

Intimate Partner Violence in Turkey: The Turkish Intimate Partner Violence Attitude Scale-Revised

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Abstract This study documents psychometrics of the Turkish version of Intimate Partner Violence Attitude Scale-Revised (IPVAS-R; Fincham et al. in *Psychological Assessment*, 20, 260–269, 2008). Dating college students ($n=280$) from four universities completed Turkish versions of the IPVAS-R, Multidimensional Measure of Emotional Abuse, Physical Assault of Conflict Tactics Scale - Revised, and Ambivalent Sexism Inventory. Confirmatory factor analysis supported the three factor structure of the IPVAS-R, albeit with an item change from the Abuse to the Control factor, due to the cultural nuances. This factor structure was cross validated with a second independent sample of 205 dating college students. Convergent validity and satisfactory internal consistency were also reported. The IPVAS-R was found to be a psychometrically sound measure to gauge attitudes toward psychological

and physical dating aggression among college students outside of North America.

Keywords Attitudes toward psychological and physical aggression · Psychological and physical aggression · Dating college students · Scale adaptation

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Since Makepeace's (1981) pioneering study, physical dating violence remains widespread among college students and is not limited to Western culture (Straus 2004; Chan et al. 2008). For example, among 8666 dating college students from 31 universities in 16 countries an unacceptably large percentage (median = 29 %, range = 17–45 %) assaulted their dating partners in the last 12 months (Straus 2004). Another sample of nearly 16,000 college students from 21 countries yielded similar results in that reported physical violence towards a dating partner in the previous 12 months was unacceptably high (median = 30 %, range = 17–44 %; Chan et al. 2008). In a Turkish sample ($n = 834$), 46.0 % of female and 34.7 % of male students reported perpetrating physical violence at least once in their relationships (Toplu and Hatipoglu-Sümer 2011).

Psychological aggression, defined as verbal aggression and nonverbal behaviors that are not directed at the partner's body, however is also important for two reasons. First, the recipients of such aggression suffer deleterious effects and often judge psychological aggression as worse than physical aggression (see Murphy and Cascardi 1999; O'Leary and Jouriles 1994). Second, psychological aggression predicts the occurrence of the first act of physical aggression (Murphy and O'Leary 1989). Psychological aggression also occurs at alarming rates among dating college students, reaching as high as 90 % (Harned 2001; Hines and Saudino 2003; Jenkins and Aube 2002; Leisring 2013; Neufeld et al. 1999). For example, Harned (2001) found that 85 % of women and 84 % of men performed psychologically aggressive acts in

the year prior to the assessment. The most frequently performed type of aggression was emotional abuse (78 % for women; 77 % for men), followed by isolation (64 % for women; 61 % for men), intimidation and threats (58 % for women; 63 % for men), and economic abuse (8 % for women; 12 % for men). In Turkey, Toplu and Hatipoglu-Sümer (2011) reported high rates of psychological aggression (85.2 % and 75.6 % for dating women and men, respectively).

Given high prevalence rates, the need for understanding attitudes that facilitate aggression is apparent; data have consistently shown that attitudes toward psychological aggression may put college students at increased risk of such aggression (e.g., Aloia and Solomon 2013; Capezza and Arriaga 2008; Fincham et al. 2008; Reitzel-Jaffe and Wolfe 2001; Toplu-Demirtaş 2015). To illustrate, Reitzel-Jaffe and Wolfe (2001) tested a model in which negative beliefs regarding gender and violence (including attitudes toward psychological aggression) predicted relationship abuse ($r = .50$). Similar results were found in Turkey as Toplu-Demirtaş (2015) documented a strong relationship between the acceptability of psychological aggression and its actual occurrence ($r = .47$).

The link between attitudes toward physical aggression and its perpetration is also well documented (Archer and Graham-Kevan 2003; Clarey et al. 2010; Nabors and Jasinski 2009; Orpinas et al. 2013; Straus 2004). In the International Dating Violence study, Straus (2004) found a high level of agreement (median = 42 %, range = 26 % - 79 %) with the item, “I can think of a situation when I would approve of a husband slapping a wife’s face.” The correlation between approval of such behavior in a culture and physical violence perpetration in the culture was .26. In a similar vein, Archer and Graham-Kevan (2003) assessed beliefs about aggression and physical aggression among a sample of college students ($n = 40$; 11 men and 29 women), shelter women ($n = 40$), and male prisoners ($n = 46$) who reported at least one act of physical aggression to their current partner and the findings largely supported the relation between attitudes and aggression. The link between the acceptance and perpetration of violence is also evident in high school (Clarey et al. 2010). Using annual surveys to study students from the sixth to twelfth grades, Orpinas et al. (2013) identified the trajectories of physical aggression and found that students who were in the low perpetration trajectory (65 %) showed the least acceptance of aggression whereas students in the high perpetration trajectory (27 %) showed the most acceptance. Thus, aggression and acceptability trajectories followed a similar pattern.

The attitude-behavior association may be remarkably influential in developing prevention programs. Variables such as attitudes that justify aggression, (Avery-Leaf et al. 1997, Macgowan 1997), and knowledge and norms regarding dating violence (Foshee and Langwick 2004; Jaycox et al. 2006) have been at the core of prevention programs. Designing prevention programs that challenge and alter attitudes toward dating aggression may be effective in reducing dating aggression. Indeed, Hendy et al.

(2003) suggest that the success of prevention programs will increase provided that they stay focused on changing the “cognition, affection and behaviors” of “aggressors”.

With a few notable exceptions, the vast majority of research on dating violence has been conducted in Western societies, with the majority of participants being Caucasian. Thus, our understanding of attitudes toward dating aggression and the association between attitudes toward dating aggression and its occurrence is limited to individualistic cultures and may not apply to non-Western and collectivistic cultures where relationships are highly valued.

As a consequence, there is a need for both culture specific and cross-cultural studies on attitudes toward dating aggression and its occurrence. Fundamental to such research is the need for psychometric instruments that measure attitudes toward psychological and physical violence. In Turkey, two scales have been used; Sezer’s (2008) Turkish adaptation of the Acceptance of Couple Violence Scale (Foshee et al. 1992), which gauges “attitudes toward physical dating violence” and Yumuşak and Şahin’s (2014) Turkish adaptation of Attitudes towards Dating Violence Scales (Price et al. 1999), which assesses “attitudes toward physical, sexual and psychological aggression”. Both scales were targeted at adolescents in high schools. The first is brief (11 items) and provides a limited assessment whereas the second has different numbers of items and structures for males (3 subscales and 39 items) and females (3 subscales and 37 items).

The need for a brief yet comprehensive measure designed for dating college students in Turkey is evident. Rather than develop a new scale, we examined the viability of the Intimate Partner Violence Attitude Scale – Revised (IPVAS-R, Fincham et al. 2008), a 17-item self-report measure designed to gauge attitudes toward psychological and physical aggression in dating relationships of college students. It has three subscales; Abuse (8 items) involves accepting attitudes regarding threats, verbal attacks, blame, and hurt (e.g., “As long as my partner doesn’t hurt me, ‘threats’ are excused”). Control (5 items) comprises endorsement of attitudes regarding controlling behaviors in the dating relationships (e.g., “I would be flattered if my partner told me not to talk to someone of the other sex”). Violence (4 items) includes holding attitudes about the use of physical acts in a dating relationship (e.g., “I think it is wrong to ever damage anything that belongs to a partner”).

Fincham et al. (2008) demonstrated good stability for the measure (test-retest over a 14 week interval was .58, .53 and .39, for control, abuse and violence, respectively) and acceptable internal consistency for a research tool (alphas > .70). The scale also exhibited good discriminant validity. As regards concurrent validity Violence had the highest association with physical aggression, whereas Abuse and Control were related to psychological aggression. As for predictive validity, after controlling for relationship satisfaction and initial levels of the predicted variable, Violence predicted demand/withdrawal and psychological aggression perpetration 14 weeks later.

It appears that as a valid and reliable instrument, the IPVAS-R is a useful starting point for use in cross-cultural research where the attitudes of college students in a collectivistic culture may differ from those located in an individualistic culture. Thus, the aim of this study is to evaluate its cross-cultural applicability in a sample of participants in Turkey, a collectivistic, non-Western culture.

Method

Participants

Participants were 280 students (195 women, 84 men and 1 person who did not indicate gender) from 18 to 32 years of age ($M = 22.22$, $SD = 2.30$). The sample was drawn from major state universities in Ankara, a Midwestern urban city in Turkey. Average relationship length was two years ($M = 24.71$, $SD = 25.10$; range = 1–132 months). Most (79.6 %) perceived the relationship as stable and serious with only 6.4 % saying that they had a casual relationship. A substantial percentage (55.4 %) planned to get married to their current partner whereas 34.3 % did not have any idea about the future of the relationship; 11.8 % reported cohabiting and 26.1 % reported that the relationship was their first one. Participants were not dating to each other.

Procedure

Approval was obtained from the Human Subjects Ethics Committees of the universities before administering any questionnaires. The study was conducted in classes with the permission of the class instructor. Clear instructions for the aim of the study, conditions of participation (volunteering, confidentiality, anonymity), and risks (recalling abuse) were provided both verbally and on the informed consent. Participants were particularly asked not to involve partners/friends in the activity. No incentives were offered. It took approximately 10 to 15 min for the participants to complete all the measures.

Measures

Demographic Information Basic demographics (sex, age, name of the university, and grade level) and relationship characteristics (current relationship status, length of the relationship in months, seriousness of the current relationship, future of current relationship, and former relationship status) were obtained.

Intimate Partner Violence Attitude Scale - Revised (IPVAS-R) We used a well-established forward translation-back translation method to develop a Turkish version of the IPVAS-R. First, four academics (two from psychological

counseling, one from English language teaching and one from the curriculum and instruction) proficient in English and Turkish, translated the IPVAS-R into Turkish. Second, we compared the four translations for each item, and picked the one that best reflected the original meaning. We then asked two additional academics (one from English language teaching and one from psychological counseling) to back-translate the items into English. Next, we compared and evaluated the back translated items with the original items and found no difference in terms of wording or meaning. After the completion of back translation, two instructors from the Department of Turkish Language reviewed the Turkish version of the scale with regard to grammar, fluency, and intelligibility. We corrected very minor grammar mistakes based on their feedback. Then, as a final step, a new academic from psychological counseling evaluated the scale on cultural fit, content, wording, and layout. No changes were requested and the instrument was ready for cognitive interviewing which is recommended for adaptation studies (Collins 2003). Cognitive interviewing allows the exploration of cognitive processes. Two students -one male and one female- separately “thought out loud” while completing IPVAS-R. They also assessed all items one by one, evaluated the appearance and length of the scale, the clarity of the instructions, and the clearness of the items and ratings. Both the first author and participants agreed that they did not have any difficulty. Then, we finalized the Turkish version of IPVAS-R.

As with the original scale, participants provided answers using a 5-point Likert type scale from “strongly disagree” to “strongly agree” (with items 2, 4, 5, and 8 reverse coded). Higher scores reflected more accepting attitudes of psychological and physical aggression.

Multidimensional Measure of Emotional Abuse (MMEA)

To assess psychological dating aggression perpetration, we utilized 7 items subscales of the Turkish version of the MMEA (Murphy and Hoover 1999): Restrictive Engulfment (RE, e.g., secretly searched through the other person’s belongings), Denigration (D, e.g., said that someone else would be a better partner), Hostile Withdrawal (HW, e.g., sulked or refused to talk about an issue), and Dominance/Intimidation (D/I, e.g., threw, smashed, hit, or kicked something in front of the other person). Preliminary findings were consistent with the original scale’s structure, and the scale was regarded as valid and reliable to measure psychologically aggressive acts in Turkish college students’ dating relationships (Toplu-Demirtaş and Hatipoğlu-Sümer 2013).

Each item is rated on an 8-point frequency scale for the past 6 months. Scores are obtained by summing responses and ranged between 0 and 42 for each subscale with higher scores indicating more psychological aggression. In the present study, Cronbach’s coefficient alphas (α) for RE, D, HW, and D/I were .79, .83, .88, and .81, respectively.

Physical Assault of the Conflict Tactics Scale – Revised (CTS-R) To assess physical dating violence perpetration, we used the 5 item Physical Assault (PA) subscale of the Turkish version of the CTS –R (Straus et al. 1996). Only minor acts of physical PA (throwing something, twisting arm or hair, pushing or shoving, grabbing and slapping) were evaluated in the current study.

The rating and scoring procedure of PA is similar to the MMEA. Scores range between 0 and 30 with higher scores indicating more physical assault. Turhan et al. (2006) adapted and evaluated the reliability and validity of Turkish version of the CTS –R, and concluded that it had adequate psychometrics. In the current study, α was .83.

Ambivalent Sexism Inventory (ASI) To measure sexist attitudes, we employed Benevolent Sexism (BS) and Hostile Sexism (HS) subscales of the Turkish version of the ASI (Glick and Fiske 1996). BS (11 items, e.g., “men are complete without women”) and HS items (11 items, e.g., “women are too easily offended”) were rated on a six point scale (1 = disagree strongly to 6 = agree strongly). Higher scores reflect more sexist attitudes. The ASI was translated in to Turkish and shown to be valid and reliable by Sakallı-Uğurlu (2002). In the present study, Cronbach alphas were .86 for BS and .81 for HS.

Power

To ensure sufficient power, we conducted a power analysis using NIESEM (Dudgeon 2003) based on the work of MacCallum et al. (1996). Our sample size (280) was above the minimum required (218).

Results

Construct Validity of IPVAS-R

Prior to conducting a Confirmatory Factor Analysis (CFA) we examined the assumptions of CFA. First, missing cases did not exceed 2 %. The Little MCAR Test (Little and Rubin 1987) was not significant, $\chi^2 = 104.11$ ($df = 95$; $p = .25$) indicating no identifiable pattern of missingness. We therefore used an Expectation-Maximization (EM) algorithm to impute missing values (Tabachnick and Fidell 2007).

We checked multivariate outliers by calculating Mahalanobis distances; 16 cases were considered outliers since the critical value was exceeded, $\chi^2 (17) = 40.79$, ($p < .001$). We therefore conducted analyses with and without the outliers and did not find that the results differed significantly. The results reported therefore include outliers to maximize sample size.

Multivariate normality was tested through the use of Mardia’s (1970) coefficient with Multivariate Kurtosis. Mardia’s coefficient was above the recommended criterion (> 3 ; Ullman 2006), which meant multivariate normality was violated. To handle nonnormality, we used bootstrapping (bootstrap samples =1000; Cheung and Lau 2008; Nevitt and Hancock 1998). In this strategy, the Bollen-Stine corrected p value is used instead of Maximum Likelihood (ML) based p value to assess model fit (Arbuckle and Wothke 1999). We used the bootstrapped results of parameter estimates, standard errors of parameter estimates, and significance tests.

Fit Indices For RMSEA, we followed Browne and Cudeck’s (1993) recommendation: RMSEA $< .05$, close fit; $.05 < \text{RMSEA} < .10$, mediocre fit; RMSEA $> .10$, poor fit. For χ^2/df ratio, Kline (2005) recommends $\chi^2/df < 3$. For SRMR and CFI, we considered Hu and Bentler (1999)’s suggestions, a SRMR less than .08, and a CFI greater than .95, respectively. We also checked the significance of parameter estimates, standardized regression weights and squared multiple correlations for overall evaluation of the scale.

CFA of IPVAS-R The model yielded the following fit indices, $\chi^2 (116, N = 280) = 335.81$, Bollen-Stine corrected $p = .00$, χ^2/df ratio = 2.90, RMSEA = .08 (90 % CI = .07–.09) which indicates mediocre fit (Browne and Cudeck 1993), standardized RMR (SRMR) was .08, equal to the suggested cutoff value (Hu and Bentler 1999). However, CFI was .71. A quick inspection showed an obvious misspecification in that item_4 was not a good indicator of the Abuse ($\beta = -.06$) factor but instead appeared to belong to the Control factor as indicated by a large modification index.

We therefore performed a new CFA with item_4 specified as an indicator of the Control factor. The factor loading of item_4 increased to .38 (from $-.06$), with a variance of 14 % in Control (Fig. 1). The overall fit indices indicated an adequate model fit, $\chi^2 (116, N = 280) = 310.00$, Bollen-Stine corrected $p = .00$, $\chi^2/df = 2.67$, CFI = .75, RMSEA = .08 (CI 90 % = .07–.09), SRMR = .08 (Browne and Cudeck 1993). Significant t values suggested that all the items were indicators of their relevant latent construct and no modification indices had high values. Finally, Cronbach’s alpha for the full IPVAS-R was .72. Internal consistency for Violence, Control and Abuse subscales were .72, .62, and .65, respectively.

Cross Validation Given the change made regarding item_4, we cross validated the factor structure of the Turkish IPVAS-R, with a new sample of 205 dating college students from the major state and private universities in Ankara, (149 females and 54 were males, 2 did not report gender). Their ages ranged from 18 to 34 ($M = 23.15$ $SD = 3.28$). The sample was similar to the previous one in terms of demographics. We repeated the

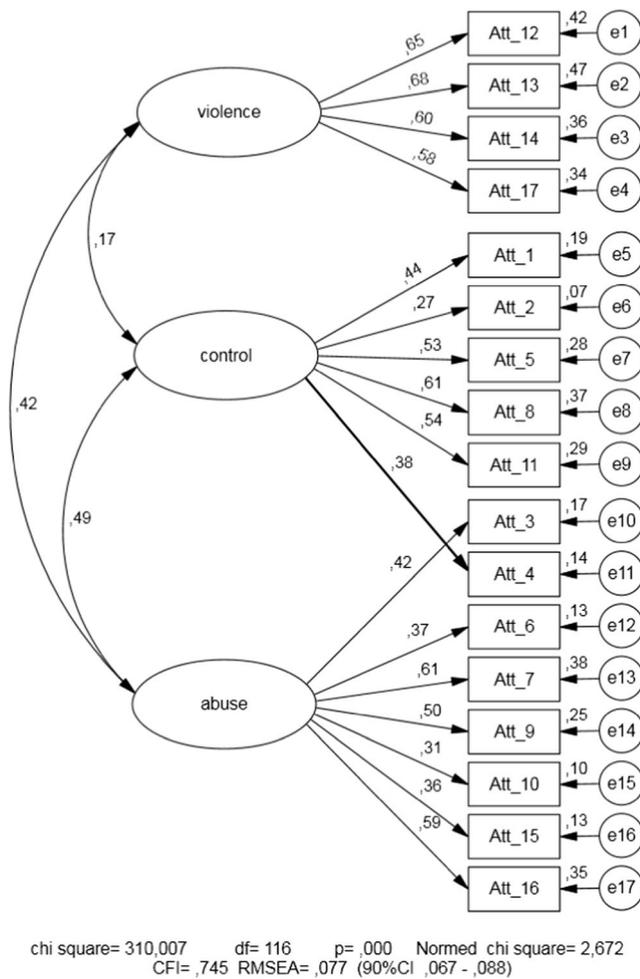


Fig. 1 Estimates of parameters of confirmatory factor analysis for Turkish IPVAS-R

same procedures for assumption checking, and handled violations in the same way we did previously. Likewise, we followed the same steps for the CFA.

The results of second CFA indicated an adequate model fit, χ^2 (116, $N = 205$, Bollen-Stine corrected $p = .00$; χ^2/df ratio = 2.24; RMSEA = .08 (90 % CI = .07–.09); SRMR = .08; CFI = .79. The bootstrapped standardized factor loadings ranged between .41 and .89 for violence, .25 and .63 for control, and .30 and .69 for abuse. In sum, we cross validated the results of the CFA with another sample of dating college students and the results provided good empirical evidence for the construct validity of IPVAS-R.

Convergent Validity of IPVAS-R

As theoretically expected, Violence had the strongest association with physical assault ($r = .23, p < .01$), Control with Restrictive Engulfment ($r = .38, p < .01$) and Abuse with Denigration ($r = .30, p < .01$) and Dominance/Intimidation ($r = .30, p < .01$). The remaining correlations shown in

Table 1 were significant and positive (Cohen 1988). As also shown in Table 1, Violence was positively associated with Control ($r = .11, p < .05$) and Abuse ($r = .27, p < .01$). The correlation between Abuse and Control, was also positive ($r = .29, p < .01$).

The relationships between IPVAS-R subscales, hostile sexism, and benevolent sexism were found to be mostly significant, positive and weak to moderate. Violence correlated with Hostile Sexism ($r = .15, p < .05$). Control, however, was related to both Hostile ($r = .31, p < .01$), and Benevolent Sexism ($r = .33, p < .01$). The same pattern was also found for Abuse.

Discussion

In the current study, we investigated the psychometric soundness of a Turkish version of the IPVAS-R across two independent samples with similar demographics in a collectivistic culture. The IPVAS-R was translated into Turkish through a rigorous translation-back translation process to ensure equivalency and to eliminate cultural bias. Secondly, a CFA was conducted to see if the hypothesized three-factor structure proposed by Fincham et al. (2008) would emerge in this new cultural context. Though the model fit the data satisfactorily, when we checked the significance of parameter estimates to ascertain that items properly loaded on the related factors, we saw that one item (item_4 on Abuse factor) did not. Closer inspection immediately indicated that the item belonged to the Control factor. Attitudes toward jealousy (I do not mind my partner doing something just to make me jealous), in Turkish culture, seemed to be perceived differently, not as Abuse but as Control instead. A new CFA with this item specified as an indicator of Control demonstrated better model fit, factor loadings, and squared multiple correlations. This model was then cross validated in a second independent sample.

The finding that the jealousy item in Turkish culture was perceived as a Control item instead of an Abuse item is not surprising. Being jealous as a means of control in premarital relationships is perceived as a desired behavior, which manifests itself in common as “the man/woman who loves gets jealous” (Hortaçsu 2015). For instance, the most frequently experienced psychologically aggressive acts of the college dating women from their partners were jealousy (71.4 %) and those acts were perceived as least abusive (Aslan et al. 2008). Furthermore, Restrictive Engulfment of the MMEA (assesses the acts of controlling the partner due to jealousy) was more closely related to Control ($r = .38$) compared to Abuse ($r = .20$). Perceived as a sign of love in Turkish culture, dating college students appeared to have differed in their attitudes toward psychological aggression concerning jealousy, perhaps viewing it in a more favorable light than an abusive behavior. Consequently, with a minor change involving one item that became an indicator of Control rather than Abuse, the three-factor structure of the IPVAS-R was confirmed

Table 1 Means, SDs, internal consistencies, and intercorrelations among IPVAS-R subscales, psychological aggression, physical assault, and sexism

	1	2	3	4	5	6	7	8	9	10
1. Violence	1	.11*	.27**	.13*	.10	.06	.14*	.23**	.15*	.08
2. Control		1	.29**	.38**	.04	.16**	.13*	.09	.31**	.33**
3. Abuse			1	.20**	.30**	.20**	.30**	.23**	.31**	.28**
4. Restrictive				1	.34**	.44**	.49**	.41**	.08	.11
5. Denigration					1	.41**	.59**	.49**	.02	-.05
6. Withdrawal						1	.53**	.30**	.13*	.09
7. Dominance							1	.49**	.08	.08
8. Physical								1	.05	.07
9. Hostile									1	.53**
10. Benevolent										1
Mean	5.58	15.93	15.08	8.66	3.08	13.92	3.84	1.51	40.96	41.71
SD	2.60	4.33	4.52	7.73	5.19	9.38	5.17	3.49	10.48	10.13
α	.72	.62	.65	.79	.83	.88	.81	.83	.81	.86

$N=280$. Restrictive = Restrictive Engulfment; Withdrawal = Hostile withdrawal; Dominance = Dominance/intimidation; Physical = Physical assault; hostile = Hostile sexism; Benevolent = Benevolent sexism

* $p < .05$, ** $p < .01$

providing evidence for construct validity. Cross-validation of this finding in Turkish culture was demonstrated with an independent sample.

As expected, the sub-scales of the IPVAS-R were moderately positively related, yet quite distinct from each other, which was consistent the original findings for the scale (Fincham et al. 2008). Considering attitude-behavior relationships, the IPVAS-R reflected positive associations in the ways anticipated. The strongest correlate of Violence was Physical Assault ($r = .23, p < .01$). Abuse was also closely correlated to Physical Assault, whereas Control was not. The findings were consistent with those obtained by Fincham et al. (2008). Among psychological aggression variables, the strongest correlates of Control and Abuse were Restrictive Engulfment ($r = .38, p < .01$), Denigration and Dominance/Intimidation ($r_s = .30, p < .01$). As repeatedly noted (e.g., Murphy and Hoover 1999; Murphy et al. 1999), the robust association of Dominance/Intimidation with physical assault presented itself here as the close association between attitudes toward physical aggression and Dominance/Intimidation, which provided further validity data.

Consistent with previous studies, dating college students with more accepting attitudes of aggression seemed to engage in more psychologically and physically aggressive acts toward their partners (e.g., Aloia and Solomon 2013; Capezza and Arriaga 2008; Clarey et al. 2010; Fincham et al. 2008; Forbes et al. 2006; Karakurt et al. 2013; Kernsmith 2005; Orpinas et al. 2013; Toplu-Demirtaş 2015). For sexism, dating college students with higher scores on sexist beliefs tended to get higher attitude scores (Capezza & Arriaga; Forbes et al. 2006; Ryan and Kanjorski 1998; Toplu-Demirtaş 2015; Yumuşak 2013).

Overall, the results confirmed the three-dimensional structure of the 17 item IPVAS-R, albeit with an item change from the Abuse to the Control factor. Thus, the factors of Control and Abuse yielded six and seven item measures, respectively. We believe that the Turkish version of IPVAS-R has emerged as a brief, multidimensional, easily scored, and psychometrically sound scale to measure attitudes toward physical and psychological aggression among college students. We recommend creating an index of “attitudes toward psychological aggression” by adding the scores of “Abuse” and “Control” for cross-cultural studies.

The findings of this study should be interpreted in the light of its limitations. Foremost among these is that the sample was not randomly selected but rather recruited from currently dating college students coming from selected private and public universities in a single city. The extent to which the sample is representative of college students throughout Turkey is open to question. Second, females were overrepresented in the sample perhaps reflecting a greater willingness to participate in surveys about relationships. The sampling and gender bias limit generalizability (Fraenkel and Wallen 2012). Finally, we could not confirm the factor structure separately for men and women samples due to overrepresentation of women and the small sample size. Given potential differences in attitudes towards dating violence across gender, it is important to demonstrate measurement equivalence across men and women for the Turkish adaptation of the IPVAS-R. Clearly, our findings need to be replicated with a more representative and larger sample. Finally, longitudinal data on attitudes towards dating violence is needed.

Notwithstanding the limitations outlined, adaptation of the IPVAS-R seems a promising start to fulfilling the need for a

psychometrically sound measurement that can be used cross-culturally to gauge attitudes toward psychological and physical aggression among college students in dating relationships. Further adaptations of the IPVAS-R have the potential to allow researchers to conduct cross-cultural studies to investigate differences and similarities in attitudes toward aggression across cultures. Such research will add a further dimension to the existing literature on developing culturally sensitive prevention programs in colleges.

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