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**Digital Intimate Partner Violence Among Peruvian** Youths: Validation of an Instrument and a **Theoretical Proposal** 

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## **Abstract**

The present study presents psychometric information on a new instrument, the Digital Intimate Partner Violence Questionnaire (DIPVQ), and explores the similitudes and differences between in-person and digital-based abuses (those that involve the use of information and communication technologies [ICTs]). In all, 449 Peruvian students took part in the study (X = 21.2 years; SD = 4.3 years; 73% women). DIPVQ structure was determined by carrying out an exploratory factor analysis (EFA) with polychoric correlation matrices and oblique rotation. In-person violence was assessed using the Dating Violence Questionnaire (DVQ) and self-labeling questions (e.g., feeling trapped, afraid, and abused). Relationship satisfaction was assessed using the Perceived Relationship Quality Components-Short Form (PRQC-SF). EFA showed a two-scale structure for the DIPVQ: control-centered cyberabuse (N = 5; control, monitoring, and identity theft; EAP alpha = .96) and damage-centered cyberabuse

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(N=7; unwanted sexual contents, blackmailing, and causing debts throughout ICT; Expected-A-Posteriori alpha = .97). DIPVQ had direct relationship to DVQ and self-labeling (p < .001; d = 0.38-1.18), and inverse to PRQC-SF (p = .11; d = .22-.33). Behaviors such as impersonation and monitoring were reported by more than 20% of participants. Online and offline victimization coexist in 42% of cases, while 3.6% of aggressions happened exclusively via ICT. DIPVQ is a valid and reliable measure of digital victimization. The *control-centered* scale had a higher frequency, although the *damage-centered* scale had stronger relationship to feeling afraid and abused. While previous literature has classified online aggressions regarding their aesthetic appearance, it seems that their functional value (control vs. hurting) could provide a better framework for understanding these aggressions.

# **Keywords**

information and communication technologies, social networking services, dating violence, intimate partner violence

# Introduction

Access to new information and communication technologies (ICTs) has increased steadily in the last few years among the Latin American population, where Internet access has grown from 7% to 58% (United Nations Organization [UNO], 2016). In this same period, Peru registered the broadest growth rate in the area (UNO, 2016), especially among urban youth and higher education populations, with a percentage of users that exceeds 85% (INEI, n.d.). Thus, the access to ICT in Lima metropolitan areas is similar to countries such as the United States, where 82% of young adults (18-34 years old) had access to the Internet in 2012 (U.S. Census Bureau, 2014).

The impact that ICTs have had on human relationships has recently become an area of interest in scientific literature. Social networks services (SNS) can play an important role in different stages of adolescent and youth relationships, like searching for a date, courting, making official a relationship, or managing breakups (Fox, Warber, & Makstaller, 2013; Van Ouytsel, Van Gool, Walrave, & Ponnet, 2016). Although SNS provide advantages such as accessibility and immediacy of exchanges, which can result in benefits for health and well-being (Antheunis, Schouten, & Krahmer, 2016), they can also serve as tools for perpetrating abuse and control (Fox, Osborn, & Warber, 2014).

The development of questionnaires to assess intimate partner violence (IPV) represents a milestone for quantitative research in the field (Langhinrichsen-Rohling, 2005), as they provide shared standards of measurement and implicit

definitions of what phenomena were considered as violence within the intimate relationship (Schinkel, 2010). However, recent reviews found over 50 validated instruments (Costa & Barros, 2016; López-Cepero, Rodríguez-Franco, & Rodríguez-Díaz, 2015), using a variety of scales that make reports difficult to compare. Given these divergences in empirical definitions, authors usually refer to umbrella terms, such as physical, sexual, emotional, and coercive control (Esquivel-Santoveña, Lambert, & Hamel, 2013) to report prevalence of IPV. Currently, few of those assessment tools integrate specific questions about the role that ICT can play in the IPV (e.g., the *Revised Composite Abuse Scale* includes a single question on this regard; Ford-Gilboe, Wathen, Varcoe, MacMillan, et al., 2016).

In recent years, in accordance with the popularization of mobile telephones and SNS, instruments specifically aimed at assessing digital IPV have been published, using "cyber abuse" as umbrella term. Those instruments mimicked the development of questionnaires devoted to in-person IPV, proposing different (and inconsistent) definitions of the phenomenon. Thus, the literature has developed and used several groups of digital IPV questionnaires. The first group assesses digital IPV using a single-scale approach, such as the Partner Cyber Abuse Questionnaire (Wolford-Clevenger, et al., 2016). A second group of instruments assesses cyber abuse as a multifactorial phenomenon: Cyber Dating Abuse (CDA; Zweig, Dank, Yahner, & Lachman, 2013), which distinguishes between sexual and nonsexual violence; Controlling Partner Inventory (CPI; Burke, Wallen, Vail-Smith, & Knox, 2011), which assesses control, surveillance by diverse means, threats, and excessive communication; Electronic Victimization Inventory (EVI; Bennet, Guran, Ramos, & Margolin, 2011), which assesses humiliation, hostility, intrusion, and blocking in social networks; Cyber Dating Abuse Questionnaire (CDAQ; Borrajo, Gámez-Guadix, Pereda, & Calvete, 2015), which distinguishes between direct aggressions and control; Cyberdating Quality in Adolescents (Cyberdating Q A; Sánchez, Muñoz-Fernández, & Ortega-Ruiz, 2015), which assesses control, jealousy, and intrusion; or Cyber Psychological Abuse Scale (CPAS; Leisring & Giumetti, 2014), which distinguished minor and severe psychological abuse. A third group of tools has been developed to assess victimization experiences related to the specific context in which they occur (e.g., Facebook Survey by Lyndon, Bonds-Raacke, & Cratty, 2011; Photos, Camera, GPS, Spyware scale of CPI by Burke et al., 2011) or based on the risks associated (e.g., the Online Obsessive Relational Intrusion by Chaulk & Jones, 2011, which classifies intrusive behaviors in benevolent, potentially harmful, and dangerous).

Even without being exhaustive, the review of the instruments leads to draw two conclusions. First, most of the questionnaires assess acts aimed at gathering personal information and maintaining control of their activities by ICT, whether they are gathered in a single factor or divided in several scales (e.g., control, intrusion, monitoring, cyberstalking). But, given that several authors label scales according to the aesthetic appearance of the behavior (e.g., sexual; Zweig, Dank, Yahner, & Lachman, 2013), platform (e.g., Facebook or Spyware), the type of aggressions (e.g., direct or indirect aggressions; Bennet et al., 2011; Borrajo et al., 2015), or the risk associated with such behaviors (Chaulk & Jones, 2011), it is difficult to isolate a common axis that could provide a single, comprehensive framework for understanding digital IPV. The present study aims to determine which solution best fits youths' victimization experience.

Despite the lack of agreement around classification of digital aggressions, the literature points out the high frequency of victimization that adolescents and young people experience through ICT in different parts of the world. For example, Montiel, Carbonell, and Pereda (2016) estimated that approximately 61% of Spanish adolescents have suffered some form of aggression by telematic means in the last year. Shapka and Maghsoudi (2017) found 70% of Canadian adolescents experienced digital aggression victimization. In addition, Pereira and Matos (2016) estimated 62% of Portuguese adolescents have experienced some form of cyberstalking. Within the IPV literature, Zweig, Dank, Yahner, and Lachman (2013) found that 26% of American adolescents experienced online IPV victimization: 11% were sexually assaulted and 22% were nonsexually assaulted online (7% experienced both forms of online victimization). Regarding sexual abuses, the literature highlights sending unwanted sexual material (4%-7%), suffering pressures to send intimate photos or videos (3%-7%), or sending or publishing photos or videos without permission (3%-6%) as the most frequent aggressions. Most frequent nonsexual abuses include monitoring by repeated calls or messages (30%-36%), using of social networks to publish offensive messages (5%-31%), and accessing personal accounts without permission (20%-25%; Picard, 2007; Wolford-Clevenger et al., 2016; Zweig, Dank, Lachman, & Yahner, 2013).

Some studies provide information regarding the relationship between online and offline IPV, estimating their co-occurrence in 32% to 84% of youths (Temple et al., 2016; Yahner, Dank, Zweig & Lachman, 2015; Zweig, Dank, Yahner, & Lachman, 2013). However, to the best of our knowledge, no study has so far described the prevalence of exclusively online (without inperson) victimization.

Based on the information present in the literature, this study aims to (a) provide psychometric information of a new instrument, the Digital Intimate Partner Violence Questionnaire (DIPVQ), devoted to assess digital IPV; (b)

provide information about victimization experience of a sample of young adults from Peru, a population of interest given the high presence of ICT in their daily life; and (c) analyze the prevalence of just online, just offline, and combined victimization among Peruvian youths.

# Method

# **Participants**

A total of 449 university students from Lima (Peru) participated in the study. Most of the participants were women (76%), with a mean age of 21.2 years (SD = 4.28 years). All participants reported to have had an intimate relationship that lasted 1 month or more. Around half of the sample (50.8%) reported it to be in a current relationship, without differences in the distribution of males and females (contingency index C = .019; p = .684). Regarding the use of digital media, 99.6% had regular access to ICT.

#### Instruments

A set of six measuring tools was used as follows:

- Sociodemographic information was gathered using a specific sheet. It
  included fields for sex, age, work status, and socioeconomic stratum
  (of the participant and of his or her intimate partner), as well as the
  relationship status (current/finished).
- b. *ICT use survey* is a rating scale about frequency of the use of technologies (cell phones to talk, to watch videos/listen to music on the Internet, to play online games, to study or work, to surf, to stay informed, to meet new people, and to access to social networks). It consisted of seven questions to evaluate in an ordinal scale of five levels of response (from 0 = never to 4 = more than 2 hr/day). The scale obtained an ordinal Expected-A-Posteriori (EAP) alpha of .754.
- c. Perceived Relationship Quality Components—Short Form (PRQC-SF) is a short instrument that includes the first item of all the six scales of the PRQC of Fletcher, Simpson, and Thomas (2000). The items were rated on an ordinal scale of five levels of response (from 1 = strongly disagree to 5 = strongly agree). The scale obtained an ordinal EAP alpha of .937.
- d. Dating Violence Questionnaire (DVQ) is an instrument devoted to evaluate victimization in the courtship of adolescents and young people.
   Validated initially with Spanish, Mexican, and Argentinean samples

- (Rodríguez-Franco et al., 2010), with an adaptation for Chilean population (Lara & López-Cepero, 2018). DVQ evaluates up to eight forms of abuse through a 46 items set, using a scale of five frequency levels (from 0 = never to 4 = almost always). This study includes the first four scales (humiliation, coercion, sexual violence, physical violence—meeting the main types of aggression described by Esquivel-Santoveña et al., 2013; 24 items), which demonstrated adequate internal consistency for the present sample (EAP ordinal alphas between .891 and .965). English version is available in López-Cepero, Fabelo, Rodríguez-Franco, and Rodríguez-Díaz (2016).
- e. Self labeling (or self-perception) was assessed through three questions: (a) Do you feel or have you felt trapped in your relationship?
  (b) Are you or have you been afraid of your intimate partner? and (c) Do you feel or have you felt abused in your intimate partner relationship? responded using the same ordinal scale for the DVQ.
- f. DIPVQ is an instrument created ad hoc, which validation is part of the objectives of this study. An initial set of 20 items encompassing abusive actions that may occur during the relationship and that involves cell phones, the Internet, and/or other digital media (e.g., he/she calls or texts you 10, 20, or 30 times in an afternoon to know your location; threats to obtain sexual videos; uses your email, phone, or social networks without permission pretending to be you; see the appendix), to assess in the same scale of frequency described for the DVQ (from 0 = never to 4 = almost always).

#### Procedure

The first set of DIPVQ items was created through a review of the available scientific literature about ICT-based IPV, including digital harassment, surveillance, stalking, intrusion, account theft, monitoring and messages with unwanted sexual content, among others. The result of this procedure was a first set of 20 items, written to allow responses regardless sex and sexual orientation of the respondent. Generic references to digital media were included (e.g., referring to social networks and not to just Facebook or Twitter, as other instruments do). To ensure an adequate understanding of the writing of the items, it was reviewed by five local researchers and 10 students. The applied instrument included an ordinal response scale with five levels of frequency of victimization (from 0 = never to  $4 = almost\ always$ ). However, the low frequency of occurrence found in some items led the research team to recode responses in only three levels (0 = never, 1 = sometimes, and 2 = frequently, covering the options: frequently, usually, and

almost always), avoiding empty cells (N = 0) in the distribution to meet requirements for carrying out exploratory factor analysis (EFA).

The participants were students enrolled in the School of Psychology of a private university campus in Lima (Peru). The permission of the Ethics Committee of the School was obtained. The study was developed between the second semester of 2015 and the first semester of 2016.

The statistical procedures included the EFA, developed through FACTOR software, version 10 (Lorenzo-Seva & Ferrando, 2015). This software carry out analysis using polychoric correlation matrices, parallel estimation method to determine the number of recommended factors, Unweighted Least Square method, and Promax oblique rotation, according to the proposal of Ferrando and Lorenzo-Seva (2014) and Lorenzo-Seva and Ferrando (2015). It considered as adequacy criteria: Bartlett's index (\*p < .05), Kaiser-Meyer-Olkin test (KMO > .90), goodness of fit index (GFI > .90), and root mean square of residuals (RMSR < .0475). FACTOR also provides indices of internal consistency for the resulting factors (ordinal EAP alpha > .700; McDonald's Omega  $\Omega > .700$ ). The rest of statistical procedures was developed through SPSS (version 24), including descriptive analysis (central tendency, dispersion and frequency distribution), comparison of means (t test for independent samples, \*p < .05), calculation of Cohen's d effect size (small .20  $\leq d < .50$ ; medium .50  $\leq d <$  .80; big  $d \geq$  .80; Cohen, 1988), and bivariate correlations (Spearman's Rho, \*p < .05).

# Results

First, descriptive data were obtained from the 20 items included in the DIPVQ. A marked asymmetry was confirmed in all the items, with low average values. As many questions showed checkboxes in blank (0 cases rated as very often or all the time), the responses were grouped in only three levels of frequency (0 = never, 1 = sometimes,and 2 = frequently). The most frequent abusive behaviors were as follows: unauthorized accessing to personal accounts or controlling activities by cell phone (experienced by 32% of the participants), checking the photos and videos to find cheating (30%), and demanding passwords (22%). The results are shown in Table 1.

Second, an EFA was developed with the set of 20 items, obtaining good adequacy indices (KMO = .93; Bartlett's \*\*\*p < .001) and the recommendation of differentiating two factors (GFI = .98; total explained variance = 59.1%). Given that saturations over .300 in both factors were detected for many items in the first rotated solution, they were eliminated and the analysis procedure was repeated until each item saturated only in one of the two factors, according to the recommendations of Ferrando et al. (2014).

Table 1. Descriptive Results and Frequencies for DIPVQ Initial 20 Items Set.

#	Item (Excerpt) He/She	Х	SD	Never	Sometimes	Frequently
I	Threatened sharing personal information with other people.	0.11	0.473	93.1%	4.2%	2.7%
2	Accessed your email accounts, social networks, or mobile to control who you talk to.	0.45	0.811	68.2%	24.9%	6.9%
3	Sent you disturbing videos/photos of sexual content by cell phone/Internet.	0.14	0.493	90.9%	6.0%	3.1%
4	Used your email, phone, or social networks without permission pretending it was you.	0.23	0.650	85.1%	10.2%	4.7%
5	Used the social networks (Facebook, Tuenti, Twitter) to send you unpleasant messages.	0.20	0.601	86.4%	10.0%	3.6%
6	Threatens you with disclosing secrets if you do not access to do what he or she asks for.	0.07	0.375	95.3%	3.6%	1.1%
7	Calls you using hidden number to control what you do.	0.12	0.440	91.5%	6.3%	2.2%
8	Sent or published intimate photos/videos without asking permission.	0.05	0.295	96.7%	2.2%	1.1%
9	Used your email or social network accounts to buy things without your permission.	0.06	0.333	96.4%	2.2%	1.4%
10	Used social networks to gather information about you to harass or annoy you.	0.11	0.404	90.9%	7.6%	1.6%
11	You fear not responding his or her calls.	0.13	0.520	92.4%	4.0%	3.6%
12	Calls/texts you 10, 20, or 30 times in an afternoon to know your location.	0.20	0.532	85.3%	11.1%	3.6%
13	Threated or pressured to obtain photos/ videos with sexual content.	0.06	0.344	95.5%	3.3%	1.1%
14	Published rumors or false offensive information about you on the Internet.	0.08	0.430	95.1%	2.7%	2.2%
15	Forbade you using the Internet or cell phone.	0.18	0.534	86.4%	10.2%	3.3%
16	Sent you messages to ask for sex, even knowing you do not like it.	0.12	0.485	92.7%	4.2%	3.1%
17	Sent messages by the Internet to your friends or acquaintances to cause problems.	0.13	0.514	92.2%	4.7%	3.1%
18	Tries to figure out your secret passwords.	0.25	0.645	82.4%	12.9%	4.7%
19	Checks all your uploaded photos/videos to make sure you do not lie or cheat him or her.	0.48	0.909	69.7%	20.7%	9.6%
20	Demands to know your access passwords of your email, cell phone, and/or social networks.	0.36	0.823	78.0%	14.3%	7.8%

Note. DIPVQ = Digital Intimate Partner Violence Questionnaire; Frequently includes responses ranging 2 = frequently, 3 = very often, and 4 = almost always.

The final rotated solution retained 12 items that explained 78.7% of variance (GFI = 1; RMSR = .039). A first factor grouped five items referred to many forms of control and intimate intrusion (as usurping profiles in social media or controlling the use of the Internet; explained variance around 71%), and a second factor of seven items referred to sexual behaviors (four items, including sending unwanted sexual contents and threats of sending intimate pictures to third parties), disclosure of secrets (two items), and making unauthorized purchases (one item), with an explained variance near 8%. EFA carried out on the second item set did not show the existence of other smaller groups. Both factors were labeled as *control-centered cyberabuse* and *damage-centered cyberabuse*, obtaining satisfactory indices of internal consistency (Table 2). The correlation between both factors was of rho = .465 (\*\*\*p < .001). The questionnaire obtained good reliability indices, with an estimated ordinal EAP alpha = .96 and McDonald's  $\Omega$  = .96.

Relationship among DIPVQ scales and other measures were assessed as evidence of concurrent validity. First, positive correlations were found (\*\*\*p < .001) among the four scales of the DVQ and control-centered (rho values ranging .355.508) and damage-centered cyberabuse (rho = .400-.472), results that pointed out the coexistence between traditional (in-person) and digital (online) IPV. Second, participants were assigned to two groups, according to whether or not they presented at least one positive indicator in the DIPVQ scales. Around 31% of participants presented at least one indicator in the control scale, while 15.6% presented evidence of damage-centered victimization. The t test found that participants who had experienced online victimizacion (assessed through DIPVQ) presented further victimization by traditional media, further perception of maltreatment, fear and entrapment, and lower satisfaction than the group of negative cases. These differences were statistically significant (\*p < .05) in all the cases, with greater effect sizes for the damage-centered victimization (Table 3).

Finally, the co-occurrence of online and in-person victimization was analyzed. In total, 79.2% of participants presented at least one indicator of victimization. Within this group (N = 332), 42% of cases presented indicators of both online and offline victimization, 55% only presented indicators of inperson violence, and less than 4% exclusively presented indicators of online victimization. These results are shown in Table 4.

## Discussion

ICTs are present in everyday life for the majority of people that live in industrialized countries, especially in urban areas and among youths. Different sociological observations have pointed out a strong boom in Latin American university students, with the rate of access to ICT being close to 100%.

**Table 2.** Rotated Solution, Explained Variance, Internal Consistency, and Descriptive Results for DIPVQ.

#	Item (Excerpt) He/She	Control-Centered Cyberabuse	Damage-Centered Cyberabuse
18	Tries to figure out your secret passwords.	1.196	-
4	Used your email, phone, or social networks without permission pretending it was you.	0.914	
15	Forbade you using the Internet or cell phone.	0.746	
12	Calls/texts you 10, 20, or 30 times to know your location.	0.596	
17	Sent messages by the Internet to your friends or acquaintances to cause problems.	0.575	
13	Threated or pressured to obtain photos/videos with sexual content.		1.106
I	Threated with sharing personal information with other people.		0.728
3	Sent you disturbing videos/photos of sexual content by cell phone/ Internet.		0.840
6	Threats you with disclosing secrets if you do not access to do what he or she asks for.		0.798
8	Sent or published intimate photos/ videos without asking permission.		0.952
9	Used your email or social network accounts to buy things without your permission.		0.793
16	Sent you messages to ask for sex, even knowing you do not like it.		0.677
	Explained variance	71.2%	7.5%
	EAP alpha	.963	.969
	Range	0-10	0-14
	X (SD)	.88 (1.76)	.53 (1.70)

Note. DIPVQ = Digital Intimate Partner Violence Questionnaire; SD = Standard Deviation.

However, despite the prominence of new technologies in intimate partner relationships (Van Ouytsel et al., 2016), research has only begun examining the risks associated with ICT in relationships for the Latin American population.

(								
	$X_{pos}$	$X_{\text{neg}}$	$ X_{pos} - X_{neg} $	t	df	Þ	SD	d
Control-center	ed							
DVQ	8.92	3.49	5.43	5.764	169.9	.000***	10.12	0.54++
Satisfaction	23.77	25.12	1.35	2.028	221	.044*	6.07	0.22+
Trapped	0.67	0.31	0.36	3.884	195.7	.000***	0.95	0.38+
Afraid	0.44	0.13	0.31	4.286	166.8	.000***	0.71	0.44+
Abused	0.49	0.18	0.31	3.544	175.9	.000***	18.0	0.38+
Damage-center	ed							
DVQ	15.77	3.81	11.96	6.11	62.7	.000***	10.12	1.18+++
Satisfaction	22.85	24.87	2.02	2.612	93.1	.011*	6.07	0.33+
Trapped	1.09	0.37	0.72	4.601	76.4	.000***	0.95	0.76++
Afraid	0.71	0.17	0.54	3.991	71.7	.000***	0.71	0.76++

**Table 3.** The *t* Test and Effect Size for DVQ, PRQC-SF, and Self-Labeling Regarding Online Victimization (DIPVQ).

Note. Degrees of freedom estimated without assuming equality of variances. Size effect +small, ++medium, and +++big. DIPVQ = Digital Intimate Partner Violence Questionnaire; DVQ = Dating Violence Questionnaire; PRQC-SF = Perceived Relationship Quality Components–Short Form.

\*p < .05. \*\*\*\*p < .001.

4.580

74.4

.000\*\*\*

18.0

0.77++

0.62

**Table 4.** Relative Presence of Digital and Traditional IPV Among Participants With Any Victimization (N = 332).

	Positive Cases	Control-Centered	Damage-Centered
Only offline	54.82%	-	-
Both offline and online	41.57%	38.20%	18.27%
Only online	3.61%	3.42%	0.62%
Total	100%	41.62%	18.89%

Note. IPV = intimate partner violence.

0.82

Abused

0.20

Consequently, the first objective of the study focused in the frequency of digital abuse. Results pointed out the high frequency of ICT-based victimization among young people. Based on the original set of 20 items, it was found that 20% to 30% of the participants experienced at least a form of digital dating abuse, especially related to intimate partner control (such as unwanted intrusions in personal accounts or monitoring social networks to find cheatings). Items belonging to the damage-centered scale, although less frequent, represent direct ways of harming the intimate partner (e.g., threatening and pressure to obtain sexual videos/pictures, threatening of spreading this material, and making purchases without permission using their accounts and users). These findings resemble previous results present in the offline IPV

literature, where highly injuring aggressions (e.g., physical or sexual) are less frequent than indirect or subtle abuses (as coercive control or detachment; Rodríguez-Franco et al., 2010). At the same time, they demonstrate that young Peruvian university students already use ICT as a means to perpetrate IPV, with frequencies similar to those described for other geographic areas (Picard, 2007; Wolford-Clevenger et al., 2016; Zweig, Dank, Lachman, & Yahner, 2013; Zweig, Dank, Yahner, & Lachman, 2013).

The second objective of the study looked to improve our knowledge of underlying constructs regarding digital aggressions. Thus, on the basis provided by the previous literature and various measurement instruments, a set of 20 items was created and subjected to a factorial analysis. It was confirmed that the three most frequent indicators (2, 19, and 20) were eliminated by EFA due to their saturation in both scales, indicating that they were so common that could be considered as universal strategies of abuse. It is important to mention that the rotated solution recommended the distinction of two factors, whose contents partially coincide with the constructs described in previous works: one focused in the intrusion and control through new technologies (control-centered cyberabuse, present in other solutions with more than one factor—Borrajo et al., 2015; Zweig, Dank, Lachman, & Lachman, 2013, etc.) and another that joins items related to sexual harassment, blackmailing, and property damage (damage-centered cyberabuse). Both scales showed indicators of a very high internal consistency (>.900). However, while the contents of the first scale seem easy to group, the qualitative analysis of the second scale contents leads one to ask whether their items are grouped around sexual aggressions (e.g., the secrets disclosure would refer to sexual secrets; Zweig, Dank, Lachman, & Yahner, 2013), the facility to recognize them as aggressions (Bennet et al., 2011; Borrajo et al., 2015), or their danger or severity (Chaulk & Jones, 2011).

It is possible that the divergence between the factor structure described for DIPVQ and other validated instruments could be influenced by methodological limitations. For example, the original set of items was formed from the direct experience of the research team and the available literature at the end of 2014, but several of the currently available instruments were published in later years (although instruments such as CDAQ or Cyberdating Q\_A have not introduced qualitatively different constructs from those ones already existing). In addition, it is also possible that information provided by the participants (young university students of the country capital) is not representative of the total youth population, hypotheses that can only be verified through the replication of the study in new samples, checking the invariance of results.

Nevertheless, the present study makes contributions that support the utility of having two differentiated scales. First, control-centered and damage-centered scales present a positive correlation, indicating that they belong to the same universe of experiences, but they have a differential impact (evidenced

by the effect size) on satisfaction and probability of feeling afraid, abused, and/or trapped. It has also been confirmed that the scale of damage-centered cyberabuse has a lower frequency of occurrence than control-centered victimization (that affects around one of every three participants), but it has a stronger association with other forms of traditional (offline) victimization, perhaps pointing out a difference based on the risks associated to these behaviors. Focusing on the functional value of actions (how much direct harm they can do), instead of focusing on their appearance (behaviors that take place in a particular SNS, or that have to do with sex or money), would allow to draw a comprehensive framework to encompass different proposals in the literature. Thus, to distinguish between actions directed to force victim to stay in the relationship and actions aimed at causing devastating personal harm would allow to integrate conceptually the conclusions provided by this study and other previous research (e.g., Bennet et al., 2011; Borrajo et al., 2015; Chaulk & Jones, 2011; Zweig, Dank, Yahner, & Lachman, 2013).

This framework accounts for several strengths. First, it focuses on more pragmatic aspects (what actions are aimed at) and less on the description of behaviors or concrete contexts of occurrence, preventing questionnaires going out of date as new SNS appear (and others get in disuse, such as MySpace or MSN Spaces). Second, it may lead the developing of instruments applicable for various geographic regions (as ICT use tend to integrate with local culture and customs, focusing on concrete behavioral expressions can decrease cultural validity of questionnaires). And third, this change would affect the design of actions and policies focused on intervention, given that monitoring and control are very frequent but can be corrected at the present time (changing passwords, managing visibility in SNS, setting personal limits, and breaking up with the partner can stop the abuse), while those centered on inflicting severe personal harm, although less frequent, can cause damages that are hard to remove or solve (e.g., sending of intimate videos to third parties or the dissemination of degrading information, which can be spread and stored both in the cloud and in personal devices, leaving a virtually indelible mark), what makes prevention a priority.

It is important to note that both scales represent aggressions that can harm the victim, but while control would act in an indirect way, damage-centered scale gathers behaviors with direct, devastating power. This classification proposal is consistent with the evidence provided in this study (satisfaction, self-labeling, relationship with various forms of traditional victimization), and resembles the structure of some instruments such as CDAQ (Borrajo et al., 2015) and CPAS (Leisring & Giumetti, 2014). However, the differentiation of two constructs is still a hypothesis that need to be confirmed in future investigations.

Finally, the third and final objective was focused on estimating the presence of different aggression profiles (victims who suffer violence in person, only via digital media, or both), in the line pointed out by Zweig, Dank, Lachman, and Yahner (2013). It was observed that 42% of people who suffered some type of victimization endorsed items of both digital and traditional abuse, a finding that indicates that new technologies have been incorporated as a vehicle through which they can exert control and harm in young intimate relationships. Among people who suffered only one form of victimization, most were detected by the DVQ (55%), yet 4% reported exclusively digital victimization. This represented an odd ratio of 1 out of each 25 participants, but still corroborates that digital IPV profiles do exist. This conclusion leads to new hypotheses that should be explored in future studies: Do these profiles correspond to emerging forms of partnering, such as long-distance relationships? Are there personal characteristics (personality, social skills, etc.) that make it more likely to suffer aggressions by traditional or digital media? And above all, how do we improve intervention programs for responding to these needs?

As it is expected that digital media will continue to grow in the future, and knowing the role that social networks, chats, and other virtual media have on the creation and maintenance of intimate relationships, a large percentage of potential victims are likely to be ignored by most of the evaluation instruments and prevention programs that are currently available. Consequently, researchers and practitioners should pay attention to the way the field is developing: Should they encompass any online aggressions under the umbrella term "cyber abuse"? or should they make distinctions between Internet-specific versus classic strategies (tentatively, "cyber abuse" vs. "abuse through ICT")? Although the study of aggressions through ICT is relatively recent, the rapid popularization of these technologies in industrialized countries makes it imperative to debate the role that ICT plays within the IPV field, facilitating a more organized development of our knowledge and helping to create better assessment instruments and intervention programs.

# **Appendix**

DIPVQ 20 Items Initial Set.

		Control- Centered	Damage- Centered	Eliminated
I	He/she has threatened you with sharing your personal information (email, messages, and intimate photos) with other people.		X	
2	He/she has accessed your email accounts, social networks, or registered your mobile without permission to control who you talk to.			X

(continued)

15

# Appendix (continued)

		Control- Centered	Damage- Centered	Eliminated
3	He/she has sent you disturbing videos or photos of sexual content by cell phone or the Internet.		Х	
4	He/she has used your email, phone, or social networks without permission pretending it was you.	X		
5	He/she has used the social networks (Facebook, Tuenti, Twitter) to send you unpleasant messages.			X
6	He/she threatens you with disclosing secrets if you do not access to do what he or she asks for.		X	
7	He/she calls you with hidden number to control what you do.			X
8	He/she has spread or published intimate photos or videos where you appeared without asking permission.		X	
9	He/she has used your email or social network accounts to buy things without your permission.		X	
10	He/she has used social networks to gather information about your activities to harass or annoy you.			Χ
П	You feel afraid of not responding his or her calls or messages because he or she can harm you.			Х
12	He/she calls or texts you 10, 20, or 30 times in an afternoon to know your location.	X		
13	He/she has threatened or pressured to obtain your photos or videos with sexual content.		X	
14	He/she has published rumors or false offensive information about you on the Internet.			X
15	He/she has forbidden you using the Internet or your cell phone.	X		
16	He/she has sent you messages by cell phone or the Internet to ask for sex, even knowing you do not like he or she does that.		X	
17	He/she has sent messages by the Internet to your friends or acquaintances to cause problems.	X		
18	He/she tries to figure out your secret passwords, log in through the safety questions, or access when you leave open your session.	X		
19	He/she checks all your uploaded photos or videos to social networks to make sure you do not lie or cheat him or her.			Х
20	He/she demands to know your access passwords of your email, cell phone, and/or social networks.			X

Note. DIPVQ = Digital Intimate Partner Violence Questionnaire.

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19

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