in the expected direction, and the prediction was best when hostile sexism scores were the predictor of physical violence. Even when the results were significant and went in the expected direction, however, the validity coefficients were low. This problem might be partly due to the little variability in the CUVINO scores due to the restricted response range in many items. Overall, attempts should be made in future studies to improve validity perhaps by developing further measures that are not so affected by floor effects.

If sexism is a precursor of gender violence, then effective intervention is possible at early ages. To this end, it is very positive that that the world communi-

ty (WHO, 2013) has begun to recognize the significance – for social and economic progress – of gender inequalities and violence prevention at an early age, with effective programs and objectives such as improving the lives of women and men with a focus on reducing gender inequalities by measuring perceived sexism against women. In this respect, the results of the third part of the study are relevant. In particular, substantial differences were found by gender in all the dependent variables in the direction that males are more prejudiced than females regarding gender roles. This result is consistent with the traditional image of women as the weaker sex, and also consistent with certain traditional values of Catalan society. Thus, sexism could be perpetuated by factors such as culture, paternalism as a way of raising children, male chauvinism perpetuated through the years, and the new laws against gender violence.

As far as the other results in part 3 are concerned, it cannot be stated that childhood abuse is related to sexism, but it seems to be related to both emotional and physical violence. This result was expected, and can be explained by the theory of abuse or the abused woman/abuser syndrome, which is learned and later replicated in adulthood. Finally, no differences in the impact of socioeconomic status have been observed here unlike previous studies (Cárdenas et al., 2010; Vaamonde & Omar 2012). Failure to replicate this result in the present study, however, might be because participants were mostly of the same socioeconomic level (that is to say, middle class). This is also a clear shortcoming of our study.

In 1987, an interdepartmental commission for the promotion of women was created in Catalonia with the aim of promoting equal rights and non-discrimination between men and women. As the gender-related results of our study suggest, this has had no impact on the levels of prejudice in university students and may have reinforced subtle and benevolent expressions of prejudice. What remains to be ascertained is whether this has forced women to enter a "masculine" world –in labour or academic terms–, as gender stereotypes also appear to exist in the choice of professional career.

"Masculine" and "feminine" attributes do not cause behaviour; rather, behaviour defines gender (Anderson, 2005). Several lines of evidence suggest that the meaning of violence depends on both the context and the gender of the perpetrator and the victim. This double dependency might be reflected in the mean differences among groups defined by their choice of degree course. Mechanical Engineering shows a high peak in the measures of all variables HS, BS, CUVI A and CUVI B. This is considered a "masculine" career and most of the students are men. At the other end, the lowest scores are for Social Work, Nursing, Medicine and Primary School, which are considered more 'feminine', focused on the welfare of society and in which most students are female. However, even when the results are plausible and consistent for all the dependent variables it must be stressed again that this part of the study is purely descriptive.

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