

## Scale of Self-perceived Communication in the Couple Relationship (SCCR)

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**Título:** Escala de Comunicación Autopercebida en la Relación de Pareja (CARP).

**Resumen:** El objetivo de este estudio ha sido construir y validar la Escala de Comunicación Autopercebida en la Relación de Pareja (CARP) con el fin de ofrecer un instrumento sencillo y útil. Participaron 620 personas que mantenían una relación de pareja. Para estudiar la estructura factorial de la escala se dividió aleatoriamente la muestra en dos submuestras, realizándose una validación cruzada mediante análisis factorial exploratorio (AFE) y análisis factorial confirmatorio (AFC). Asimismo, para comprobar que el modelo se mantenía estable al tener en cuenta la variable sexo, se repitió el análisis factorial confirmatorio con las submuestras de mujeres y de hombres y se aplicó un AFC Multigrupo para comprobar la invarianza factorial en función de esta variable. Se ha obtenido una escala de 8 ítems constituida por dos factores que explican el 46.6% de la varianza y que presenta una buena fiabilidad ( $\alpha = .75$ ), comprobándose la invarianza estricta en función del sexo. Esta escala puede ser útil en el campo de la detección, prevención e intervención en situaciones de conflicto entre la pareja.

**Palabras clave:** Relación de pareja; comunicación; escala; validación de instrumentos; análisis factorial.

**Abstract:** The aim of this study was to develop and validate the Scale of Self-perceived Communication in the Couple Relationship (SCCR) in order to provide a straightforward and useful instrument. 620 persons who were in a couple relationship took part in this study. The sample was divided randomly into two subsamples to study the factor structure of the scale, carrying out a cross-validation by using an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA). Also, and to verify that the model remained stable taking account of the variable gender, the confirmatory factor analysis was repeated with the women and men subsamples, and a multigroup CFA was carried out to check the factor invariance according to this variable. An 8-items scale was obtained, made up with two factors explaining 46.6% of the variance who also reported a good reliability ( $\alpha = .75$ ), testing the strict invariance according to the gender. This scale might be useful in the field of detection, prevention and intervention of conflict situations in the couple relationship.

**Keywords:** Couple relationship; communication; scale; instrument validation; factor analysis.

### Introduction

The couple relationship is unique within human relationships in that it implies processes and expectations that do not exist in other types of relationships, such as faithfulness and romantic and emotional exclusivity (Vidal González, Rivera Aragón, Díaz-Loving, & Méndez Ramírez, 2012). Above and beyond this generalization, each individual's behaviors and expectations, in this case with regard to the couple relationship, are a response to transmitted social beliefs and values. Each person has their own way of being and living as part of a couple, which implies that every couple relationship is unique. One can even go so far as to say that there are as many types of couples as there are relationships (Ríos González, 2005).

Establishing and maintaining affective and intimate relationships constitutes, even in adolescence and youth, a component of psychosocial development with implications on health, wellbeing and psychological adjustment. Despite the possible risks that couple relationships may imply on occasions, when they function satisfactorily they are a source of emotional and social support, contribute to identity development and construction, as well as to the improvement of social competence and even physical health (Martínez-Álvarez, Fuertes-Martín, Orgaz-Baz, Vicario-Molina, & González-Ortega, 2014; Slatcher & Selcuk, 2017). Moreover, they contribute to the generation of a positive family envi-

ronment, creating an ideal framework for the upbringing and education of children that grow up within this context.

Building on the basis that couple relationships constitute a fundamental aspect of life, communication and understanding within the partnership can be considered essential aspects of personal and social development; thus, a well-functioning couple relationship provides emotional and social support, and it is an accepted fact that a person in a healthy couple relationship has traditionally been associated with the social image of happiness (Ruíz Becerril, 2001). As a result, issues such as satisfaction with the couple relationship and communication within this relationship are those most commonly addressed by researchers analyzing this topic (García Meraz & Romero Palencia, 2012; Urbano-Contreras, Martínez-González, & Iglesias-García, 2018).

Turrallde (2003) attributes communication with being the behavioral system that calibrates, regulates, maintains and makes relationships between human beings possible, and as such it would be impossible to study human interactions and behaviors without taking it into account. Just as adequate communication as an essential part of couple relationships provides certain benefits and contributions, communication that is negative or used with a destructive purpose is of great relevance and can have a detrimental effect on the wellbeing of the couple, even affecting overall relationship satisfaction (Eguiluz, Calvo, & De la Orta, 2012). In contrast, a high level of communication, as well as positive communication, tends to reduce the perception of stress in the relationship and may prevent its deterioration (Ledermann, Bodenmann, Rudaz, & Bradbury, 2010). This will have a positive effect on the family dynamic when the couple lives with their children, and allow for control of the risk factors that could lead to

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the breakup of the couple and the consequent negative effects on their children.

As stated by Sánchez Aragón and Díaz Loving (2003), communication is an ideal medium through which a person can express themselves, while receiving at the same time feedback on themselves, support, acceptance, and the very confirmation that they are a person capable of establishing a successful intimate relationship. Communication in couple relationships has a broader scope than in other types of relationships, including a wide variety of actions and gestures that form part of the internal communication of the couple, and constitute their own symbology and dynamic (the expression of feelings and ideas, kisses, jokes, silences, etc.).

Just as sex as a variable has a direct influence on the level of satisfaction with the couple relationship (Urbano-Contreras, Iglesias-García, & Martínez-González, 2019; Urbano-Contreras, Martínez-González, & Iglesias-García, 2018), it is also a relevant variable in the study of communication. While both men and women highlight the importance of communication in aspects such as sexuality (Uribe Alvarado, 2012), its communicative conduct tends to manifest itself differently, both on a verbal and non-verbal level (Encabo Fernández & López Valero, 2004). This is reflected even in the types of conflicts that arise within the partnership, generated in men mainly as a result of jealousy and distrust, and in women as a result of incompatible interests and apathy (Flores Galaz, 2011). These differences require instruments and studies that take a more in-depth look at results such as those of Urbano Contreras (2018), which confirm the need to work with men on specific elements related to the expression of feelings, opinions and desires. This need is highlighted by the fact that compared to women, men show an interest in and a desire to communicate, but manifest a certain inability to achieve this, especially when it comes to emotional issues.

Although everyone, as a function of their personal characteristics and experiences, ends up defining, transforming and adapting their own communicative style, scientific literature clearly identifies certain communication patterns. These patterns help to identify specific communicative styles, which are defined according to the way of communicating and the communication strategies used (Hawkins, Weisberg, & Ray, 1980; Miller, Nunnally, & Wackman, 1976; Satir, 1986). Knowing the communicative styles that the individual members of the couple put into practice can help to detect possible limitations to appropriate interaction and, above all, allow them to opt for more positive communication styles as a way of improving the couple relationship (Flores Galaz, 2011; Armenta Hurtarte & Díaz-Loving, 2008).

With regard to communication styles and patterns, a variety of classification systems exist. One of the pioneering and most used gave rise to the Communicator Style Measure (CSM) scale, used in a number of research studies. The author, Norton (1978), establishes ten different communicative styles, which are encompassed by two major and opposing general communicative tendencies, the active and the passive

(dominant, dramatic, contentious, expressive or animated, impression leaving, open, attentive, friendly, relaxed and precise).

From the specific point of view of couple relationships, Sánchez Aragón and Díaz Loving (2003), establish theoretically the existence of five major dimensions in marital communication styles (positive, negative, violent, reserved and reflexive) from the analysis of the similarities and differences of some classic works.

On an international level, the Marital Communication Scale (Kahn, 1970) is noteworthy for the evaluation the communication aspect. It uses a 6-point Likert-type scale and is made up of 16 items, of which 8 are items in which the man is the transmitter and the wife the receiver of the communication, while in the other 8 items the roles are reversed. Also relevant is the Communication Patterns Questionnaire (CPQ) (Christensen, 1988, validated on a Spanish sample by Montes-Bergeres, 2009), which evaluates, by means of 35 items in the original version and 28 in the reduced version, the subject's perceptions of their own and their partner's patterns in the use of strategies of demand or withdrawal when they discuss relationship problems.

On a more general level, as Sánchez-Aragón (2014) points out, the Relational Communication Scale (Burgoon & Hale, 1987) is of relevance, since it constitutes an instrument that in its final form incorporates 30 items that measure interpersonal communication methods by means of 8 factors (with a reliability of between .42 and .88) using a 5-point Likert-type scale, and that has been used in a wide variety of communication environments. Similarly, the Differentiation in the Family System Scale (DIFS) (Anderson & Sabatelli, 1992), which features 11 items and has a reliability of between .84 and .94 in its original version, is noteworthy. It also offers five possible response options for the response, allowing one to obtain a self-report measure that assesses family differentiation, taking into consideration, on the one hand, ongoing emotional connectedness (support, involvement, personal relationship) and, on the other hand, separateness (autonomy, uniqueness, freedom of personal expression). Nevertheless, this scale does not address communication directly and, as a result, is more closely related to the evaluation of other aspects such as couple relationship satisfaction (Bartle-Haring, Ferriby, & Day, 2018; Lampis, Cataudella, Busonera, & Skowron, 2017; Muraru & Turliuc, 2012).

Given the importance of communication as a fundamental part of wellbeing and quality of life and, in particular, as a definitive component of couple relationships (Calvache Mora, 2015; Vangelisti & Perlman, 2010), it is clear that there is a need to continue to develop valid, reliable and up-to-date instruments to measure this aspect of couple relationships. These instruments should, as far as possible, be applied to a diverse sample, include the participation of both members of the couple, and include more than 400 people in their elaboration (Touliatos, Perlmutter, & Holden, 2001). Since most of the scales used in this context were not created with the

Spanish population in mind, have focused mainly on the communicative styles, and were elaborate around three decades ago, the specific goal is to elaborate an instrument that, in addition to being brief and reliable, is sensitive to the idiosyncrasies of the Spanish population.

## Method

### Participants

A total of 620 people over the age of 18 and in couple relationships participated voluntarily and altruistically in the study. Of the participants, 57.7% were women and 42.3% men. In 77.7% of the cases, both members of the couple responded. In terms of age, 48.5% were between the ages of 18 and 31, 26.5% between 32 and 45, and 25.2% over the age of 45 (a mean age of 35.5 and a median age of 35). With regard to their place of residence, 55.7% live in the north of Spain and 44.3% in the south. Where level of education is concerned, 53.0% had a university degree, 28.1% had obtained an advanced high school diploma or done vocational training, 16.6% had completed their compulsory secondary education, and 2.3% had no formal education. Regarding their work environment, 28.9% were working in the private sector, 23.4% were students, 19.7% unemployed, 12.3% working in the public sector, 11.1% freelance, and 4.6% retired. In terms of the partnership itself, 54.6% were unmarried and 45.4% married, and in terms of relationship duration, 18.5% indicated fewer than 2 years, 20.6% between 3 and 5 years, 18.7% between 6 and 10 years, 17.4% between 11 and 20 years, and 23.9% more than 20 years (a mean of 12.1 years and a median of 8 years). Moreover, 46.9% had had no prior relationships, 57.9% maintained that they did not have children, and 66.1% lived with their partners.

### Instruments

The applied questionnaire contained 21 questions with 4-point Likert-type scale responses (from 1 = *strongly agree* to 4 = *strongly disagree*, avoiding in this way the tendency to choose an intermediate value), on issues related to communication within the partnership. It was elaborated on the basis of scientific literature on couple relationships and communication and revised after its elaboration by a group of experts on research methods, followed by others specialized in couple relationships and the family environment. It was also applied to a group of couples with a variety of socio-demographic characteristics to test its face and content validity. As a result of and after each of these phases the items were modified, before achieving its final format.

The overall reliability was calculated using Cronbach's alpha-coefficient and a value of .85 was achieved, which according to the proposal of George and Mallery (2003) is between good and excellent, and above the minimum confidence level of .70, according to Kerlinger and Lee (2002) or

Vangeneugden, Laenen, Geys, Renard and Molenberghs (2005).

In addition to this questionnaire, a self-report measure was applied to evaluate the general satisfaction of the respondents with the quality of the communication within the partnership. It was composed of a single item (*I am satisfied with the quality of the communication in our partnership*) and used the same reply scale, with the objective of using this measure afterwards to analyze the convergent validity of the designed instrument.

### Procedure

The sample was obtained using the non-probabilistic method known as 'Snowball Sampling' (Goodman, 1961), starting off with a selection of couples that, in addition to responding to the questionnaire, handed out copies of the questionnaire to other couples in their immediate environment who, in turn, handed it out others. The process of information gathering was carried out via two procedures. On the one hand, the questionnaire was handed out in person, giving each couple an envelope containing two questionnaires, accompanied by a brief introduction letter and instructions for their completion. Each member of the couple was also given an envelope in which to return the completed questionnaire, guaranteeing in this way that no other person, including their partner, would have access to the information facilitated, and ensuring protection of privacy. On the other hand, the questionnaire was digitalized using the Google Forms tool, and the link sent to close acquaintances, who were asked to complete it, share it with their partner, and distribute it via their social media so that other people could also complete it.

For the analysis of the compiled data, the statistical software package SPSS 22.0, including the AMOS 22.0 module, was used.

### Data Analysis

First, the database was examined to detect any atypical cases or missing values that might skew the posterior analysis, and the Little test (Little, 1998) was applied to analyze the behavior of these missing values. The missing data were then imputed using the Expectation-Maximization (EM) method. Second, the compatibility of the items was analyzed with a normal curve (analysis of the asymmetry and kurtosis), establishing as criteria asymmetry values below 2 and kurtosis values below 7 (Curran, West, & Finch, 1996), and eliminating those items that did not meet these criteria.

To study the factorial structure or construct validity, a cross-validation process was carried out using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), dividing the initial sample into two equivalent sections of 310 subjects each. The first subsample was made up of 178 women (57.4%) and 132 men (42.6%), and the second subsample of 180 women (58.1%) and 130 men (41.9%).

An exploratory factor analysis (EFA) was carried out on the first subsample using the maximum likelihood extraction method (Lawley & Maxwell, 1971) and the promax rotation method (Hendrickson & White, 1964). This method was used because the oblique method is more effective in the identification of a simple structure (Finch, 2006) and because the objective was to identify the number and composition of the common factors (latent variables) necessary to explain the common variance in the items analyzed as a whole (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014). The cases of application were verified with the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (Kaiser, 1970) and Bartlett's Test of Sphericity (Bartlett, 1950).

Understanding EFA and CFA to be complementary techniques that form part of the same continuum (Ferrando and Lorenzo-Seva, 2014), a confirmatory factor analysis (CFA) was carried out on the second subsample. To do so, the maximum likelihood estimation method was used, evaluating the goodness of fit of the proposed model using a combination of absolute and relative adjustment indices. Among the absolute indices, the  $p$ -value associated with the chi-square statistic was used, which tests the null model against the hypothesized model and the value of the ratio between  $\chi^2$  and the degrees of freedom ( $\chi^2/df$ ), a heuristic value that is used to reduce the sensitivity of  $\chi^2$  to the size of the sample. Nevertheless, given the sensitivity shown by the  $\chi^2$  test to the sample size, other absolute adjustment indices were calculated, such as the Goodness of Fit Index (*GFI*), the Standardized Root Mean Square Residual (*SRMR*), and the Root Mean Square Error of Approximation (*RMSEA*). The following incremental indices were also calculated: the Comparative Fit Index (*CFI*), the Normed Fit Index (*NFI*), the Incremental Fit Index (*IFI*), and the Tucker Lewis Index (*TLI*). The following values were used as references for the existence of a good fit: a  $\chi^2/df$  value below 2 (Tabachnik & Fidell, 2007); a *GFI* value above .95 (Hoelter, 1983); *NFI*, *GFI*, *TLI*, *IFI* and *CFI* values above .95, although they shouldn't be considered to be fixed cut-off points (Markland, 2007); and *RMSEA* and *SRMR* values below .05 (Brown & Cudeck, 1993) and .08 (Hu & Bentler, 1999), respectively.

To test whether the model maintains its stability when the gender variable is taken into account, the confirmatory factor analysis was repeated with the subsamples of women ( $n = 358$ ) and men ( $n = 262$ ). Since the model was expected to present a good fit in both cases, the multi-group confirmatory factor analysis (MG-CFA) was applied to test the model's factorial invariance as a function of gender. This analysis was performed using a series of nested models, each one more restrictive than the previous one: first the configural invariance was tested (the same factorial structure for the groups) (M1); then, the metric or weak invariance was considered (the equivalent factor loadings must be equivalent) (M2); after which the strong invariance was evaluated (the

factor loadings and intercepts must be equivalent) (M3); and finally, a strict invariance model was tested (the factor loadings, intercepts, and residuals or unique variances must be equivalent) (M4). As an indicator that the models remain invariant, the difference in the *CFI* between the successive levels of invariance (Cheung & Rensvold, 2002) should be equal to or less than .01, and the difference in the *RMSEA* equal to or less than .015 (Chen, 2007). The  $\chi^2$  value was also calculated, but due to its sensitivity to the sample size, it was not taken into account (Wu, Li, & Zumbo, 2007). Finally, it was concluded that if strict invariance exists, the observed changes will be due to the latent variable and not to a measurement bias (DeShon, 2004).

Afterwards, to check if there were statistically significant differences between the answers given by women and men to the items of the resulting scale, a comparison of the means was done using the statistical significance Student's *t* test for independent samples, and the effect size was calculated using Cohen's *d* statistic.

Finally, the convergent validity was analyzed using Pearson's correlation between the resulting factors and the external variable previously selected as the criterion variable (*I am satisfied with the quality of the communication in our partnership*). In accordance with the reviewed literature, this item was considered to be a possible valid indicator or external criterion of what the instrument was trying to measure, and a certain degree of statistical correlation was expected to be found between the responses given for this item and the elements of the questionnaire.

The internal consistency and reliability of the questionnaire was established by means of Cronbach's alpha-coefficient (Cronbach, 1951), and the Corrected Item-Total Correlation, as well as Cronbach's alpha-coefficient for eliminated items, was calculated.

## Results

The percentage of missing values was between 0.5% and 1.6% and, according to the Little test, they were distributed completely at random (MCAR) ( $\chi^2 = 432.854$ ,  $df = 408$ ,  $p = .200$ ). Where small losses in the MCAR are found (around 5%), any imputation method seems to replicate the population parameters reasonably (Fernández-Alonso, Suárez-Álvarez, & Muñoz, 2012). Among the various modern approaches for the treatment of the missing values, we chose the EM (Expectation-Maximization) method using the Missing Values Analysis module of the program SPSS (Dempster, Laird, & Rubin, 1977; Pigott, 2001), since this procedure has distinct advantages in applied contexts (Van Ginkel & Van der Ark, 2005). All the items complied with the criteria of the normal curve, with asymmetry values below 2 and kurtosis values below 7 (see Table 1).

**Table 1.** Means, Standard Deviations, Asymmetry, Kurtosis and Corrected Item-Total Correlations.

	<i>M</i>	<i>SD</i>	Asym	Kurt	Corrected Item-Total Correlations
When something bothers me about my partner I tell them, respecting their point of view.	3.15	.71	-.38	-.44	.48
I try not to show my feelings to my partner.	1.72	.85	1.02	.29	.25
When I have a problem with my partner I talk it through with them.	3.41	.71	-.89	-.12	.56
I usually express my opinion and my desires to my partner.	3.44	.70	-1.03	.41	.57
When my partner criticizes me I keep it in mind.	3.22	.68	-.36	-.57	.48
When my partner helps me I thank them and make it clear to them that their help has been useful to me.	3.56	.64	-1.33	1.43	.58
I know what my partner doesn't like about me.	3.34	.70	-.92	.80	.37
My partner realizes when I am angry.	3.59	.64	-1.40	1.83	.38
I try to relax before expressing my anger to my partner.	2.62	.87	-.10	-.67	.24
When I know that I have made a mistake I apologize to my partner.	3.32	.76	-.87	.13	.48
When my partner feels bad, I also feel bad because I don't know how to help them.	3.23	.86	-.81	-.28	.22
I show my partner that I have confidence in their ability to make their own decisions.	3.35	.71	-.74	-.30	.56
I get the feeling that on a day to day basis we only talk about things that my partner is interested in.	1.65	.85	1.30	1.05	.39
When we argue I usually shout at my partner.	1.91	.87	.67	-.29	.43
I have gone so far as to insult my partner during an argument.	1.56	.78	1.35	1.25	.42
I usually communicate to my partner the negative things I see in them, before the positive things.	1.91	.82	.68	-.04	.41
I have little patience with my partner.	1.85	.85	.73	-.24	.36
When we get angry with each other I can go for days without speaking to my partner.	1.47	.81	1.71	2.10	.39
We dedicate time every day to talking about us (feelings, worries, plans, etc.)	2.88	.86	-.227	-.81	.59
We have enough time to communicate.	2.89	.86	-.30	-.70	.34
I feel like I can talk to my partner about anything.	3.56	.71	-1.71	2.59	.58
I am satisfied with the quality of the communication in our partnership.	3.31	.78	-.90	.15	.62

From the exploratory factor analysis (EFA) performed on the first subsample ( $n_1 = 310$ ) two factors were obtained that explained 46.6% of the variance. These factors were made up of 8 items of the original 21, since these were successively eliminated when their communality was below .40, their factor loading was lower than .40, or if it was equal or superior to .40 in more than one factor. The Kaiser-Meyer-Olkin measure of sampling adequacy gives a value of .76,

which is considered 'acceptable' (Kaiser, 1974; Hair, Anderson, Tatham, & Black, 1999), and the Bartlett test of sphericity was significant ( $\chi^2 = 690.814$ ;  $df = 28$ ;  $p < .00$ ).

The resulting factors were denominated 'Positive Communication' and 'Negative Communication'. Table 2 shows the explained variance, the number of items included and the factor saturation for each element.

**Table 2.** Factorial Structure of the Questionnaire.

Factor	1	2
No. items factor	4	4
% total variance explained factor	29.44%	17.18%
Items	Saturation	
I usually express my opinion and my desires to my partner.	.88	
When I have a problem with my partner I talk it through with them.	.79	
I feel like I can talk to my partner about anything.	.61	
When something bothers me about my partner I tell them, respecting their point of view.	.56	
I have gone so far as to insult my partner during an argument.		.72
When we argue I usually shout at my partner.		.69
I usually communicate to my partner the negative things I see in them, before the positive things.		.56
I have little patience with my partner.		.52

The values obtained with the confirmatory factor analysis on the second subsample ( $n_2 = 310$ ) indicated an optimal fit of the model, with a significant chi square value of  $\chi^2 = 31.817$  (19),  $p < .03$ ,  $\chi^2/df = 1.675$  and the following values for the calculated indices:  $GFI = .976$ ,  $RMSEA = .047$ ,  $SRMR = .045$ ,  $CFI = .982$ ,  $NFI = .958$ ,  $IFI = .983$  and  $TLI$

$= .974$ . The factorial weights found in each of the factors were statistically significant ( $p < .01$ ), with standardized values above .40. The final version of the model is presented in Figure 1 and has been named 'Self-perceived Communication in Couple Relationships Scale' (SCCR).

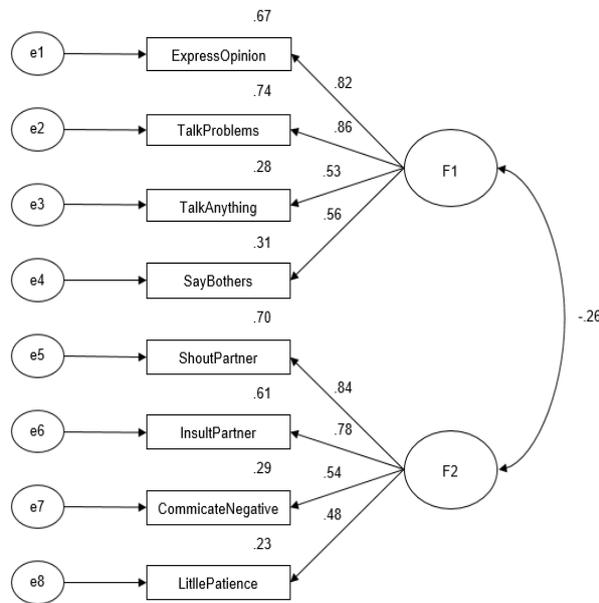


Figure 1. Confirmatory Factor Analysis (Subsample 2).

To test whether the model remains stable when the gender variable is taken into account, the confirmatory factor analysis was repeated with the subsamples of women (n = 358) and men (n = 262). The obtained results show a good fit of the model in both cases (see Table 3).

Table 3. Adjustment Indices for Men and Women.

	$\chi^2$	df	p	$\chi^2/df$	GFI	RMSEA	SRMR	CFI	NFI	IFI	TLI
Women	56.059	19	.00	2.950	.964	.074	.056	.956	.935	.956	.935
Men	28.157	19	.08	1.482	.974	.043	.046	.983	.951	.984	.983

In both samples, all the items achieved an adequate saturation in the in the expected factor (see Table 4), and low inter-correlations were observed between the two factors,

which is evidence of an adequate discriminant validity ( $r = -.26$  for women and  $r = -.35$  for men).

Table 4. Standardized Solutions for the CFA in both samples.

Factor	Factor 1		Factor 2	
	Saturation			
	W	M	W	M
Items				
I usually express my opinion and my desires to my partner.	.83	.84		
When I have a problem with my partner I talk it through with them.	.84	.80		
I feel like I can talk to my partner about anything.	.55	.62		
When something bothers me about my partner I tell them, respecting their point of view.	.52	.61		
I have gone so far as to insult my partner during an argument.			.78	.75
When we argue I usually shout at my partner.			.76	.73
I usually communicate to my partner the negative things I see in them, before the positive things.			.63	.43
I have little patience with my partner.			.50	.48

W = Women; M = Men

Since the model for both factors presented a good fit, both for women and for men, the Multigroup Confirmatory Factor Analysis (MG-CFA) was applied to test the model's factorial invariance as a function of gender. The results show

strict factorial invariance, as no differences were found in the fit of the nested models. This is indicated in Table 5, in which it can be seen that in all cases  $\Delta CFI$  is lower than .01 and  $\Delta RMSEA$  is lower than .015.

Table 5. Goodness of Fit Indices of each of the Factorial Invariance Models tested, for Men and Women.

Model	$\chi^2$	df	$\chi^2/df$	$\Delta \chi^2$	$\Delta df$	p	CFI	$\Delta CFI$	RMSEA	$\Delta RMSEA$
M1. Configural invariance	84.208	38	2.216			.000	.967		.044	
M2. Metric invariance	90.502	44	2.057	6.294	6	.000	.966	-.001	.041	-.003
M3. Strong invariance	99.074	47	2.108	8.572	3	.000	.962	-.004	.042	.001
M4. Strict invariance	112.650	55	2.048	13.576	8	.000	.958	-.004	.041	-.001

Finally, Student's *t* test was applied to determine if there were statistically significant differences between the answers given by women and men to the items of the resulting scale. The results indicate that women obtained higher mean scores than men in four of the eight items (two in each fac-

tor), although the effect size (measured with Cohen's *d* statistic) is small (see Table 6). Because the designed scale attempts only to reflect the profile of each subject in the two communication styles, without offering an overall score, contrasts were performed for all 8 items.

**Table 6.** Comparison of the Means of Women and Men.

	W	M	<i>p</i>	<i>d</i>
When something bothers me about my partner I tell them, respecting their point of view.	3.18	3.10		
When I have a problem with my partner I talk it through with them.	3.51	3.27	.00	.17
I usually express my opinion and my desires to my partner.	3.55	3.30	.00	.18
When we argue I usually shout at my partner.	1.98	1.81	.02	.10
I have gone so far as to insult my partner during an argument.	1.62	1.48	.03	.09
I usually communicate to my partner the negative things I see in them, before the positive things.	1.91	1.91		
I have little patience with my partner.	1.88	1.80		
I feel like I can talk to my partner about anything.	3.57	3.56		

W = Women; M = Men

Analysis of convergent validity by means of Pearson's correlation between the resulting factors and the selected external criterion variable (*I am satisfied with the quality of the communication in our partnership* item), indicated that Factor 1 was a good predictor of the general satisfaction with the communication in the couple relationship indicator, and Factor 2 a moderate predictor, with obtained Pearson's correlation values of .56 and -.33 respectively ( $p \leq 0.00$  bilateral in both cases).

Cronbach's alpha-coefficient to measure the reliability of the items as a whole was .75, and that of the resulting factors was .79 (Factor 1) and .73 (Factor 2), values which are considered acceptable to good according to George and Mallery (2003). Furthermore, no increase in this value was observed if some of the elements were eliminated, and the Corrected Item-Total Correlation was above .35 in all 8 items that make up the SCCR (Cohen & Manion, 2002).

## Discussion and Conclusions

The instrument generated in this study reflects two opposing communicative styles, which correspond to two of the marital communication styles, positive and negative, contemplated by Sánchez Aragón and Díaz Loving (2003). According to these authors, the positive communication style defines people that transmit their thoughts and feeling to their partners, show affection, are open, friendly, cooperative, attentive, understanding and communicative with their partners. They seek to communicate with respect and demonstrate a high and explicit level of disclosure. In contrast, the negative communication style tends towards non-explicit verbalization, demonstrates closed communication, in spite of a high level of disclosure which is often accompanied by non-verbal signals. People who use this communication style minimize the importance of their partner's experience, transmit information in an inadequate way, usually disagree, seek to create conflicts and find fault in everything and everyone, to the point where they seem more interested in bothering rather than communicating, in criticizing and not valuing the other.

In comparison to other communication and couple relationships instruments not constructed with a Spanish sample, but nonetheless adapted to and validated on one, the developed scale shows slightly superior indices and a considerable reduction in the total number of items. As stated by Montes-Berges (2009), the factorial analysis to validate the Communication Patterns Questionnaire (CPQ) (Christensen, 1988) reported, at its best (with 3 factors), indices ( $CFI = .91$ ,  $NFI = .89$ ,  $RMSR = .067$ ) slightly lower than those of the scale presented here ( $CFI = .98$ ,  $NFI = .96$ ,  $SRMR = .045$ ), explaining 44.78% of the variance with 20 items as opposed to the 46.6% variance explained with the 8 items of this scale (both the CPQ and the SCCR demonstrate a reliability coefficient *a* of .75).

Similarly, the adaptation of the same author of the Differentiation in the Family System Scale (DIFS) (Anderson & Sabatelli, 1992) presented results with the same tendency. The generated instrument was composed of two factors similar to those of the scale designed here (*Respect for the other* and *Negative actions aimed at the other*), made up of 18 items that explained 42.06% of the variance ( $a = .70$ ).

Through the creation and validation process of the instrument presented in this document, the Self-perceived Communication in Couple Relationships (SCCR) scale was obtained, made up of 8 items with a bifactor structure that reflects two opposing poles of communication (positive/assertive and negative/aggressive), and that maintains its stability for both genders. This structure corresponds to previously consulted classifications for other scales evaluating the same subject. The results of the reliability and the psychometric properties of the scale suggest that it can be used in empirical contexts, which, together with its brevity and ease of application, contributes to making it a useful instrument for the various different environments in which communication in couple relationships is researched or requires evaluation. Compared to other scales, the fact that it is current and centered on the Spanish population, including relevant elements of its diversity, gives it added value.

Among the diverse areas of diagnosis or intervention in

which the scale can be used, the application in the field of detection and prevention of conflicts within couple relationships stands out. As pointed out by Paleari, Regalia and Fincham (2010), the perceived quality of a relationship can be predicted to a large extent by negative responses in conflict situations (not forgiving, attacking, or avoiding), which in turn is directly or indirectly related to the use of effective communication.

Communication is a fundamental element in dealing with and resolving conflicts, but it is also often one of the most common sources of disagreement between partners (Papp, 2018). Misinterpreting what the other person was trying to say, for example, tends to generate a defensive attitude, which ends up increasing the tension and distancing the partners from a solution to the conflict. In such a situation, it is of fundamental importance to have the skills to establish efficient and clear communication, which will result in both parties making themselves understood and possibly even discovering that the problem was non-existent or had a simple solution (Armas Hernández, 2003). In the face of this reality, being able to detect the strengths and necessities of communication in couple relationships allows one to reduce the deterioration that the family environment may suffer as a result of conflicts, with the resulting negative effect on the children. In this regard, strategies for the constructive resolution of conflicts are required, improving communication and active listening skills, controlling aggressive attitudes and favoring empathy (Save the Children, 2009).

Furthermore, it should be noted that another contribution of the scale is that the population of two geographical

areas of the country (north and south) were included, and that an attempt was made to include the maximum possible diversity in the sample. On the other hand, one of the limitations of the generated scale that should be pointed out is that it is one of self-perception, although one must take into account that the data provided by this type of instrument may be very significant from a clinical perspective. Additionally, other already validated techniques were not used to evaluate the communication in the couple relationships, which would help to contrast the convergent validity. Nevertheless, to make up as far as possible for this limitation, an item was selected with content that, on the basis of the revised literature, could prove to be a good predictor of communication. These limitations allow one make suggestions and provide guidelines for further studies, such as including the gathering of qualitative information, applying the scale to other geographical areas (such as other countries), other contexts (such as the clinical field), studying the influence of other variables on the quality of the couple relationship (such as the duration of the relationship, whether or not the couple lives together, and whether or not they have children) and expand the diversity of the couples, by compiling information on older people or homosexual couples, with the objective of obtaining a greater validity to generalize the results.

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