



Published in final edited form as:

*J Aggress Maltreat Trauma*. 2017 ; 26(9): 1042–1054. doi:10.1080/10926771.2017.1335821.

## Associations of Emotional Abuse Types with Suicide Ideation among Dating Couples

Caitlin Wolford-Clevenger, Hannah Grigorian, Meagan J. Brem, Autumn Rae Florimbio, JoAnna Elmquist, and Gregory L. Stuart

University of Tennessee-Knoxville, Department of Psychology, 204 Austin Peay Bldg. Knoxville, TN 37996-0900, USA

### Abstract

Numerous studies have demonstrated that coercive control is more strongly associated with suicidal ideation than other forms of intimate partner violence. However, a majority of these studies focused on samples of help-seeking women. This study examined whether coercive control remains the form of intimate partner violence most strongly associated with suicidal ideation within a sample of nonclinical dating couples. This cross-sectional, survey study on 104 dating couples examined the associations of coercive control (i.e., dominance/intimidation and restrictive engulfment) with suicidal ideation, while controlling for other forms of emotional abuse (i.e., hostile withdrawal and denigration), physical assault, and depressive symptoms. As expected, dominance/intimidation and depressive symptoms, but not denigration and physical assault, were associated with suicidal ideation. Contrary to our hypothesis, hostile withdrawal, but not restrictive engulfment, was associated with suicidal ideation. This study suggests that dominance/intimidation and hostile withdrawal are forms of emotional abuse that are pertinent to suicidal ideation in nonclinical dating couples.

### Keywords

dyads; domestic violence; partner abuse; psychological aggression; suicide risk; ideation; coercive control; physical abuse

---

The development of suicide risk among young adults is critical to understand as it is a leading cause of death within this population (Centers for Disease Control and Prevention, 2013). An estimated 2.9 million young adults experience suicidal ideation in the United States annually, and approximately half a million young adults attempt suicide each year (Crosby, Gfroerer, Han, Ortega, & Parks, 2011). Factors that may contribute to suicidal ideation within this population are particularly important to identify, as such thoughts precede suicide attempts and deaths and are amenable to prevention and intervention efforts (Kuo, Gallo, & Tien, 2001).

---

\*All correspondence should be addressed to Caitlin Wolford-Clevenger; cwolfor2@vols.utk.edu, office phone: (865) 974-3489;. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIAAA or the National Institutes of Health.

Stable and healthy relationships, such as romantic relationships, are strong, targetable protective factors for suicidal ideation (Gunnell, Harbord, Singleton, Jenkins, & Lewis, 2004; Kleiman, Riskind, & Schaefer, 2014; Mazza & Reynolds, 1998; You, Van Orden, & Conner, 2011). Studies examining relationship factors associated with suicide risk have highlighted victimization by intimate partner violence (IPV), defined as physical, sexual, and/or emotional abuse within couples, as a correlate of suicidal ideation (see Golding, 1999 for a meta-analysis; Saltzman et al., 2002). Indeed, men and women victimized by IPV report higher rates of lifetime suicidal ideation (43.6–68.7%; Afifi et al., 2009; Chan et al., 2008; Iverson et al., 2012; Pico-Alfonso et al., 2006; Schneider et al., 2009) than in the general population (18.5%; Lee et al., 2010). Furthermore, the association between IPV and suicidal ideation has remained while accounting for the influence of depressive symptoms, one of the most robust correlates of suicidal ideation (Devries et al., 2011; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Garlow et al., 2008; Wolford-Clevenger, Vann, & Smith, 2016).

Of the forms of IPV, emotional abuse is more strongly associated with suicidal ideation than physical assault (Cavanaugh, Messing, Del-Colle, O'Sullivan, & Campbell, 2011; Golding, 1999; Leiner et al., 2008; Leone, 2011; Pico-Alfonso et al., 2006; Saltzman et al., 2002). Emotional abuse involves denigration (defined as degradation and humiliation), hostile withdrawal (defined as removing emotional contact intentionally to harm the partner), and/or coercive control (i.e., intimidation/dominance—defined as behaviors that elicit fear and compliance, and isolation—defined as restricting partners' social connections; Murphy & Hoover, 1999). Closer scrutiny of these studies revealed that it is coercive control, in particular, that drives the association between emotional abuse and suicidal ideation. Coercive control involves claiming relational power through demands (e.g., dominance, isolation) dependent upon credible threats (e.g., intimidation; Dutton & Goodman, 2005). Studies have shown that individuals in relationships characterized by coercive control experience greater suicidal ideation than those in relationships troubled by physical assault resulting from situational conflict (Frye, Manganello, Campbell, Walton-Moss, & Wilt, 2006; Johnson, 1995; Leone, 2011). Theoretically, being coercively controlled by one's partner may elicit greater emotional pain and hopelessness—both which are risk factors for suicide ideation (Baumeister, 1990; Wolford-Clevenger & Smith, 2017).

However, this body of literature primarily consists of women seeking help from abusive relationships and is therefore not representative of abused men or of couples experiencing IPV who do not present to shelters. Only one known study to date has compared the associations of physical assault and emotional abuse (but not coercive control specifically) with suicidal ideation in college students. This study demonstrated that emotional abuse most strongly associated with suicidal ideation among women, while physical assault most strongly associated with suicidal ideation among men (Wolford-Clevenger et al., 2016). Finally, no studies have examined these relationships by collecting data from both members of the dyad, which will provide a fuller picture of the relations between IPV and suicidal ideation. Research investigating whether coercive control also serves as the strongest correlate of suicidal ideation among a nonclinical sample of dating couples will advance the understanding of the potential impact IPV has on suicide risk among young adults.

## Purpose and Hypotheses

The purpose of this study is to examine whether the observed pattern of coercive control being the chief form of IPV associated with suicidal ideation generalizes to a non help-seeking population: young adults in dating relationships. Given the large body of research that has shown coercive control to be a salient correlate of suicidal ideation, we hypothesized that coercive control, as operationalized by dominance/intimidation and restrictive engulfment (i.e., isolation), would emerge as the strongest correlate of suicide ideation, while controlling for physical assault, other forms of emotional abuse (i.e., hostile withdrawal and denigration), and depressive symptoms—one of the strongest predictors of suicidal ideation (Kessler, Berglund, Borges, Nock, & Wang, 2005).

## Methods

### Participants

One hundred and four dating couples ( $n = 208$  individuals) were recruited as part of a larger study on longitudinal predictors of IPV. The baseline data were used for the purposes of this study. Participants were recruited from introductory psychology courses and were awarded partial course credit. Participants' partners were recruited and were given the option to either be monetarily compensated or given partial course credit.

The majority of participants identified as heterosexual (94.7%), with 3.8% identifying as bisexual, and 1.4% identifying as lesbian. Three (2.9%) of the couples were same-sex partners. Thus, 51.4% of the sample was female. A majority of the participants (86.1%) reported that they were not living together. The average length of the participants' present relationship was 10.29 months ( $SD = 11.09$ ).

Participants' ages ranged from 18–29 ( $M = 19.61$ ,  $SD = 11.09$ ). A majority of the sample identified as non-Hispanic Caucasian (88%) with 8.2% identifying as Asian American, 2.4% as Black/African American, 2.4% as Hispanic/Latino, 1.9% as Native American/Alaskan Native, 1.4% as two or more racial/ethnic identities, 0.5% as Native Hawaiian/Pacific Islander, and 1% as Middle Eastern (Note that these percentages do not equal 100%, as participants had the option to select more than one category). The distribution of the education level/occupational status of the participants was as follows: freshman (46.2%), sophomore (22.6%), junior (15.4%), senior (9.1%), employed (4.8%), unemployed (1.4%), and high school senior (0.5%). A majority of the sample reported practicing a religion, with 60.4% identifying as non-Catholic Christian and 24.4% identifying as Catholic-Christian. The distribution of family income was as follows: less than \$50,000 (20.3%), \$50,000–\$100,000 (36.2%), \$100,000–\$150,000 (23.7%), \$150,000–\$200,000 (10.1%), and greater than \$200,000 (9.7%).

### Procedures

All procedures were approved by the Institutional Review Board. We recruited participants via introductory psychology course research participation and flyers posted on campus at a large, southeastern university. Inclusion criteria were the following: 18 years of age or older, in a dating relationship of one month or longer, and at least one partner of the couple had to

be a student at the university. In order to increase the sample size and generalizability of the study, we required that participants be in a relationship lasting at least one month. This criterion was selected because it would require more than a minimal amount of contact between partners. If one partner of the couple was not a student at this particular university, they were required to live within 100 miles of the university.

Eligible couples came to the laboratory to complete the baseline procedures. They completed a battery of questionnaires separately and other procedures not relevant for the purposes of this study.

## Measures

**Physical assault victimization**—The Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to measure the frequency (zero to more than twenty times) of acts of physical assault experienced by each partner in his or her present relationship within the past year. The 12-item physical assault victimization subscale was used. The variable was on an ordinal scale. The sum of the items was used, with greater scores indicating greater physical assault victimization. The reliability and validity for the CTS2 has been supported in a prior student sample (Straus et al., 1996). Good internal consistency of the physical violence scale has been reported in prior research ( $\alpha = .86$ ; Straus et al., 1996) and was adequate in the current study ( $\alpha = .69$ ).

**Emotional abuse victimization**—The 28-item Multidimensional Measure of Emotional Abuse (MMEA; Murphy & Hoover, 1999) assessed the frequency of a range of emotionally abusive acts experienced by each partner in their relationship in the past year on a 6-point Likert scale ranging from zero to more than twenty times. The MMEA consists of four subscales with seven items each: denigration, dominance/intimidation, hostile withdrawal, and restrictive engulfment. This variable was on an ordinal scale. The sum of the items for each subscale was used, with greater scores indicating victimization by each type of emotional abuse. Each subscale's possible total score ranged from 0 to 35. The construct validity and good internal consistencies of each subscale have been supported in a prior student sample (Murphy et al., 1999) and ranged from good to excellent in the present sample: denigration ( $\alpha = .87$ ), dominance/intimidation ( $\alpha = .89$ ), hostile withdrawal ( $\alpha = .90$ ), and restrictive engulfment ( $\alpha = .90$ ).

**Depressive symptoms**—The 21-item Psychiatric Diagnostic Screening Questionnaire (PDSQ; Zimmerman & Mattia, 2001) depression subscale measured depressive symptoms experienced by each partner during the past two weeks. The last six items were excluded in order to create a suicidal ideation subscale as described below. Thus, the sum of the 15 yes-no items comprised the depressive symptom scale for the current study (total possible score ranging from 0–15). The original depression subscale has demonstrated good psychometric properties, including internal consistency, in psychiatric outpatients (Zimmerman & Mattia, 2001). The 15-item scale demonstrated acceptable internal consistency in the current sample ( $\alpha = .78$ ).

**Suicidal ideation**—The six yes-no items regarding suicidal ideation in the PDSQ depression subscale were summed to assess such ideation experienced by each partner in the past two weeks (Zimmerman & Mattia, 2001). Total possible score range from 0–6. The items assess both passive and active ideation and are thus representative of current definitions of suicidal ideation (Silverman, Berman, Sanddal, O’Carroll, & Joiner, 2007). This variable was on a continuous scale. The subscale exhibited acceptable internal consistency in the current sample ( $\alpha = .71$ ).

### Data Analytic Strategy

Because couple data are interdependent (i.e., partners are nested within the dyad), multilevel modeling using Hierarchical Linear Modeling Version 7 (HLM 7.0) was employed to account for the interdependent data. Physical assault, the emotional abuse subscales, depressive symptoms, and suicidal ideation were all measured as Level-1 variables. Analyses were conducted in the following manner: First, descriptives were examined to assess the nature of the data. Second, the level of missing data was explored. Third, the null model and intraclass correlation coefficient were estimated. Fourth, a “full” model including depressive symptoms, physical assault, and all subscales of emotional abuse as predictors was estimated in Level-1. The Level-1 random intercept was controlled for in Level-2 in order to account for individuals being nested within dyads. Fixed slopes were estimated, given that random slopes are not possible to estimate with dyadic data. See Table 1 for the statistical equations estimating each model tested. All explanatory variables were ordinal and grand mean-centered. Maximum likelihood estimation was used for each model (Hox, 2010).

### Results

See Table 2 for descriptive statistics. Physical assault, the emotional abuse subscales, and suicidal ideation exhibited positive skew and were therefore log-transformed prior to analyses. The percentage of data missing on each variable was minimal as follows (*n*s reflect number of participants at Level-1): depressive symptoms ( $n = 2$ , 1.0%), physical assault ( $n = 0$ ), dominance/intimidation ( $n = 3$ , 1.4%), hostile withdrawal ( $n = 3$ , 1.4%), restrictive engulfment ( $n = 3$ , 1.4%), denigration ( $n = 3$ , 1.4%), and suicide ideation ( $n = 3$ , 1.4%). Cases with missing data were excluded by HLM during analyses.

Ten percent of the sample ( $n = 21$  individuals) reported some level of suicidal ideation. Only 1.9% ( $n = 2$ ) of the dyads had both partners reporting some level of suicidal ideation. Eight percent ( $n = 17$ ) of the dyads had only one partner reporting some level of suicidal ideation. The remaining two dyads had one partner reporting some level of suicidal ideation and the other partner with missing data on the suicidal ideation variable.

Model 1 (null model) demonstrated the intraclass correlation coefficient to be .11. This indicated that 11% of the variance in suicidal ideation was due to the variation between dyads, suggesting that multilevel modeling was an appropriate analytic approach (See Table 3 for model parameters). The final model that included all explanatory variables indicated that depressive symptoms, hostile withdrawal, and dominance/intimidation, but not physical

assault, denigration, and restrictive engulfment, were associated with suicidal ideation, while controlling for the Level-1 intercept (See Table 3 for model parameters).

## Discussion

The present study examined the associations of coercive control (i.e., dominance/intimidation and restrictive engulfment) with suicidal ideation, while controlling for other forms of emotional abuse (i.e., hostile withdrawal and denigration), physical assault, and depressive symptoms. As expected, dominance/intimidation and depressive symptoms, but not denigration and physical assault, were associated with suicidal ideation. Contrary to our hypothesis, hostile withdrawal, but not restrictive engulfment, was associated with suicidal ideation. This study suggests that dominance/intimidation and hostile withdrawal are forms of emotional abuse that are pertinent to suicidal ideation in nonclinical dating couples.

Prior research on help-seeking samples of primarily women has supported coercive control as the main form of IPV associated with suicidal ideation (Frye et al., 2006; Leone, 2011; Wolford-Clevenger & Smith, 2017). However, the current study only partially supports this pattern in dating couples, finding that some dimensions of emotional abuse were associated with suicidal ideation, while physical assault was not. Specifically, controlling acts of dominating and intimidating a partner are associated with suicidal ideation. Such threatening and fearsome acts likely evoke greater feelings of helplessness and hopelessness such that the victim considers suicide as an escape from the relationship (Clements, Sabourin, & Spiby, 2004; Stark & Flitcraft, 1995). This may be especially true when threats are made credible by previous experiences of such threats being followed by action (Dutton & Goodman, 2005). Victims may begin to fantasize about suicide as a path to oblivion where such emotional suffering no longer exists (Baumeister, 1990). Alternatively, men and women who were predisposed to suicidal ideation due to other risk factors, such as childhood maltreatment or preexisting depression, may be vulnerable to entering controlling relationships.

However, restrictive engulfment, another form of coercive control, which involves restricting and closely monitoring one's partner, was not associated with suicidal ideation. Although this null finding is surprising, examination of the items assessing restrictive engulfment reveals a potential explanation. Restrictive engulfment involves such acts as *attempting* to keep one from seeing friends or family, complaining about them socializing, or asking friends/family members about their whereabouts. This implies that the victim has a social network—albeit one that the perpetrator is attempting to isolate them from—that buffers effects such control may have on suicidal ideation (You et al., 2011). Alternatively, individuals victimized by restrictive engulfment may employ coping strategies other than suicidal ideation such as placating perpetrator worries underlying restrictive engulfment.

Also contrary to our hypothesis, hostile withdrawal was associated with suicidal ideation. Hostile withdrawal may be associated with suicidal ideation, as it involves an aggressive, intentional, and painful removal of an important social connection. Feeling connected to others and worthy of such connections is a powerful buffer against suicidal thoughts (Joiner, 2005; You et al., 2011). Thus, experiencing hostile withdrawal from one's partner may be

associated with increases in suicidal ideation. Such hostile withdrawal may be especially painful for young adults given the importance many of them place on finding a committed relationship (Rauer, Pettit, Lansford, Bates, & Dodge, 2013). Furthermore, they may rely on their romantic partner as a primary source of support and coping, which may leave them at risk for considering suicide when that attachment is threatened (Drum, Brownson, Denmark, & Smith, 2009). However, again, the direction of this association is unknown; thus, men and women who are previously at risk for suicidal thoughts may be vulnerable to being in relationships with individuals who engage in such emotionally abusive acts.

### Limitations

Limitations of the present study included cross-sectional design and retrospective survey methodology that both introduced recall bias as well as precluded conclusions about temporal associations from being drawn. Furthermore, participants were recruited from a university and thus are not representative of the full population of young adults in dating relationships. Future work should sample from young adults in dating relationships who are not in college, as they may present with different life experiences that impact their risk for IPV. Similarly, most participants were not cohabitating. Cohabiting couples may have different experiences with IPV and how it impacts suicide risk. Additionally, a majority of the participants identified as Caucasian, non-Hispanic. Future work that is more inclusive of racial/ethnic minorities will better inform potential differences in how IPV associates with risk for suicide ideation in these understudied populations. Only three couples were in same-sex relationships and each of these partners identified as female. Additional research is needed to investigate the relations between IPV and suicide ideation among populations that include men, individuals in same-sex relationships, and transgender and gender diverse populations. In addition, we did not include sexual abuse, as the CTS2 sexual coercion scale has poor internal consistency, and we did not include IPV perpetration, as the number of variables added to the model would pose issues with multicollinearity. Instead, we relied solely on each partner's reporting of their own victimization and controlled for the interdependence of the data using multilevel modeling. Future research using larger samples will allow for the inclusion of violence perpetration in the models.

### Future Directions

The understanding of the associations between dimensions of emotional abuse could be improved through several future avenues of research. First, longitudinal research examining the proximal and distal relations between emotionally abusive acts and suicidal ideation would critically inform the temporal, or reciprocal, relations between these events. Furthermore, such studies should continue to control for the influence of other robust risk factors for suicidal ideation, including depressive symptoms as well as potential confounding factors such as IPV perpetration and family of origin factors (e.g., family history of suicide, childhood maltreatment, etc.). In addition to longitudinal studies, qualitative work with couples may uncover a richer understanding of how emotional abuse is related to increased suicidal ideation among one or both partners.

Finally, future research on the associations between IPV and suicidal ideation should rely on theories of suicide as a guide. Many theories emphasize the importance of social

connectedness in protecting against suicide, which is pertinent to the experience of emotional abuse in one's romantic relationship (e.g., Joiner, 2005). Alternatively, Baumeister's (1990) escape theory of suicide may help identify whether, and why, emotional abuse contributes to suicidal thoughts, as victims may blame themselves for such abuse and seek relief from such pain.

### Clinical Implications

The current study presents preliminary implications for clinical work with young adult dating couples. First, the study shows that at least 10% of the couples have at least one partner experiencing suicidal ideation in the past two weeks. Suicide prevention and intervention programs on college campuses may benefit from including appeals to individuals in relationships to feel comfortable asking their partners about suicidal thoughts and helping them to seek services. However, relationships afflicted by emotional abuse may not be productive grounds for a healthy response to a partner's suicidal thoughts. Thus, college students and/or young adults who volunteer that they are experiencing emotional abuse, particularly through dominance/intimidation or hostile withdrawal, by their partner should be carefully assessed for suicidal ideation.

Finally, for young adult dating couples who are seeking couples therapy, the prevalence of suicidal thoughts may be higher than found in the present study, as the sample was not help-seeking. Thus, practitioners should assess suicidal ideation, especially in the presence of emotional abuse victimization by either partner. Although couples therapy addressing emotional abuse in the relationship may help increase social connectedness and thus reduce suicidal ideation, partners experiencing such thoughts should be referred to individual therapy to target suicidal ideation more specifically.

### Acknowledgments

Please note that this work was supported, in part, by grant K24AA019707 from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) awarded to the last author and grant F31AA024685 from NIAAA awarded to the first author.

### References

- Afifi T, MacMillan H, Cox B, Asmundson G, Stein M, Sareen J. Mental health correlates of intimate partner violence in marital relationships in a nationally representative sample of males and females. *Journal of Interpersonal Violence*. 2009; 24(8):1398–1417. <http://dx.doi.org/10.1177/0886260508322192>. [PubMed: 18718882]
- Rauer AJ, Pettit GS, Lansford JE, Bates JE, Dodge KA. Romantic relationship patterns in young adulthood and their developmental antecedents. *Developmental Psychology*. 2013; 49(11):2159. [PubMed: 23421803]
- Cavanaugh C, Messing J, Del-Colle M, O'Sullivan C, Campbell JC. Prevalence and correlates of suicidal behavior among adult female victims of intimate partner violence. *Suicide & Life-Threatening Behavior*. 2011; 41:372–383. DOI: 10.1111/j.1943-278X.2011.00035.x [PubMed: 21535096]
- Casey PR, Dunn G, Kelly BD, Birkbeck G, Dalgard OS, Lehtinen V, ... Dowrick C. Factors associated with suicidal ideation in the general population. *The British Journal of Psychiatry*. 2006; 189(5): 410–415. [PubMed: 17077430]



- Chan KL, Straus MA, Brownridge DA, Tiwari A, Leung WC. Prevalence of dating partner violence and suicidal ideation among man and woman university students worldwide. *Journal of Midwifery and Women's Health*. 2008; 53:529–537.
- Centers for Disease Control and Prevention [CDC]. Web-based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control, CDC; 2013. Available from <http://www.cdc.gov/injury/wisqars/index.html>
- Clements CM, Sabourin CM, Spiby L. Dysphoria and hopelessness following battering: The role of perceived control, coping, and self-esteem. *Journal of Family Violence*. 2004; 19(1):25–36.
- Crosby AE, Han B, Ortega LA, Parks SE, Gfroerer J. Suicidal thoughts and behaviors among adults aged 18 years--United States, 2008–2009. *Morbidity and mortality weekly report. Surveillance summaries*. 2011; 60(13):1–22.
- Devries K, Watts C, Yoshihama M, Kiss L, Schraiber L, Deyessa N, Heise L, Durand J, Mbwanbo J, Jansen H, Berthane Y, Elisberg M, Garcia-Moreno C. Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. *Social Science & Medicine*. 2011; 73(1):79–86. DOI: 10.1016/j.socscimed.2011.05.006 [PubMed: 21676510]
- Drum DJ, Brownson C, Denmark AB, Smith SE. New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice*. 2009; 40(3): 213–222.
- Dutton MA, Goodman LA. Coercion in intimate partner violence: Toward a new conceptualization. *Sex Roles*. 2005; 52(11/12):743–756. DOI: 10.1007/s11199-005-4196-6
- Ellsberg M, Jansen H, Heise L, Watts C, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: An observational study. *Lancet*. 2008; 371(9619):1165–1172. [PubMed: 18395577]
- Frye V, Manganello J, Campbell J, Walton-Moss B, Wilt S. The distribution of and factors associated with intimate terrorism and situational couple violence among a population-based sample of urban women in the United States. *Journal of Interpersonal Violence*. 2006; 21(10):1286–1313. DOI: 10.1177/0886260506291658 [PubMed: 16940397]
- Garlow SJ, Rosenberg J, Moore JD, Haas AP, Koestner B, Hendin H, Nemeroff CB. Depression, desperation, and suicidal ideation in college students: Results from the American Foundation for Suicide Prevention College Screening Project at Emory University. *Depression and Anxiety*. 2008; 25(6):482–488. [PubMed: 17559087]
- Golding JM. Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence*. 1999; 14(2):99–132.
- Gunnell D, Harbord R, Singleton N, Jenkins R, Lewis G. Factors influencing the development and amelioration of suicidal thoughts in the general population. *The British Journal of Psychiatry*. 2004; 185(5):385–393. [PubMed: 15516546]
- Hox, JJ. *Multilevel analysis: Techniques and applications*. 2. New York: Routledge; 2010.
- Iverson KM, Dick A, McLaughlin KA, Smith BN, Bell ME, Gerber MR, Cook N, Mitchell KS. Exposure to interpersonal violence and its associations with psychiatric morbidity in a U.S. National Sample: A gender comparison. *Psychology of Violence*. 2012; doi: 10.1037/a0030956
- Johnson MP. Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage & Family*. 1995; 57(2):283–294.
- Joiner, T. *Why people die by suicide*. Harvard University Press; Boston, MA: 2007.
- Kessler RC, Berglund P, Borges G, Nock M, Wang PS. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. *JAMA*. 2005; 293(20):2487–2495. [PubMed: 15914749]
- Kleiman EM, Riskind JH, Schaefer KE. Social support and positive events as suicide resiliency factors: examination of synergistic buffering effects. *Archives of Suicide Research*. 2014; 18(2): 144–155. [PubMed: 24620940]
- Kuo WH, Gallo JJ, Tien AY. Incidence of suicide ideation and attempts in adults: The 13-year follow-up of a community sample in Baltimore, Maryland. *Psychological Medicine*. 2001; 31(07):1181–1191. [PubMed: 11681544]

- Lee JI, Lee MB, Liao SC, Chang CM, Sung SC, Chiang HC, Tai CW. Prevalence of suicidal ideation and associated risk factors in the general population. *Journal of the Formosan Medical Association*. 2010; 109(2):138–147. [PubMed: 20206838]
- Leiner AS, Compton MT, Houry D, Kaslow NJ. Intimate partner violence, psychological distress, and suicidality: a path model using data from African American women seeking care in an urban emergency department. *Journal of Family Violence*. 2008; 23(6):473–481.
- Leone JM. Suicidal behavior among low-income, African American woman victims of intimate terrorism and situational couple violence. *Journal of Interpersonal Violence*. 2011; 26:2568–2591. [PubMed: 21156688]
- Mazza JJ, Reynolds WM. A longitudinal investigation of depression, hopelessness, social support, and major and minor life events and their relation to suicidal ideation in adolescents. *Suicide and Life-Threatening Behavior*. 1998; 28(4):358–374. [PubMed: 9894304]
- Murphy CM, Hoover SA. Measuring emotional abuse in dating relationships as a multifactorial construct. *Violence and Victims*. 1999; 14(1):39–53. [PubMed: 10397625]
- Nock MK, Borges G, Bromet EJ, Alonso J, Angermeyer M, Beautrais A, ... De Graaf R. Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *The British Journal of Psychiatry*. 2008; 192(2):98–105. [PubMed: 18245022]
- Pico-Alfonso M, Garcia-Linares M, Celda-Navarro N, Blasco-Ros C, Echeburua E, Martinez M. The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *Journal of Women's Health*. 2006; 15(5):599–611.
- Saltzman, LE., Fanslow, JL., McMahon, PM., Shelley, GA. Intimate partner violence surveillance: Uniform definitions and recommended data elements. Version 1.0. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2002.
- Schneider R, Burnette ML, Ilgen MA, Timko C. Prevalence and correlates of intimate partner violence victimization among men and women entering substance use disorder treatment. *Violence & Victims*. 2009; 24(6):744–756. DOI: 10.1891/0886-6708.24.6.744 [PubMed: 20055212]
- Silverman MM, Berman AL, Sanddal ND, O'Carroll PW, Joiner TE Jr. Rebuilding the Tower of Babel: A revised nomenclature for the study of suicide and suicidal behaviors: Part II: Suicide-related ideations, communications and behaviors. *Suicide And Life-Threatening Behavior*. 2007; 37(3): 264–277. DOI: 10.1521/suli.2007.37.3.264 [PubMed: 17579539]
- Stark E, Flitcraft A. Killing the beast within: Woman battering and female suicidality. *International Journal of Health Services: Planning, Administration, Evaluation*. 1995; 25(1):43–64.
- Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The Revised Conflict Tactics Scales (CTS2) Development and Preliminary Psychometric Data. *Journal of Family Issues*. 1996; 17(3):283–316.
- Wolford-Clevenger C, Vann NC, Smith PN. The association of partner abuse types and suicidal ideation among men and women college students. *Violence and Victims*. 2016 Online first publication.
- Wolford-Clevenger C, Smith PN. The conditional indirect effects of suicide attempt history and psychiatric symptoms on the association between intimate partner violence and suicide ideation. *Personality and Individual Differences*. 2017; 106:46–51. [PubMed: 29056805]
- You S, Van Orden KA, Conner KR. Social connections and suicidal thoughts and behavior. *Psychology of Addictive Behaviors*. 2011; 25(1):180. [PubMed: 21142333]
- Zimmerman M, Mattia JI. The Psychiatric Diagnostic Screening Questionnaire: Development, reliability and validity. *Comprehensive Psychiatry*. 2001; 42(3):175–189. [PubMed: 11349235]

**Table 1**

Statistical equations for models tested

<b>Model Title</b>	<b>Level-1 Model</b>	<b>Level-2 Model</b>
Model 1 (Null)	$SI_{ij} = \beta_{0j} + r_{ij}$	$\beta_{0j} = \gamma_{00} + u_{0j}$
Model 2	$SI_{ij} = \beta_{0j} + \beta_{1j}^*(DEP_{ij}) + \beta_{2j}^*(PHYS_{ij}) + \beta_{3j}^*(DENI_{ij}) + \beta_{4j}^*(DOM_{ij}) + \beta_{5j}^*(REST_{ij}) + \beta_{6j}^*(HOST_{ij}) + r_{ij}$	$\beta_{0j} = \gamma_{00} + u_{0j}$ $\beta_{1j} = \gamma_{10}$ $\beta_{2j} = \gamma_{20}$ $\beta_{3j} = \gamma_{30}$ $\beta_{4j} = \gamma_{40}$ $\beta_{5j} = \gamma_{50}$ $\beta_{6j} = \gamma_{60}$

*Note:* SI = suicide ideation, DEP = depressive symptoms, PHYS = physical assault, DENI = denigration, DOM = dominance, REST = restrictive engulfment, HOST = Hostility

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**Table 2**

Descriptives for primary study variables

	<i>n</i>	<i>M</i>	<i>SD</i>	Skewness ( <i>SE</i> )	Kurtosis ( <i>SE</i> )
Physical assault	208	2.63	8.59	7.85 (.17)	81.16 (.34)
Denigration	205	2.84	5.15	3.04 (.17)	12.53 (.34)
Hostile Withdrawal	205	9.29	8.68	1.28 (.17)	1.58 (.34)
Dominance/Intimidation	205	2.03	4.37	4.21 (.17)	26.89 (.34)
Restrictive Engulfment	205	7.85	8.94	1.45 (.17)	1.58 (.34)
Depressive symptoms	206	3.17	2.87	0.90 (.17)	0.01 (.34)
Suicide ideation	205	0.19	0.67	4.20 (.17)	18.41 (.34)

**Table 3**

Parameters for each model tested

	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>	<i>p</i>	Model Statistics	Model Comparison
<b>Model 1 (Null)</b>							
Deviance = -223.85 Parameters = 3							
Intercept	0.04	0.01	4.28	100	<.001		
<b>Model 2 (Full Model)</b>							
Deviance = -257.46 Parameters = 9 $\chi^2 = 33.61$ $df = 6$ $p < .001$							
Intercept	0.04	0.01	5.02	100	<.001		
Depressive Symptoms	0.02	0.004	3.78	90	<.001		
Physical Assault	0.01	0.03	0.37	90	0.71		
Denigration	-0.06	0.03	-1.71	90	0.09		
Hostile Withdrawal	0.05	0.02	2.60	90	0.01		
Restrictive Engulfment	-0.03	0.02	-1.35	90	0.18		
Dominance/Intimidation	0.08	0.03	2.32	90	0.02		