Dating Violence in University Students: Validation of the DVQ-VP Scale In Bolivia

Violencia en el noviazgo en estudiantes universitarios: validación de la escala DVQ-VP en Bolivia

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Abstract.
Background. Dating violence is an increasingly studied subject as it is related to the initial stages of what could later become intimate partner violence and even intrafamily violence. It is believed that love can cause behavioral patterns that will eventually become habits. The **objective** of this study is to have valid and reliable instruments, adapted to different contexts, to accurately and promptly evaluate victims and aggressors and guide an appropriate intervention. **Method.** we worked with 2216 volunteer university students from Bolivia who had at least one relationship in the past twelve months. Exploratory and confirmatory factor analysis were conducted to adapt the Dating Violence Questionnaire for Victimization and Perpetration (DVQ-VP) for the Bolivian context. **Results.** the appropriate psychometric characteristics were confirmed for evaluating violence in dating relationships using a reduced version of 18 items in a five-factor model for victims and a single-factor scale for the evaluation of aggressors, which were found to be invariant for sex. **Conclusions.** a significant variability was found among the studies, making them less comparable. The implications and limitations of the study are noted.

Resumen.
Antecedentes. La violencia en el noviazgo es un tema que se estudia cada vez más, ya que se relaciona con las etapas iniciales de lo que más tarde podría convertirse en violencia de pareja e incluso violencia intrafamiliar. Se cree que el amor puede causar patrones de comportamiento que eventualmente se convertirán en hábitos. El **objetivo** de este estudio es contar con instrumentos válidos y fiables, adaptados a diferentes contextos, para evaluar con precisión y prontitud a las víctimas y agresores, además de orientar una intervención adecuada. **Método.** Trabajamos con 2216 estudiantes universitarios voluntarios de Bolivia que tuvieron al menos una relación de pareja en los últimos doce meses. Se realizó análisis factorial exploratorio y confirmatorio para adaptar el DVQ-VP al contexto boliviano. **Resultados.** Se confirmaron las características psicométricas adecuadas para evaluar la violencia en las relaciones de noviazgo utilizando una versión reducida de 18 ítems en un modelo de cinco factores para las víctimas y una escala de un solo factor para la evaluación de los agresores, que se encontraron invariantes para el sexo. **Conclusiones.** Se señalan las implicaciones y limitaciones del estudio.

1. Introduction

Intimate partner violence (IPV) is a phenomenon that is claiming more and more victims, while studies show that the relationship patterns of the members of the couple already appear during dating relationships, constituting a risk factor for suffering IPV (Amor et al., 2001; García et al., 2018; García-Carpintero-Muñoz et al., 2022; Gutiérrez et al., 2022; Rubio-Garay et al., 2012; Yanez-Peñúñuri et al., 2019). The Pan American Health Organization (PAHO, 2021) reports that one in three women have experienced or are experiencing physical or sexual violence from their partner or ex-partner and that three out of every five murders of women are committed by their partner.

Additionally, Bott et al. (2021) found that intimate partner violence is the most common form of violence against women in Latin America and García Cabezas (2020) also reports that a femicide is recorded. A systematic search of surveys on violence in PAHO Member States (2021), with 1046 records from 24 countries between 1998 and 2018, shows that this type of violence is present across the continent, with prevalence ranging from 1% in Canada to 50% in Bolivia in the past 12 months.

Bolivia recognizes feminicide within the legislation in 2013, reporting up to 2021 a total of 998 femicides. Choque Aldana (2021) reports that Bolivia has third highest rate of femicide in Latin America and the Caribbean, and the National Institute of Statistics (INE) reported the presence of almost 52% of at least one episode of violence coming from their partner or ex-partner. Along these lines, it is worth highlighting the studies by Rodríguez-Franco et al. (2022), with young Spaniards, and Cortés Ayala et al. (2014), with young Mexicans, which report that more than 70% of the participants in their studies did not perceive themselves as mistreated by their partner, despite the evidence that they had experienced abuse in their dating relationship. The authors assume that violence is probably not recognized due to the lack of information about it, its normalization or even because it is confused with displays of affection. Therefore, dating violence offers such disparate prevalence figures, ranging between 9% and 90% (Rubio-Garay et al., 2017).

This leads Escoto et al. (2007) to consider that adolescents create great expectations of love, care, support, and understanding in courting, which prevents them from noticing when they become involved in dating violence. This will also lead to a great diversity of definitions, ideologies, and methodological positions in the different groups and contexts in which it has been investigated. The importance of studying this phenomenon lies in its predictive nature of future aggression, something that will become increasingly serious with time and coexistence (Rey-Anacona et al., 2010; Rey-Anacona et al., 2021).

It is understood that dating violence is any act, omission, attitude or expression that generates, or has the potential to generate emotional, physical or sexual harm to the affective partner with whom an intimate relationship is maintained in the absence of cohabitation, economic bond, legal or marital status. It has specific characteristics not shared with the violence experienced in other stages of the life of a couple (Rubio-Garay et al., 2017), while as a social problem, from the legal perspective and linked to the intervention of power, it is postulated that it must imply intentionality, not being desired, not being essential, and being harmful (Hamby, 2017), where it will be necessary to discriminate the perception of the behavior and if it is an act or appears as a process (García-Díaz et al., 2020; López-Cepero et al., 2015). A characteristic of this type of violence is its bidirectional nature regardless of the sex of the partners, especially when it comes to psychological and physical violence. It has been seen that as there is an increase in the level of aggressiveness. This characteristic is lost and more women are affected as the relationship becomes more stable (Herrero-Olaizola et al., 2020; Rey-Anacona et al, 2021; Riesgo et al., 2019; Rubio-Garay et al., 2017).

This approach, in addition to making its identification more precise and improving its 'surveillance', will promote a better evaluation and may offer a better guide to its treatment (Hamby, 2017). This implies the need to have effective instruments aimed at evaluating the presence of violence in couple relationships, either those aimed at diagnosing abuse within the couple/dating violence (long instruments) or those that seek to make a detection orientation or screen. However, many of them lack methodological rigor in their validation process, standing out three for work with Spanish-speaking samples: Conflict Tactics Scale 2 (CTS2), Conflict in Adolescent Dating Relationships Inventory (CADRI), and the Dating Violence Questionnaire (DVQ) (López-Cepero et al., 2015). The first refers to not being prepared for working with young people and adolescents, and the second to not delving into the study of victimization, in addition to preserving Anglo-Saxon elements that probably do not adapt to the context. The DVQ is proposed the most appropriate to study this topic; even more so with its revised and reduced version, the DVQ-VP (Rodríguez-Díaz et al., 2017; Rodríguez-Franco et al., 2022).

It is worth mentioning that most of the tests that have psychometric support have been prepared and validated with samples from the United States or Europe, which could ignore the importance of the cultural component and the sociodemographic context as determinants of the phenomenon studied (Fernández et al., 2010). In this sense, the original version of the DVQ-VP has been worked with the Latin American population, and currently has a version that also allows the study of the phenomenon from both the victim and the aggressor (Rodríguez-Franco et al., 2022). Thus, this study aims to confirm the hypothesis that the DVQ-VP fit a five-factor model that assesses dating violence in the Bolivian population.

2. Method

2.1 Participants

The inclusion criteria to participate in the study required individuals to be in a current relationship with a partner or having been in a relationship in the last 12 months. The initial sample consisted of 3776 Bolivian university volunteers with an implicit consent from various careers from the cities of La Paz (51.54%), Cochabamba (26.99%), and Santa Cruz (21.48%). To ensure a smooth data collection process, participants were collectively briefed on the research objectives and confidentiality of their responses. They were encouraged to address any questions before and during the completion of the assessment tests. Once the participants grasped the study's purpose, the instruments were administered to those who consented to participate.

After excluding those who had never been in a relationship or had ended their relationship over 12 months ago, 30% of the sample was removed. Additionally, we opted for the removal of questionnaires with any unanswered items (15%), avoiding data imputation. The final sample was made up of 2216 participants, 1176 women (53.1%) and 1040 men (46.9%), with an average age of 20.35 years. ($SD = 1.879$). Taking the recommendations of Anderson and Gerbing (1988) and Lloret-Segura et al. (2014), the sample was randomly divided into two halves equivalent in sex, age and city, both samples being sufficient to carry out the AFE, made up of by 1108 people (53.1% women, 46.9% men, and a mean age of 20.35 years and $SD = 1.878$), and the AFC, with a subsample of 1108 participants (53.1% women and 46.9% males between the ages of 17 and 25 [$x = 20.35/SD = 1.881$].

2.2 Instruments

2.2.1 Dating Violence Questionnaire for Victimization and Perpetration (DVQ-VP)

In the article titled "Dating Violence Questionnaire for Victimization and Perpetration (DVQ-VP): An interdependence analysis of self-reports", Rodíguez-Franco et al. (2022) introduce the DVQ-VP for the first time as an assessment tool composed of two subscales: one for measuring experienced violence and the other for measuring perpetrated violence within romantic relationships. Each of these subscales consists of five identical dimensions that assess various aspects of dating violence. Below, we present the characteristics of each subscale:

Dating Violence Questionnaire (DVQ-R). The reduced version of the Dating Violence Questionnaire (DVQ-R) was used (Rodríguez-Díaz et al., 2017), a self-administered instrument, specific to assess violence between adolescent and young couples of both sexes and validated cross-culturally, as well as a 20 Likert-type behavioral items of 5 points (0 = never; 4 = almost always), which assesses victimization globally and in five different forms of dating violence victimization: detach-ment (attitude of indifference towards the partner and their feelings; i. e., *Does not acknowledge any responsibility regarding the relationship or what happens to both of you*), humiliation (personal criticism of self-esteem and personal pride; i. e., *Criticizes you, underestimates the way you are, or humiliates your self-esteem*), sexual (sexist or sexual behaviors unwanted by the partner; i. e., *You feel compelled to have sex as long as you don't have to explain why*), coercion (pressure exerted on someone to force their will or behavior through threats or manipulation; i. e., *Has physically kept you from leaving*), physical (blows, damage to objects with emotional significance for the victim; i. e., *Has slapped your face, pushed or shaken you*). The reliability of the dimensions ranges between .729 and .901 (Alfaro-Urquiola, 2020).

Dating Violence Questionnaire for Perpetration (DVQ-RP). The *DVQ-R* items were adapted to measure aggression against partner (*DVQ-RP*). Thus, the DVQ-RP is composed by 20 items distributed in five different forms of dating violence victimization: physical (i. e., *you have beaten your partner*), sexual (i. e., *you insist on touching your partner in ways and places which she/he doesn't like and doesn't want*), humiliation (i. e., *you criticize your partner, underestimate the way she/he is, or humiliate her/his self-esteem*), detachment (i. e., *you do not recognise any responsibility regarding to both of you*), and coercion (i. e., *you have physically kept your partner*). Each of the five dimension of dating violence aggression was measured by four items using a five-point Likert scale ranged from 0 (never) to 4 (all the time).

The five aforementioned factors of violence were maintained in the questionnaire, keeping the modifications made in the validation by experts of the DVQ-R for the Bolivian context. In parallel, based on the DVQ-R, Rodríguez-Franco et al. (2022) developed the Dating Violence Questionnaire for Perpetration (DVQ-RP). In the statistical analysis carried out, they found that the items correspond to the factors proposed and that the model fit was good: $\chi^2(160) = 312.38$, $p \leq .001$, CFI=.967, RMSEA=.028 and 90% CI [.023,.032] and reliability values between .78 y .92 (Rodríguez-Díaz et al., 2017).

2.3 Procedure

Prior to the application of the questionnaires, a review by experts was carried out. Form adjustments were made to items 2, 4, 5, 7, 8, 13, 16, and 17, as can be seen in Appendix 1. Probably the most important modification occurs in item 17, where the use of radio or letters was considered obsolete for the digital age, which is currently in force, changing radio to music since currently there can be various devices linked to this activity, and messages to refer to all instant messaging or formal means such as email or social networks. After the final instrument review, the questionnaires were administered in person in selected classrooms, based on a probabilistic sampling by academic specialization and semester.

2.4 Data Analysis

It is worth mentioning that for the work with the data from the DVQ-VP, the original five-point Likert-type scale was used and the scores were converted into three ranges, according to what was suggested by Rodríguez-Franco et al. (2022). After verifying the non-normality of the scales that measure violence, we proceeded to perform the exploration and exploratory factor analysis of each scale using JASP (version 0.16). Next, the reliability of the global scales and their factors was calculated, estimating the Cronbach's Alpha coefficients (α) and the omega coefficient (ω). Subsequently, the factorial structure of the questionnaires was reduced from an exploratory factor analysis (EFA), using a parallel analysis (AP; Ferrando & Anguiano-Carrasco, 2010), minimum residues and a promax rotation with an analysis based on the matrix of polychoric correlations, discarding coefficients lower than .4. For the confirmatory factor analysis, based on the recommendations of Forero et al.(2009), it was decided to work with diagonalized weighted least squares (DWLS). The robust fit of the model was evaluated through the indicators of the TLI, CFI (values > .90 for a good fit), χ^2/df (values between 1 and 3 as a measure of absolute fit), RMSEA (optimal when the values are equal or less than .05 and acceptable or good in the range .05–.08, according to Hu and Bentler (1995), the SRMR (acceptable below .06 and good for below .05).

Discriminant validity was analyzed by a) the Average Variance Extracted (AVE > .05) and (b) the Heterotrait-Monorait Ratio (HTMT, values less than .90 report adequate validity) (Salessi & Omar, 2019). To calculate the HTMT, the Henseler online calculator was used, utilizing the matrix of polychoric correlations calculated with JAMOVI (version 2.3.18). Subsequently, the invariance based on sex was calculated.

3. Results

3.1 Reliability analysis and EFA

Working with the trichotomic scale, there is an Alpha of .934 and an Omega of .933 for the total scale, while the values for the different factors oscillate between .712 and .872 (Cronbach's Alpha) and .715–.867 (McDonald's Omega), being the lowest those of coercion and detachment. The only item that, if eliminated, would represent an increase in the value of the reliability coefficients is 13: *Has physically kept you from leaving / Te ha retenido para que no te vayas.*

The reliability analysis for the scale of violence perpetrated or exercised presents a total Alpha of .934 and an Omega of .932, with values for the various domains between .701 and .884 and McDonald's Alpha and Omega between .706 and .880, being again those of coercion and detachment the minor ones, where items 13 and 4 (*I am punctual and faithful for appointments with study*

groups or classes, but I am late for the meetings with my partner, I do not keep what I promise and I am irresponsible with him/her/ Soy cumplido(a) con el estudio, pero llego tarde a las citas, no cumplo lo prometido y me muestro irresponsable*) are suggested to be eliminated.

The exploratory factorial analysis of the DVQ-R confirms its suitability based on a determinant: 1.747 E-5 and KMO: .951. the solution was bifactorial. The first factor made up of the items corresponding to physical and sexual violence plus item 19: *Has ridiculed or insulted your beliefs, religion or social class/Ha ridiculado o insultado tus creencias, religión o clase social*, while the second would be detachment, coercion, and humiliation. With this model, .633 of the variance would be explained. When analyzing the DVQ-RP (determinant = 1.062 E-5 and KMO = .954), in the analysis of communalities, items 4 and 13 have both initial and extraction values below .3 (.237 and .285) so their removal is suggested. Based on the uniqueness values reported, items 4, 13, 1, 16 and 17 should also be eliminated since they present values greater than .5, resulting in a scale made up of a single factor capable of explaining 62% of the variance. If the solution is forced to a factorial model it would result in six factors, two of which would be made up of only two items, which is something not recommended.

3.2 Confirmatory Factor Analysis

The CFA was carried out with four variations (see Table 2): a) the original, with five domains in which violence is presented with four items in each domain; b) the original excluding items 4 and 13; c) model 2 with two factors resulting from the EFA; and d) a two-factor version removing items 4 and 13. In the case of the DVQ-RP, the same consideration will be taken by evaluating the original, the single-factor version and both with the exclusion of the items 4 and 13 (see Table 3).

In the first case, analyzing R^2, the need to eliminate items 4 and 13 (and probably 1 R^2 = .384) was confirmed, presenting slight improvements with this modification. In the case of the bifactorial model, there is a decrease in the fit of the model and once again the need to eliminate the mentioned items is seen, slightly improving the indicators after the change. Although in all the models for the victim analyzed there are indicators of a good model fit (see Table 1), taking into account that the lowest values of RMSEA and SRMR and the highest values of CFI, TLI, and GFI are in the original model with the elimination of two reagents, the same will be taken as the most appropriate for the following calculations.

When analyzing the estimates for each of the items (Table 2), and their contribution to the model, all the values were significant, and all the items have a contribution greater than .6 to their respective dimensions; the lowest value was reported by item 1. Regarding convergent validity, the composite reliability (CR) is .959 for the entire scale and oscillating between .729 (coercion)

Table 1

DVQ-R's model fit indicators

Model	χ^2	df	p	χ^2/df	RMSEA	RMSEA$_{IC90\%}$	SRMR	CFI	TLI	GFI	ECVI
Original	255.328	160	.001	1.5958	.0230	.018–.028	.036	.9970	.997	.997	.357
Original −4 y 13	190.180	125	.001	.5264	.022	.015–.028	.036	.998	.997	.997	.287
Bifact	417.405	169	.001	2.4699	.036	.032–.041	.046	.993	.992	.995	.48
Bifact −4 y 13	313.432	134	.001	2.3390	.035	.030–.040	.045	.994	.993	.995	.383

Table 2

Estimated parameters for DVQ-R factors

Factor	Item	Estim. std	Omega	Alfa	CR	AVE	1.Fis.	2.Sex.	3.Hum.	4.Det.
1.Fís.	CR10	.768	.878	.884	.884	.657				
	CR11	.803								
	CR3	.835								
	CR7	.834								
2.Sex.	CR6	.734	.861	.860	.863	.611	**.92419118**			
	CR14	.787								
	CR18	.811								
	CR2	.793								
3.Hum.	CR9	.775	.855	.856	.855	.596	.89406731	.88807935		
	CR12	.755								
	CR19	.755								
	CR20	.803								
4.Det.	CR8	.745	.742	.741	.741	.489	.81881877	.83852805	**.92989192**	
	CR15	.694								
	CR16	.657								
5.Coe.	CR1	.613	.733	.725	.729	.474	.82406294	.89309824	.86146056	**.90478891**
	CR5	.733								
	CR17	.713								

Note. Contains on the right an array with the HTML values

and .884 (physical) for other factors. The validity was evaluated from the calculation of the Convergent Validity (AVE) and the discriminant validity (HTMT). On the general scale, the standardized analysis of variance (AVE) was .579, with values between .657 for physical violence and .474 for coercive violence. In the case of the HTMT, if the values in Table 3 are observed, it can be seen that discriminant validity cannot be concluded (see bold values).

When doing the invariance analysis based on sex, no changes in CFI greater than .01, RMSEA greater than .015 or SRMR greater than .030 were observed in any of the cases (configural, metric, scalar or residual), which allows us to say that the instrument measures the same construct regardless of the sex of the participants (see Appendix).

In DVQ-RP, after testing four models that present good or acceptable values for RMSEA, SRMR, CFI, TLI, GFI, and ECVI, the "monofactorial model without items 4 and 13" was chosen due to the chi-square significance

and good values in other indicators (see Table 3). The standardized estimated loadings of its items vary between .539 (item 16) and .835 (item 11). Regarding convergent validity, it presents values of CR=.948 and AVE=.506. The scale is invariant for sex (see Appendix). The recalculation of the scale of the reliability coefficients, after the modifications, was $\alpha = .945$ and $\omega = .944$.

4. Discussion

The present investigation tested the trichotomic model proposed by the authors of the scale in 2021, analyzing additionally the validity and reliability of the DVQ-RP (Rodríguez-Franco et al., 2022). The exploratory factor analyzes allow us to appreciate that the items converge in two dimensions in the case of the questionnaire for victimization and one dimension in the case of perpetrated violence. However, in the case of the DVQ-R, the adjustment values of the model confirm its configuration in five factors (Rodríguez-Díaz et al., 2017; Rodríguez-Franco et al., 2022) with a modification of the previous

Table 3

DVQ-RP's model fit indicators

Model	χ^2/df; p	RMSEA	SRMR	CFI	TLI	GFI	ECVI
Original	$\frac{174.565}{160} = 1.09$; .204	.009	.037	.999	.999	.996	.284
Original −4 y 13	$\frac{123.578}{125} = .99$; .519	.000	.037	1	1	.996	.227
Monofactorial	$\frac{314.074}{170} = 1.85$; .001	.028	.048	.994	.993	.993	.392
Monofac −4 y 13	$\frac{205.637}{135 = 1.52}$; .001	.022	.046	.996	.996	.975	.283

version: the elimination of items 4 and 13 corresponding to the categories of detachment and coercion, respectively. In the previous studies reviewed (Rodríguez-Díaz et al., 2017; Rodríguez-Franco et al., 2022), these two dimensions report lower reliability values, which could be due to the mediation of culture and the situation in which it is considered or not considered that violence occurs. Similarly, it is worth mentioning that there are some differences between the textual expression of the original version in Spanish and the official translated version, which in the Spanish-speaking context may have differences depending on the country (see Appendix 1). However, it should also be considered that the discriminant validity criteria have not been contemplated in previous adaptations.

Although the presence of intention, harm, and that the conduct is not desired or necessary is taken into account for a conduct to be called violence (Hamby, 2017), these criteria can be observable and clearly measurable when it comes to physical violence, sexual or insults that involve active and aggressive verbal conduct in which the intention of the issuer and the damage caused to the victim can be seen. However, as the behavior becomes non-verbal and the aggressiveness is attenuated or hidden in the case of subtle psychological violence (Novo et al., 2016), the context can acquire greater weight (Álvarez Roldán & Parra Toro, 2012), which, added to the fact of being in love, could decrease the perception of the other person's control intentions (Bartels & Zeki, 2004).

In this sense, given that we worked with young people in a dating relationship and that romantic love is usually at its highest point, it could happen that violent actions such as emotional blackmail or disinterest are overlooked, and instead are interpreted as expressions of affection, interest or parts of the personality of the loved one (Cubells-Serra et al., 2021; Marcos et al., 2020; Standley, 2022). Thus, possibly the expression "Has physically kept you from leaving", since it does not have a condition of use of force or shows the intention of the person issuing the behavior, it can pass as an expression of affection or a need to spend more time together. It is also the particular case of item 4 ("Is a good student, but is always late at meetings, does not fulfil his/her promises, and is irresponsible") since, in addition to the above, it is possible that it is not consid-

ered as something violent within Bolivian society, due to a cultural factor called "the Bolivian hour", where lateness is normalized and is not necessarily taken as a lack of respect or a aggression, but as something circumstantial and very common that, in many cases, will not depend on the person but on the situations in which they find themselves (Águeda Cotjiri, 2017; Cosio Hurtado, 2010). In this regard, it could be interesting to study the behavior of this reagent in other countries and contexts.

In turn, the lack of discriminant validity and the high correlations between the various factors suggest that the different manifestations of violence in dating relationships are interlinked, there being a second order factor since it would not be enough to understand the violence as physical (physical and sexual) and psychological (humiliation, detachment, and coercion) or "active" and "passive" in a disjointed way. This was observed when trying to confirm the two-factor model resulting from the AFE. In this sense, it should be remembered that a person who is a victim of sexual or physical violence will also be experiencing the consequences of psychological violence since, although the violence does not follow linear steps, the aggressions usually worsen as can be seen graphically in the violence meter originally proposed by the National Polytechnic Institute of Mexico (Tronco Rosas & Ocaña López, 2011). An important element to consider is the presence of invariance with respect to sex, both for the victimization questionnaire and for the exercise of violence, since it will provide more information on the bidirectionality of the phenomenon and the need to study men and women in both roles.

It can be said that the DVQ-VP is a valid and reliable test, as it has been analyzed from its psychometric properties, both for experienced violence (DVQ-R) and for perpetrated violence (DVQ-RP).

5. Limitations

The perception of intentionality may differ in the interpretation that one has of a behavior as violent or not, depending on whether the role of victim or aggressor is exercised. In this sense, one of the limitations of this study is the population with which it was worked: university students with a relationship in the last twelve months, and their self-report being the only data available. Therefore, given the bidirectional nature of dat-

ing violence (Herrero-Olaizola et al., 2020; Riesgo et al., 2019; Rojas-Solís & Romero-Méndez, 2022; Rubio-Garay et al., 2017; Rubio-Garay et al., 2012), working with both members of the couple simultaneously would be more fruitful and would allow a better evaluation of the role of intention behind the behaviors and their interpretation, depending on whether role of victim or aggressor, mainly in the case of violence by detachment and coercion. In addition, another factor that could be linked to the interpretation of one's own behavior as violent or not, could be its justification, based on mechanisms of moral disconnection (Rubio-Garay et al., 2019), mediating along with the level of detachment regarding the intensity and frequency of the violence, as we tried to improve the adaptation of the items by introducing the use of the radio or letters in the reagents, as well as thinking of the digital era that currently prevails by changing the radio by music (currently there can be various devices linked to this activity) and letters to all instant messaging and any formal means (such as email or social networks).

6. Conclusion

The appropriate psychometric characteristics were confirmed for evaluating violence in dating relationships using a reduced version of 18 items in a five-factor model for victims and a single-factor scale for the evaluation of aggressors, which were found to be invariant for sex. Being a self-report, it is necessary in future studies to compare the information with that provided by the couple.

7. Funding

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