Psychometric analysis of a scale for the detection of violence in dating relationships in young people

Análisis psicométrico de una escala para la detección de la violencia en las relaciones de pareja en jóvenes

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Abstract

The purpose of this research is to adapt and validate an instrument to analyse the typology and incidence of violence in young couples. The study was conducted using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The selected sample consisted of two groups of young couples (n= 253 and n= 323) students of the Faculty of Educational Sciences of the University of Granada (Spain). After validation with the EFA, we obtained a structure that was later corroborated with the CFA through structural equations (RMSEA = .062, CFI = .935, TLI = .916). Reliability and internal consistency of the instrument were also tested with values for all dimensions above .700. A descriptive and correlational analysis was also carried out. It is concluded that this new version, consisting of 20 items and five dimensions, has acceptable validity and reliability, demonstrating that the model is consistent and coherent with the theoretical starting assumptions.

Key words: validation, questionnaire, violence, intimate partner relationships, young people.

Resumen

El propósito de esta investigación es adaptar y validar un instrumento que permite analizar la tipología y la incidencia de la violencia en las relaciones de pareja en jóvenes. El estudio se realizó utilizando el análisis factorial exploratorio (AFE) y el análisis factorial confirmatorio (AFC). La muestra seleccionada estuvo compuesta por dos grupos de jóvenes (n= 253 y n= 323) estudiantes de la Facultad de Ciencias de la Educación de la Universidad de Granada (España). Después de la validación realizada con el AFE, obtuvimos una estructura que, más tarde, fue corroborada con el AFC a través de ecuaciones estructurales (RMSEA = .062, CFI = .935, TLI = .916). La fiabilidad y la consistencia interna del instrumento también se probaron con valores para todas las dimensiones superiores a .700. También se llevó a cabo un análisis descriptivo y correlacional. Se concluye que esta nueva versión compuesta por 20 ítems y cinco dimensiones presenta una validez y fiabilidad aceptables que demuestran que el modelo es consistente y coherente con los supuestos teóricos de partida.

Palabras clave: validación, cuestionario, violencia, relaciones de pareja, jóvenes.

The expression violence in young couples' refers to the forms of mistreatment that, exercised by one of the partners, aims to achieve a situation of conformity and control over the other. This definition integrates the different modalities or typologies in which violence can manifest itself as well as the different situations or contexts in which it can take place (Soriano, 2011).

The importance of studying this problem is determined by its high prevalence rate as well as by the serious personal and social...
consequences for victims, as shown by numerous studies (Dodaj et al., 2020; Navarro et al., 2020; Rodríguez Domínguez et al., 2020; Ruel et al., 2020; Taquette et al., 2020; Vicario et al., 2019). Levels transcend social class, ethnicity, educational level or sexual orientation (López & Ayala, 2011). To this must be added the learning and normalisation of patterns and models that may occur in the current or future couple’s relationship (Rodríguez et al., 2018).

This violence, which is used not only as a way of exercising power but also as a resource in conflict resolution, is currently manifesting itself in new ways and affects increasingly younger age groups (Garrido et al., 2020).

During 2019, of the total number of women resident in Spain, aged 16 years or older, 10.8% have suffered violence in their current or past relationships. Extrapolating this figure to the total female population, it is estimated that 2,197,691 women in this age group have been victims of abuse in their relationships (Government Delegation against Gender Violence, 2020).

This data, referring only to women, shows that the phenomenon of violence is very widespread in our country. However, although it is one of the most frequent forms of violence, its level of detection is low. This, as Pazos et al. (2014) points out, is probably due, among other reasons, to the difficulty young couples have in recognising that they are victims of abuse, to which must be added the idealisation that, based on myths such as “romantic love”, leads them to justify the violent behaviour they suffer at the hands of their partners.

Although in recent years there has been an increase in the number of studies in our country that point to the presence and importance of violence in young couples (Batiza, 2017; Díaz-Aguado et al., 2013; Garrido et al., 2020; Marcos & Isidro, 2019; Martínez et al., 2016; Mohamed et al., 2014; Peña et al., 2018) the line of research on it has received little attention. Therefore, it is necessary to have valid and reliable instruments that facilitate the study of the problem in all its breadth and specificity.

Of the many instruments designed to investigate violence, in relationships, the Conflict Tactics Scale ([CTS]; Straus, 1979) has probably been the most widely used. Although it only considers physical and verbal violence, it is in its revised version Revised Conflict Tactics Scale ([CTS2]; Straus et al., 1996) where the subscales sexual coercion and severity of injuries are included. Moreover, it is the only one that has been validated for Spain and Mexico (Fernández-Fuertes et al., 2006; Fernández-Fuertes & Fuertes, 2010). However, neither of the two was specifically designed to work with samples of young couples.

In our language, of all the instruments validated to date, two are worth highlighting; on the one hand, the Conflict in Adolescent Dating Relationships Inventory ([CADRI]; Wolfe et al., 2001), a tool designed to detect the presence of five forms of violence in adolescent couples -sexual, relational, verbal-emotional, physical and threats-. Second, the CUVINO dating violence questionnaire (Bringas-Molleda et al., 2017; Cortés-Ayala et al. 2015; Presaghi, et al., 2015; Rodríguez-Franco et al., 2010; Rodríguez-Franco et al., 2012), is a Likert-type scale with 42 items divided into 8 factors: detachment, humiliation, sexual aggression, coercion, physical aggression, gender-based violence, emotional punishment and instrumental violence and the recent revision and reduction of the questionnaire (Rodríguez-Díaz et al, 2017).

Although there are some specific instruments for the analysis of violence in relationships among young couples, we believe that it is necessary to continue advancing in this line of research. For this reason, we present an instrument created ad hoc that took as a reference the questionnaire on violence in relationships designed by Soriano (2011) and which in turn allows us to have a questionnaire that will rigorously analyse the violence that is exercised in young couples.
Therefore, the general objective of this study is to adapt and validate an instrument to analyse the typology and incidence of violence in relationships among young couples.

### Method

**Design**

This work describes the process of validation and psychometric analysis of an instrument, created ad hoc, called "Violence in young couples relationships questionnaire (VIREPA)". For this purpose, we have carried out an exploratory study and a confirmatory study by means of a quantitative survey research. The ultimate aim is to develop a valid and reliable instrument for measuring violence in young couples'.

**Participants**

The selection of the sample for each study was carried out by means of non-probabilistic or convenience sampling (Otzen and Manterola, 2017), with the students taught by the researchers on this work during the 2019-2020 academic year.

The sample of the exploratory study, which corresponds to the Exploratory Factor Analysis (henceforth EFA), consisted of a total of 253 students, corresponding to the Master's Degree in Research, Social Development and Socio-educational Intervention (22.9 %), the Degree in Social Education (36.5 %), the Degree in Pedagogy (18.3 %), the Degree in Primary Education (14.6 %) and the Degree in Early Childhood Education (7.7 %). The sample consisted of 92.5 % women and 7.5 % men, aged between 18 and 31 years, with an average of 23.2 (SD=4.3).

The study sample corresponding to the Confirmatory Factor Analysis (CFA) was made up of 323 students, corresponding to the Master's Degree in Research, Social Development and Socio-educational Intervention (17.9%), the Degree in Social Education (41.5%), the Degree in Pedagogy (30.6%), the Degree in Primary Education (6.6%) and the Degree in Early Childhood Education (3.4%). The sample consisted of 90.1 % women and 9.9 % men, aged between 17 and 29 years, with an average of 23.8 (SD=5.2).

**Instrument**

The reference instrument for this study was created to measure the existence, types, incidence and degree of self-perception of violence in young couples' (Soriano, 2006, 2011) and was called the Questionnaire for the study of violence in intimate relationships (Soriano, 2006).

In the 2019-20 academic year, the content and wording of the items of the instrument were revised and new variables of abuse were included, and the instrument was configured as follows:

The socio-demographic variables used fall into three dimensions: demographic factors (sex, age, education, work), data on the partner (sex, age, current or previous partner, duration of the relationship and whether the partner is cohabiting) and self-perception of abuse (currently or in the past).

The rest of the variables, 22 in total, measure violence in intimate relationships based on statements in which the subjects must evaluate different situations of abuse. These variables are grouped into 11 dimensions that describe the different types of abuse. These dimensions are: Physical abuse, Psychological abuse, Sexual abuse, Economic control/abuse, Social isolation, Personal devaluation, Personal control, Emotional neglect, Ideological/religious devaluation, Gender role/stereotype violence and Münchhaussen Syndrome.

The rating of the questionnaire is done through a Likert-type scale of five options (1 Never, 2 Sometime (1 to 2), 3 Many times (3 to 5), 4 Almost always (6 or more) and 5 Always).

**Data collection and analysis**

The instrument was administered online using Google forms software during the 2019-2020 academic year. Given the circumstances...
of confinement in which we found ourselves, we opted for the method of data collection.

For the data analysis, first of all, we carried out the EFA which allowed us to carry out a pilot study on this first version of the instrument and adapt it to the population studied, young people aged between 17 and 31 years. This study allowed us to analyse the factorial structure of the instrument and to detect possible difficulties of comprehension in some items when completing the questionnaire, as well as the discrimination index of each item with values ≥ .32. Previously, we proceeded to study the normality of the sample by means of the Kolmogórov-Smirnov test, obtaining a value of p.05, specifically, .294. In turn, the method for the extraction of common factors "Principal Component Analysis" (PCA) with "Varimax" rotation criterion was used, which minimizes the number of variables that have a saturation factor on a variable (Muñoz-Cantero et al., 2019), and its internal consistency was analysed by means of Cronbach's Alpha, using the SPSS-23 statistical programme and McDonald's Omega using the free software R (R Core Team, 2016).

Structural equation modelling was used for the CFA which allowed evaluating the degree of fit of the theoretically defined dimensions (Lizasoain-Hernández et al., 2017), using the AMOS-23 statistical package. Using the same type of correlation matrix as well as common factor extraction method considered in the CFA, the model fit was assessed, following the recommendations of Kline (2015), by means of the following statistics: χ2 test/degrees of freedom (Schumacker & Lomax, 2004), comparative goodness-of-fit index (CFI), incremental fit index (IFI), normed fit index (NFI), Tuker-Lewis index (TLI) (Byrne, 1994, 2001; Hu & Bentler, 1999), root mean square residual of approximation (RMSEA) (Hu & Bentler, 1998) and expected cross-validation index (ECVI).

The validity and reliability of the instrument was also analysed with the SPSS-23 statistical programme, taking into account the following indices: Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Squared Shared Variance (MSV) and Reliability Coefficient H (MaxR (H), which established reliability, convergent validity and discriminant validity.

Finally, a correlational study was carried out for each of the dimensions that make up the instrument designed, and for data analysis, the sample was characterised through a descriptive analysis using the average and standard deviation and inferential analysis of the differences in terms of sex for each dimension.

Results

The results obtained in each of the studies carried out are presented below. The EFA made it possible to compare the underlying structure of the instrument with the theoretical structure from which we started, providing important information for studying construct validity and refining the questionnaire in the context of the data obtained. For this purpose, the criteria for its feasibility were checked: determinant of the correlation matrix of .00; KMO = .905; Bartlett's test of sphericity with a significance of .00. Once the criteria had been checked, the first version of the questionnaire (22 items and 11 dimensions) was subjected to a EFA.

The analysis shows that the extracted factors explain 68.58% of the variance, and that the communalities range between .48 and .82.

Through the observation of the rotated factors of the matrix and the factorial weight of each one of the items (Table 1), it can be observed that all the items present scores higher than .3 and that they are grouped in 5 dimensions. Items with scores above .3, which appear in more than one factor, have been placed taking into account the highest score or where they theoretically make the most sense.
Table 1. Matrix of rotated factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
</tr>
</thead>
<tbody>
<tr>
<td>They are indifferent to your problems or needs.</td>
<td>.799</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They do not value the work or effort you put in.</td>
<td>.782</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He or she does not take your opinion into account, does not</td>
<td>.765</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consider your requests.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He or she ridicule you or doesn't value you in front of other people</td>
<td>.634</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He or she tries to make you think you are sick</td>
<td>.487</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When he or she gets angry he or she pushes you</td>
<td>.866</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He or she physically assaults you</td>
<td>.758</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insults or threatens you</td>
<td>.625</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At certain times, their behaviour can make you scared</td>
<td></td>
<td>.584</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Internal consistency of the instrument

<table>
<thead>
<tr>
<th>Dimension</th>
<th>α</th>
<th>ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1. Emotional Maltreatment (EM)</td>
<td>.882</td>
<td>.922</td>
</tr>
<tr>
<td>Factor 2. Physical and Psychological Mistreatment (PPM)</td>
<td>.831</td>
<td>.901</td>
</tr>
<tr>
<td>Factor 3. Personal Devaluation (PD)</td>
<td>.818</td>
<td>.898</td>
</tr>
<tr>
<td>Factor 4. Social and Economic Control (SEC)</td>
<td>.827</td>
<td>.979</td>
</tr>
<tr>
<td>Factor 5. Sexual abuse (SA)</td>
<td>.705</td>
<td>.826</td>
</tr>
</tbody>
</table>

In order to guarantee the reliability of the instrument, Cronbach's Alpha (Merino-Soto, 2016) and McDonald's Omega (1999) statistics were used. The results of the Alpha coefficient, both in general (α = .937) and in the five factors extracted, showed high reliability in all cases with values above .700. The Omega coefficient also provided a high reliability in the total value (ω = .908) and in each of the factors, exceeding .826. Both indices give the instrument a high internal consistency (Table 2).

Confirmatory factor analysis

The confirmation of the model previously obtained by means of the EFA was carried out by means of a CFA, using "Maximum Likelihood" as the estimation method. When the confirmatory factor analysis was carried out to check the five-factor composition using AMOS 23, the results obtained initially called for the elimination of the items "Uses your money as if it were his or her own" (SEC1) and "Makes you take substances that damage your health" (SA1), belonging in its original version to the Münchhaussen Syndrome dimension and located in the EFA in the "Sexual Abuse" dimension, corresponding to the 4th and 5th dimensions respectively; In addition, the item "Trying to make you

believe you are sick” located after the CFA in the Emotional Mistreatment (EM) Dimension was changed dimension, because the modification indices indicated the existence of covariance between errors associated with items belonging to different factors; and its factor score was below . Once the model was reformulated, the following results were obtained (Figure 1).

Figure 1. Model of 5 factors (AFC)

As can be seen in the index table 3, the reformulated model provides adequate values, with $\chi^2$ with a probability of .00, values equal to .06 in RMSEA and above .90 in the cases of CFI, IFI, NFI and NNFI (Arias, 2008; Byrne, 2010), indicators that are not sensitive to the sample size, and therefore allow us to confirm the proposed 5-factor model, thus guaranteeing the construct validity of the instrument designed.

<table>
<thead>
<tr>
<th>Table 3. Model adjustment indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
</tr>
<tr>
<td>Values</td>
</tr>
</tbody>
</table>

RELIEVE
Regarding the validity and reliability coefficients from the analysis of the standardised regression scores and the correlations obtained with AMOS 23, the results obtained can be assessed as adequate (Table 4), since Reliability: CR > .7; Convergent Validity: CR > AVE, AVE > .5; and for Discriminant Validity the square root of the AVE was compared with the correlation between constructs (Fornell & Larcker, 1981), to affirm that there is discriminant validity between constructs with very similar values.

Table 4. Validity and reliability coefficients of the 5-factor model

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>MAXR(H)</th>
<th>ME</th>
<th>CSE</th>
<th>AS</th>
<th>MFP</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME</td>
<td>.89</td>
<td>.67</td>
<td>.639</td>
<td>.894</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>.85</td>
<td>.54</td>
<td>.721</td>
<td>.900</td>
<td>.69</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>.75</td>
<td>.60</td>
<td>.60</td>
<td>.755</td>
<td>.61</td>
<td>.66</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFP</td>
<td>.86</td>
<td>.55</td>
<td>.721</td>
<td>.88</td>
<td>.80</td>
<td>.71</td>
<td>.70</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>DP</td>
<td>.805</td>
<td>.508</td>
<td>.607</td>
<td>.808</td>
<td>.74</td>
<td>.66</td>
<td>.77</td>
<td>.73</td>
<td>.71</td>
</tr>
</tbody>
</table>

The confirmed model was composed of a total of 5 dimensions: Emotional Abuse, Physical and Psychological Abuse, Personal Devaluation, Social and Economic Control and Sexual Abuse (Table 5), which are described below.

Table 5. Final instrument

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1. Emotional Maltreatment (EM)</td>
<td>1. He/she is indifferent to your problems or needs.</td>
</tr>
<tr>
<td></td>
<td>2. Does not value the work or effort you put into it.</td>
</tr>
<tr>
<td></td>
<td>3. He or she does not take your opinion into account, does not consider your requests.</td>
</tr>
<tr>
<td></td>
<td>4. Ridicules you or doesn't value you in front of other people</td>
</tr>
<tr>
<td>Factor 2. Physical and Psychological Mistreatment (PPM)</td>
<td>1. When he/she gets angry, he/she starts to push you.</td>
</tr>
<tr>
<td></td>
<td>2. Physically assaults you</td>
</tr>
<tr>
<td></td>
<td>3. Insults or threatens you</td>
</tr>
<tr>
<td></td>
<td>4. Sometimes you are afraid of their behaviour.</td>
</tr>
<tr>
<td></td>
<td>5. They force you to perform tasks that they consider is gender-specific.</td>
</tr>
<tr>
<td>Factor 3. Personal Devaluation (PD)</td>
<td>1. Ironise, ridicule your political ideology or religious beliefs</td>
</tr>
<tr>
<td></td>
<td>2. He/she does not respect your political ideology or your religious beliefs.</td>
</tr>
<tr>
<td></td>
<td>3. Ridicules or insults you because you are a man or a woman.</td>
</tr>
<tr>
<td></td>
<td>4. Try to make you think you are sick</td>
</tr>
<tr>
<td>Factor 4. Social and Economic Control (SEC)</td>
<td>1. He/she controls your schedule and/or decides what things you can do.</td>
</tr>
<tr>
<td></td>
<td>2. Control your money</td>
</tr>
<tr>
<td></td>
<td>3. They prevent you from having contact with your family, friends and colleagues.</td>
</tr>
<tr>
<td></td>
<td>4. They don't allow you to work or study.</td>
</tr>
<tr>
<td></td>
<td>5. Control your social networks and/or phone</td>
</tr>
<tr>
<td>Factor 5. Sexual abuse (SA)</td>
<td>1. He or she forces you to engage in sexual intercourse that is degrading or humiliating to you.</td>
</tr>
<tr>
<td></td>
<td>2. Forces you to have sex against your will</td>
</tr>
</tbody>
</table>

1. Emotional Maltreatment (EM): This dimension is made up of 4 items, which allows us to evaluate the psychological abandonment that involves the absence of attention to the affective needs and moods of the person as well as the form of mistreatment that is exercised through contemptuous forms that try to convince of the low value of the individual and social value of the other member of the relationship.

2. Physical and Psychological Mistreatment (PPM): composed of 5 items, which allows us to detect physical mistreatment defined
as any action or omission, not accidental, which causes physical harm to the person or places them at risk of suffering it; psychological mistreatment defined as any behaviour which produces devaluation, suffering or psychological harm and, the Münchhaussen Syndrome which is produced in those situations in which fictitious symptoms and/or pathologies are fabricated or induced, which are actively generated by the partner.

3. Personal devaluation (PD): This dimension consisted of a total of 4 items. This form of abuse attempts to devalue the person's religious beliefs and ideological values while emphasising gender roles and stereotypes.

4. Social and Economic Control (SEC): This dimension is made up of a total of 5 items and identifies social control which consists of surveillance, obstacles and prohibitions that are put in place in order to hinder or prevent the interpersonal relationships of the partner, as well as economic control or abuse which is understood as the use, without consent and in an abusive manner, of the objects of the other partner.

5. Sexual abuse (SA): This dimension is made up of a total of 2 items that identify the existence of abusive behaviours of a sexual nature, carried out from a position of power, without consent and against the will of the partner, as well as the implementation of sexual behaviours that are felt by the other person as degrading and humiliating to their dignity.

**Descriptive Analysis**

In the descriptive analysis carried out, generalised responses were identified between the option "Never" and "Sometimes (1 to 2)" in all the dimensions, with averages between 1.18 (the dimension "Sexual abuse") and 1.57 ("Emotional abuse", with the highest average which shows that this is the type of violence that occurs most frequently), as can be seen in Table 5. These results show the low-moderate tendency of the sample analysed.

Table 6. Descriptive statistics by dimension

<table>
<thead>
<tr>
<th>Dimensiones</th>
<th>M</th>
<th>DT</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM</td>
<td>1,5789</td>
<td>0,84948</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>SEC</td>
<td>1,3133</td>
<td>0,59096</td>
<td>1.00</td>
<td>4.20</td>
</tr>
<tr>
<td>SA</td>
<td>1,1873</td>
<td>0,43851</td>
<td>1.00</td>
<td>3.50</td>
</tr>
<tr>
<td>PPM</td>
<td>1,3307</td>
<td>0,59908</td>
<td>1.00</td>
<td>4.60</td>
</tr>
<tr>
<td>PD</td>
<td>1,2771</td>
<td>0,56475</td>
<td>1.00</td>
<td>3.75</td>
</tr>
</tbody>
</table>

On the other hand, as for the differences that sex established in relation to each of the dimensions analysed, the Student's t-test for independent samples showed that there were no statistically significant differences (EM: T=.773, P=.440; SEC: T=- 1.635, P=.103; SA: T=.422, P=.674; PPM: T=-.316, P=.752; PD: T= -.456, P=.649). In this sense, the averages of girls and boys in terms of relationship violence the differences are not very significant.

**Correlation analysis**

This section focuses on the correlational study of the 5 dimensions of the questionnaire. The data obtained, after applying Pearson's correlation test to observe the relationship between the 5 dimensions of the scale, can be seen below in Table 7.
Table 7. Results of the bivariate correlations of the items of the 5 dimensions of the questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>Emotional Maltreatment (EM)</th>
<th>Social and Economic Control (SEC)</th>
<th>Sexual abuse (SA)</th>
<th>Physical and Psychological Mistreatment (PPM)</th>
<th>Personal Devaluation (PD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Maltreatment</strong></td>
<td>Pearson's correlation 1</td>
<td>.626**</td>
<td>.501**</td>
<td>.692**</td>
<td>.631**</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>N</td>
<td>323</td>
<td>323</td>
<td>323</td>
</tr>
<tr>
<td><strong>Social and Economic Control (SEC)</strong></td>
<td>Pearson's correlation .626**</td>
<td>1</td>
<td>.565**</td>
<td>.750**</td>
<td>.574**</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>N</td>
<td>323</td>
<td>323</td>
<td>323</td>
</tr>
<tr>
<td><strong>Sexual abuse (SA)</strong></td>
<td>Pearson's correlation .501**</td>
<td>.565**</td>
<td>1</td>
<td>.583**</td>
<td>.553**</td>
</tr>
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<td>Sig. (bilateral)</td>
<td>N</td>
<td>323</td>
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<tr>
<td><strong>Physical and Psychological Mistreatment (PPM)</strong></td>
<td>Pearson's correlation .692**</td>
<td>.750**</td>
<td>.583**</td>
<td>1</td>
<td>.610**</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>N</td>
<td>323</td>
<td>323</td>
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</tr>
<tr>
<td><strong>Personal Devaluation (PD)</strong></td>
<td>Pearson's correlation .631**</td>
<td>.574**</td>
<td>.553**</td>
<td>.610**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral)</td>
<td>N</td>
<td>323</td>
<td>323</td>
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</table>

**. The correlation is significant at the 0.01 level (bilateral).

Based on the results obtained, it can be affirmed that there is a relationship between dimension 1 (EM) with dimension 2 (SEC; R=.62 y p=.00), with dimension 3 (SA; R=.50 y p=.00), with dimension 4 (PPM; R=.69 y p=.00) and with dimension 5 (PD; R=.63 and p=.00) as the bilateral correlation is significant at n.s.=.01. Furthermore, the correlation is high (Mateo, 2004; Pérez et al., 2009) and with moderate values in the case of the SA dimension.

In turn, there is also a relationship between dimension 2 (SEC) with dimension 1 (ME; R=.62 and p=.00), with dimension 3 (SA; R=.56 and p=.00), with dimension 4 (PPM; R=.75 and p=.00) and with dimension 5 (PD; R=.57 and p=.00) as the bilateral correlation is significant at n.s.=1, presenting a high correlation in all dimensions and moderate correlation in SA and PD.

Similarly, dimension 3 (SA) is related to dimension 1 (EM; R=.50 and p=.00) to dimension 2 (SEC; R=.56 and p=.00) to dimension 4 (PPM; R=.58 and p=.00) and to dimension 5 (PD; R=.55 and p=.00) with the bilateral correlation being significant at n.s.=1, presenting a moderate correlation in all dimensions.

There is also a relationship between dimension 4 (PPM) with dimension 1 (EM; R=.69 y p=.00) and with dimension 2 (SEC; R=.75 y p=.00), with dimension 3 (SA; R=.58 and p=.00) and with dimension 5 (PD; R=.61 y p=.00) as the bilateral correlation is significant at n.s.=1, presenting a high correlation in all the dimensions and with moderate values in the case of the SA dimension, as we have already referred to.

Finally, we also found a relationship between dimension 5 (PD) with dimension 1 (ME; R=.63 y p=.00) with dimension 2 (CSE; R=.57 y p=.00), with dimension 3 (SA; R=.55 y p=.00) and 4 (PPM; R=.61 y p=.00) with the bilateral correlation being significant at n.s.=1, presenting a high correlation in dimensions EM and PPM and with moderate values in the case of dimensions SA and SEC.

Discussion and conclusions

Detecting the incidence and types of violence in young couples' is a vitally important process in our society that is of particular concern to researchers and teachers (Boira et al., 2017; García-Carpintero et al., 2018; Kaufman et al., 2019; Osuna-Rodríguez...
et al., 2020; Peña et al., 2019; Valls et al., 2016; among others...).

Today's society demands that young people are aware of this social problem and can identify it. In this sense, this instrument is presented as a strategy to measure the existence, types, incidence and degree of self-perception of violence in young couples regardless of sexual orientation and whose administration takes into account the bidirectional nature of violence that can occur in these couples (Menesini et al., 2011; Swahn et al., 2010).

With the results obtained in the EFA and CFA, it can be pointed out that the "VIREPA" instrument constitutes a reliable tool, after being applied to the students of the Degree in Early Childhood Education, Primary Education, Social Education and Pedagogy and the Master's Degree in Research, Social Development and Socio-educational Intervention of the University of Granada, due to its high internal consistency both in the general scale and in each of its dimensions. It is worth mentioning that the confirmatory factor analysis was carried out taking into account the 5 dimensions proposed in the EFA, made up of 20 items once 2 had been eliminated and which managed to adapt well to values that were not susceptible to the size of the sample.

The descriptive analysis has identified a low-moderate trend in the responses with the majority choosing the options "never" and "sometimes" and where there are no statistically significant differences between girls and boys in terms of violence in couples. This coincides with the study by Hernando Gómez et al. (2012), which states that there are no gender differences in relation to physical and non-physical abuse in young couples of the university. In contrast, there are studies that indicate, although with small differences, that girls are perpetrators of more violence than boys (Fernández-Fuertes & Fuertes, 2010), motivated, in many cases, by a self-defensive response (Makepeace, 1986).

On the other hand, the correlational analyses applied showed a high interrelationship between 4 of the 5 dimensions, with moderate values in the SA dimension. This coincides with studies in which psychological abuse and emotional dependence correlate positively, i.e., the greater the psychological abuse, the greater the emotional dependence towards the partner (Momeñe et al., 2017).

An important difference with respect to the reference instrument used (Soriano, 2006, 2011) is the data provided on the composite reliability (CR), average variance extracted (AVE), maximum shared variance squared (MSV) and reliability coefficient H (MaxR (H)) statistics to demonstrate the reliability and validity of the factors and their items.

Although there are various typologies of violence that can occur in relationships, our model, as we have already mentioned, was configured by 5 dimensions. While other instruments have focused on measuring physical, psychological and sexual violence (Foshee et al. 2005; Muñoz Rivas et al., 2007, 2009), the instrument configured from this study also includes new forms of abuse configured as new typologies. Thus, the EM (Emotional Abuse) dimension, which has traditionally been linked to psychological abuse, with denominations such as verbal-emotional violence (Pazos et al., 2014) and emotional violence (Fernández-Fuertes & Fuertes, 2010; Muñoz-Rivas et al., 2007; Sears et al., 2007), allows us to evaluate the absence of attention to the emotional needs and moods of the person as well as to convince the individual of a low and social value of the other partner. This type of abuse, together with sexual violence, has been the most common form of violence in relationships among young people, as shown by numerous studies (Fernández-Fuertes & Fuertes, 2010; Hernando-Gómez, et al., 2016; Muñoz-Rivas et al., 2007; Pazos et al., 2014; Sánchez, et al., 2008).
The PPM dimension (Physical and Psychological Maltreatment) corresponds to the most studied typologies of maltreatment and allows the detection of any action or omission, not accidental, that causes physical harm and any behaviour that produces devaluation, suffering or psychological harm in any of its forms. This type of violence appears frequently in young people and adolescent couples identified as arguments and physical fights (Hernando-Gómez et al., 2016). Muñoz-Rivas et al. (2007) concluded that 90% of the young people surveyed reported having verbally assaulted their partner at some point and 40% reported having physically assaulted him/her. With regard to psychological abuse, some studies even provide data on the high incidence rate, both in terms of victimisation and aggression, and in both boys and girls (Rodríguez, 2015). The PD dimension (Personal Devaluation) is related to the EM dimension but based on religious and ideological beliefs and/or gender roles and stereotypes. The relationship between sexist beliefs and the increased risk of using psychological, physical and/or sexual violence, both in boys and girls, is well known (Pazos et al., 2014; Ulloa et al., 2004;), as well as the importance of some socio-cultural elements that exert their influence through the transmission of different gender models between men and women (Soler et al., 2005).

The SEC dimension (Social and Economic Control) allows us to identify the aspects that impede the establishment of interpersonal relationships of a partner, as well as economic control or abuse. Traditionally, this type of abuse has been included within psychological violence (Fernández-González et al., 2017; Porrúa et al., 2010) and the originality of our instrument lies in considering it as a typology of abuse with its own identity, regardless of the psychological damage it may cause.

Finally, the SA (Sexual Abuse) dimension, which identifies the existence of abusive, degrading and humiliating behaviours of a sexual nature, has been the most analysed typology, due to the repercussions it entails (Fernández-Fuertes & Fuertes, 2010; Hernando-Gómez et al., 2016; Muñoz-Rivas et al., 2007; Pazos et al., 2014; Sánchez et al., 2008). Furthermore, there are studies that support the fact that women perpetrate more verbal and emotional violence (Fernández-Fuertes & Fuertes, 2010; Muñoz-Rivas et al., 2007; Sears et al., 2007), and men perpetrate more sexual violence (Corral, 2009; Fernández-Fuertes et al., 2010; Muñoz Rivas et al., 2009; Ortega et al., 2008; Rey-Anacona, 2013; Schiff & Zeira, 2005; Sears et al., 2007).

In short, the "VIREPA" is a valid, reliable and effective instrument for assessing the existence, types, incidence and degree of self-perception of violence in young couples. However, given that the sample is focused on a single university and on degrees belonging to the Educational Sciences, in future projects, it would be interesting to apply it, with a larger sample size, to graduates belonging to different branches of knowledge.

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