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Intimate Partner Violence and Suicidal Behavior: Mediating Roles of Forgiveness and Depression

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Abstract

Objectives: Suicide is a significant public health concern, and collegiate and low socioeconomic status (SES) groups may be at particular risk. Further, persons experiencing interpersonal or intimate partner violence (IPV) have particular vulnerability to suicide, perhaps as a result of damage to the ability to forgive, and consequent negative impact on mood. However, these interrelations have not been previously examined.

Methods: We conducted serial mediation analyses to examine the indirect effect of IPV on suicidal behavior via forgiveness and depression. Our collegiate sample comprised 913 students and our low SES community sample comprised 100 primary care patients; both samples were primarily White and female. Both samples completed measures of IPV, depression, forgiveness, and suicidal behavior. Bivariate correlations and serial mediation analyses were conducted.

Results: In bivariate analyses, within both samples, IPV, depression, and suicidal behavior were all positively correlated. Forgiveness was negatively correlated with IPV, depressive symptoms, and suicidal behavior. At the multivariate level, in the collegiate sample, a serial mediating effect was found between IPV and suicidal behavior, with forgiveness and depression as serial mediators. Within the community sample, an indirect only-effect between forgiveness and depressive symptoms was found.

Conclusions: Our results indicate that IPV is related to decreased forgiveness and increased depression and, in turn, to greater engagement in suicidal behavior.

Implications: Our results may have clinical implications. Simultaneously addressing depressive symptoms, perhaps via Cognitive Behavioral Therapy, and bolstering forgiveness, perhaps via REACH therapy, may reduce risk of suicidal behaviors among persons who have experienced interpersonal violence.

Keywords: Interpersonal Violence; Suicide; Depression; College Students; Primary Care; Forgiveness

Suicidal behavior, conceptualized as thoughts about taking one's life and suicide attempts (Hirsch, Webb, & Jeglic, 2011), is a significant public health concern. Suicide is the 10th leading cause of death for Americans, with over 41,000 suicides reported in the U.S. in 2013 (Centers for Disease Control [CDC], 2013). Worldwide, over 800,000 individuals die by suicide each year, making it the 15th leading cause of death across age groups (World Health Organization [WHO], 2012). College students and individuals of low socioeconomic status (SES) may be at greater risk than others, as 20 to 30% of college students report having 'seriously considered' suicide (Brownson, Drum, Smith, & Burton-Denmark, 2011) and more than 21% of low SES individuals report thoughts of suicide (Adler et al., 2012). Numerous etiological risk factors, including interpersonal (e.g., intimate partner violence), cognitive-emotional (e.g., depression), and protective factors (e.g., forgiveness) may explain these increased risks (Bergen, Martin, Richardson, Allison, & Roeger, 2003).

Intimate partner violence (IPV) is a pervasive, yet preventable problem that affects over 12 million people annually in the U.S., with 1 in 5 women and 1 in 7 men reporting being an IPV victim (CDC, 2013), compared to 1 in 3 women worldwide (World Health Organization, 2013). IPV can be conceptualized as threatened, attempted, or completed physical, sexual, or psychological harm by a current or former partner, intimate partner and/or spouse (Mechanic, Weaver, & Resick, 2000).

College students are at high risk of experiencing IPV, as 20 to 57% of college students reported being victims of IPV (Rennison & Planty, 2003). Reports indicated that increased rates of IPV among college-aged women in the U.S., including experiences such as rape and dating violence (Rennison & Addington, 2014). This disproportionate rate of IPV in the collegiate population

may be explained, in part, by the acceptance of violence, with over 65% of college students reporting 'violence accepting' attitudes (i.e., violent arguments in a relationship are acceptable) (Murray, Wester, & Paladino, 2008; Stith & Ward, 2008; West & Wandrei, 2002). Additionally, college students are more likely than the general population to misuse alcohol (Lloyd & Emery, 2000), with 80% of collegiate men who were physically violent in relationships reporting alcohol abuse (Foran & O'Leary, 2008).

Individuals who are classified as being of low SES, characterized by below-average income, lower education, and unstable occupation or lack of occupation (Field & Caetano, 2005), and who are typically underinsured, are also at greater risk for IPV (Cunradi, Caetano, & Schafer, 2002; Salomon, Bassuk, & Huntington, 2002). Forty-two percent of uninsured women of low SES reported experiencing IPV in the last year (Collins, 2005), and 36% of a sample of low SES, uninsured men reported experiencing IPV in the last 18 months (Jewkes, 2002). This high rate of IPV may be due to factors often associated with low SES, including chronic stressors (i.e., food and financial insecurity), low education, and poor knowledge of and access to resources (Fonagy, 2003), resulting in frustration and anger which, in turn, might be expressed toward proximal others as IPV (Cunradi et al., 2002). Additionally, social and cultural norms (e.g., gender expectations regarding income), as well as societal beliefs and attitudes (e.g., stigma), as they pertain to socioeconomic status and the wellbeing of low-income persons, are shown to play a role as well (Byrne & Riggs, 1996; Norlander & Eckhardt, 2005).

Among other poor outcomes, individuals experiencing IPV are more likely to report increased suicidal behavior than counterparts not experiencing IPV (Beydoun, Al-Sahab, Beydoun, & Tamin, 2010; Bonomi et al., 2006). Previous research suggests that IPV is a risk factor for

suicidal behavior in both college students (U.S. Department of Justice, 2000) and individuals of low SES (Straus, 2008). Intimate partner violence may influence suicidal behavior directly, in conjunction with other risk factors such as vulnerability status (e.g., college student, low-income), or may do so via its impact on other factors such as cognitive-emotional functioning and mood (Devries et al., 2013).

Depression and sub-clinical depressive symptoms (e.g., including thoughts of death or dying) may be one such underlying factor which explains the relation between IPV and engagement in suicidal behavior, given the strong empirical association between depression and suicide (Thompson et al., 2006). For example, a multi-country study of domestic violence found that women who had experienced IPV were at significantly higher risk for depression and suicidal behaviors (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). As well, 30% of students who completed the American College Health Association's (2004) National College Health Assessment reported symptoms of depression in the last year. This may be due, in part, to unique stressors potentially linked to the collegiate environment, including isolation from family and traditional support systems, interpersonal and social difficulties, academic and vocational concerns, and financial strain (Wei, Russell, & Zakalik, 2005). Depression may also result from the experiences often associated with low socioeconomic status. According to the CDC (2013a or b?), 31% of the U.S. population who reported being impoverished also report a diagnosis of depression, as compared to 15.8% of persons with other socioeconomic statuses. The World Health Organization (2007) indicates similar statistics internationally, stating that impoverished individuals who are impoverished are twice as likely to experience depressive symptoms. Increases in material hardship such as financial strain, deprivation, and poverty, as well as

unemployment and loss of a job, are also associated with increases in depressive symptoms (Lupien, King, Meaney, & McEwen, 2001).

Depression and its relationship to suicidal behavior have been extensively researched (Devries et al., 2013); for example, 21% of those who have been diagnosed with clinical depression die by suicide each year, and over 40% of those who experience depressive symptoms report thoughts of suicide (Furr, Westefeld, McConnell, & Jenkins, 2001). A relationship between IPV and depression also exists (Campbell et al., 2002), with over 60% of those that experience IPV reporting symptoms of depression (i.e., feelings of worthlessness for being a victim, guilt for remaining in relationship) and in turn, increased suicidal behaviors (Campbell, Greeson, Bybee, & Raja, 2008; Devries et al., 2013; Pico-Alfonso et al., 2006). Thus, the experience of IPV appears to directly impact mood and suicidal behavior, but may also do so indirectly via its deleterious impact on potentially protective, cognitive-emotional factors such as forgiveness, which is likely a particularly-relevant characteristic within the context of IPV (Walton-Moss, Manganello, Frye, & Campbell, 2005).

Forgiveness is conceptualized as the change of cognitions, emotions, and behavior toward a transgressor or transgression, from negative to positive, while not necessarily seeking retribution or restitution for those actions (Gassin & Enright, 1995; Hargrave, 1994; Webb, 2003; Worthington et al., 2007). Forgiveness can be viewed across a variety of dimensions including forgiveness of self, of others, of situations, and perceived forgiveness by others and by God (Worthington et al., 2000).

With regard to IPV, victims may have a difficult time forgiving their abuser and may also struggle to forgive themselves for any role they perceive they might have played in the abuse,

including remaining in an abusive relationship (McCullough, Worthington, & Rachal, 1997). Previous research on forgiveness has established a relationship between forgiving an injustice, such as IPV, and relief of depression and suicidal behavior (Hirsch et al., 2011). This may be because forgiveness targets resentment and low mood by reframing the event in a positive way without dismissing the hurt inflicted by the transgressor or transgression (Enright & Fitzgibbons, 2000), allowing victims to reclaim important personal values without negating the wrongness of experienced violence (Reed & Enright, 2006). For victims, self-forgiveness may reduce risk for depression, in part, because forgiveness of the self may address feelings of guilt or shame associated with one's perceived role in IPV (e.g., "I instigated it," or "I shouldn't have stayed in the relationship") (Brown, Wohl, & Exline, 2008). Forgiveness may also reduce the intensity of anger toward a transgression or transgressor, resulting in better quality of life, including less suicidal behavior (Hirsch et al., 2011). Preliminary theory and research suggests that forgiveness-based interventions may be effective in the treatment of depression and suicidal behavior (Webb, Hirsch, & Toussaint, 2011).

We investigated the associations between IPV, forgiveness, depressive symptoms and suicidal behavior in collegiate and low-SES community samples. We propose a model of the relation between IPV and suicide, whereby the process of forgiveness is deleteriously impacted by IPV resulting in consequent symptoms of depression and, ultimately, engagement in suicidal behavior. Although previous research has established the linkages between IPV and low forgiveness and poor mental health outcomes, including depression and suicide, as well as between depression and suicide, no published data, to our knowledge, has examined all of these variables in a conceptual model across multiple vulnerable samples.

Specifically, we assessed IPV as a predictor of suicidal behavior, and proposed that the experience of IPV would affect suicidal behavior directly, but also indirectly via its effect on forgiveness (1st order mediator) and mood (2nd order mediator). We hypothesized that, at the bivariate level, positive associations would exist between IPV, depressive symptoms, and suicidal behavior, and that all of these variables would be negatively related to forgiveness. At the multivariate level, we hypothesized that the relation between IPV and suicidal behavior would be serially mediated by forgiveness and depression, such that higher levels of IPV would be related to less forgiveness and, sequentially, to greater levels of depression and suicidal behavior.

Method

Participants

Study 1 comprised college students ($N = 968$) who were living in campus housing at a rural, southeastern university. Our study was conducted in partnership with the Department of Housing and Residence Life, and participants were recruited via email invitation. A survey battery was administered online through SONA, an online research system, administered by the Department of Psychology. Student participants received five dollars, credited to their student account, for taking the survey. The collegiate sample survey battery was administered as part of a suicide prevention grant project funded by the Substance Abuse and Mental Health Services Administration.

Study 2 comprises adults receiving care ($N = 100$) from a rural, southeastern primary care clinic serving working, uninsured patients. Participants in this sample were recruited via brochures and

flyers posted throughout the clinic, postcard and email invitations, and in-person by a Clinical Psychology graduate student. Participants provided informed consent and completed either a paper-and-pencil survey or an online survey; 84 patients (84%) selected the online version. Participants in this sample received 15 dollars compensation for participation.

Measures

For both the collegiate and primary care samples, basic demographic information, such as sex, age and race/ethnicity, was collected.

Intimate partner violence. Experience of an abusive relationship was assessed using the abuse status questionnaire from the National College Health Assessment (NCHA). The National College Health Assessment aims to collect data about the health habits, perceptions, risky health behaviors, and health habits of college students (American College Health Association, 2004). The NCHA asks a variety of ‘yes/no’ questions about various health behaviors as well as more specific questions about alcohol and drug use. Specifically, the NCHA asks if participants ‘have experienced a relationship that was physically abusive within the last year.’ Participants are asked to check either ‘yes’ or ‘no’, in response to this question. The questions related to emotional, physical, and sexual abuse were combined into an abuse status category used in the collegiate sample.

In the primary care sample, the Hurt Insult Threaten Scream scale (HITS) (Sherin, Sinacore, Li, Zitter, & Shakil, 1998) was used. The HITS screening tool is a self-report measure comprised of four items, which are scaled on a five-point scale where 1 is ‘never’ and 5 is ‘frequently.’ The HITS asks how often a respondent’s partner has physically hurt them, threatened them with

harm, screamed or cursed at them, and insulted or talked down to them. Internal consistency in general adult samples ranges from .72 to .80. For this sample, the internal consistency was adequate ($\alpha = .73$).

Forgiveness. The forgiveness subscale from the Fetzer Multidimensional Measure of Religiousness and Spirituality was used in both the college and community sample (Fetzer, 2003). The three-item forgiveness sub-scale assesses forgiveness of others, forgiveness of self, and feeling forgiven by God, and is scored on a four-point Likert scale ranging from 1 ‘almost always’ to 4 ‘never.’ In previous research with college students, the forgiveness subscale exhibited adequate internal consistency ($\alpha = .76$) (Harris et al., 2008); in the current study, Cronbach’s alpha was excellent ($\alpha = .93$) in both samples. Research with primary care samples has been similar and has exhibited adequate internal consistency ($\alpha = .80$) (Lawler-Row, 2010).

Depressive symptoms. In the collegiate sample, the Beck Depression Inventory - II (BDI-II) was used. This 21-item self-report questionnaire prompts individuals to rate their attitudes, characteristics, and symptoms of depression (Beck, Steer, & Brown, 1996). Items are scored on a 4-point scale ranging from 0 (‘I do not feel sad’) to 3 (‘I am so sad and unhappy I can’t stand it’). Internal consistency for the BDI ranges from .83 to .92 in adult samples and .92 to .94 in clinical samples (Beck, Steer, Ball, & Ranieri, 1996); internal consistency in the current study was adequate ($\alpha = .88$).

In the primary care sample, participants completed the Center for Epidemiologic Studies Depression - Revised (CESD-R) scale (Eaton, Smith, Ybarra, Muntaner, & Tien., 2004). The CESD-R is a 20-item measure with 9 grouped subscales, including sadness, loss of interest, appetite, sleep, thinking and concentration, guilt, tired, movement, and suicidal ideation. The

CESD-R asks respondents to answer questions on a 5-point scale where 0 is ‘not at all or less than one day’ and 5 is ‘nearly every day for 2 weeks.’ The CESD-R is reliable, demonstrating good internal consistency (.85 to .93) in adult, community samples (Ruiz-Grosso et al., 2012). For this study, the internal consistency was excellent ($\alpha = .93$).

Suicidal behavior. The Suicidal Behaviors Questionnaire Revised (SBQ-R) was used to measure suicidal behavior in both the collegiate and community samples. The SBQ-R is a 4-item measure which investigates suicide attitudes and behaviors, including communication of intent, lifetime suicide ideation and attempts, suicidal behavior in the past year, and likelihood of future suicidal behavior (Osman et al., 2001). Each item is scored on a Likert type scale which ranges from 5 to 7 points, indicating frequency or severity. In the original development study, adequate internal consistency was exhibited ($\alpha = .82$) (Osman et al., 2001). In the current study, the SBQ-R exhibited adequate internal consistency in both the collegiate ($\alpha = .97$) and adult samples ($\alpha = .87$).

Statistical Analyses

Bivariate analyses. Pearson’s product-moment correlations were used to examine independence of, and zero-order associations between, IPV, forgiveness, depressive symptoms and suicidal behavior. Correlations between variables did not exceed the recommended cut-off for multicollinearity ($r \geq .80$).

Serial multivariable mediation analyses. Serial mediation analyses were conducted, per Hayes (2013) to examine the indirect effect of IPV on suicidal behavior via forgiveness and depression. We included forgiveness as a first order mediator and depression as the second order mediator, hypothesizing that IPV would be indirectly related to suicidal behavior; specifically, in serial

fashion, increased IPV would be associated with less forgiveness, higher depression and, in turn, to more suicidal behavior.

Results

Descriptive Results

Our college sample ($N = 913$) was largely comprised of female students (71.6%; $n = 646$), with the remaining 28.2% ($n = 254$) identifying as male or not responding (.2%; $n = 13$).

Respondents ranged in age from 17 to 55 years old, with a mean age of 20.19 years old ($SD = 3.81$). The majority of students were Caucasian (77.1%; $n = 695$) with the remaining ethnicity/race categories reported as: African American (11.1%; $n = 100$), Asian (8.1%; $n = 74$), or other or no response (3.7%; $n = 44$).

The community sample ($N = 100$) was primarily female ($n = 71$; 71%), with the remainder identifying as male (29%; $n = 29$), and ranged in age between 18 and 64 years old ($M = 42.04$; $SD = 12.81$). Our sample was primarily Caucasian (93%; $n = 93$), followed by African American (3%; $n = 3$), Asian (1%; $n = 1$), and other or don't know (3%; $n = 3$). The majority of participants reported an annual income under \$20,000 (92%; $n = 92$), with remaining annual incomes ranging from \$30,000 to \$79,999 (8%; $n = 8$).

Bivariate Results

Supporting our hypotheses, significant, positive associations existed between IPV and depressive symptoms, IPV and suicidal behavior, and depressive symptoms and suicidal behavior in both

the collegiate and community sample. Additionally, IPV, depressive symptoms, and suicidal were negatively related to forgiveness in both samples. See Table 1.

Table 1: *Bivariate Correlations: Collegiate and Community Samples*

Collegiate Sample				Community Sample			
	Forgiveness	Depressive Symptoms	Suicidal Behavior		Forgiveness	Depressive Symptoms	Suicidal Behavior
IPV	-.16**	.21**	.20**	IPV	-.31**	.35**	.20*
Forgiveness	-	-.38**	-.35**	Forgiveness	-	-.43**	-.26**
Depression	-	-	.51**	Depression	-	-	.55**

Note: * $p < .05$, ** $p < .001$. For college sample: Intimate Partner Violence = Abuse Status Questions, National College Health Assessment Scale; Forgiveness = total score of the forgiveness subscale from the Fetzer Multidimensional Measure of Religiousness and Spirituality Scale; Depressive Symptoms = Beck Depression Inventory; Suicidal behavior = Suicide Behavior Questionnaire – Revised. For community sample: Intimate Partner Violence = Hurt Insult Threaten Scream scale; Forgiveness = total score of the forgiveness subscale from the Fetzer Multidimensional Measure of Religiousness and Spirituality scale; Depressive symptoms = Center for Epidemiologic Studies Depression Revised Scale; Suicidal behavior = Suicide Behavior Questionnaire – Revised.

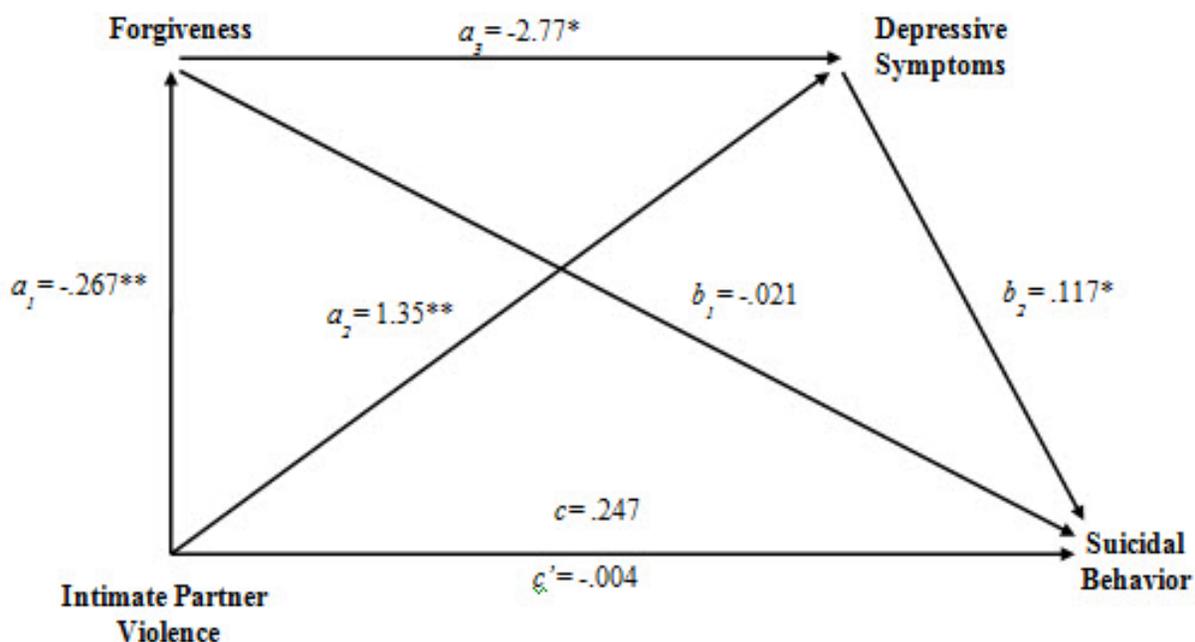
Serial Mediation Results

In partial support of the hypotheses, in the community sample, specific indirect effects were found for the relation between IPV and suicidal behavior. First, there was a significant indirect pathway for IPV through forgiveness and depressive symptoms ($a_1a_3b_2 = .087$, $CI = [.026, .215]$). This “indirect only” effect indicates that, although IPV was not directly related to suicidal behavior, it does exert an effect on suicidal behavior via its impact on forgiveness and, subsequently, depressive symptoms. Finally, there was a significant indirect pathway for IPV

through depressive symptoms ($a_2b_2 = .159$, $CI = [.041, .343]$); greater IPV was related to more depressive symptoms and, in turn, to greater suicidal behavior. The indirect effects are modeled in Figure 1. There were no significant total (c) or direct effects (c') of IPV on suicidal behavior.

Figure 1

Serial mediation of forgiveness and depression on relation between IPV and suicidal behavior in college students



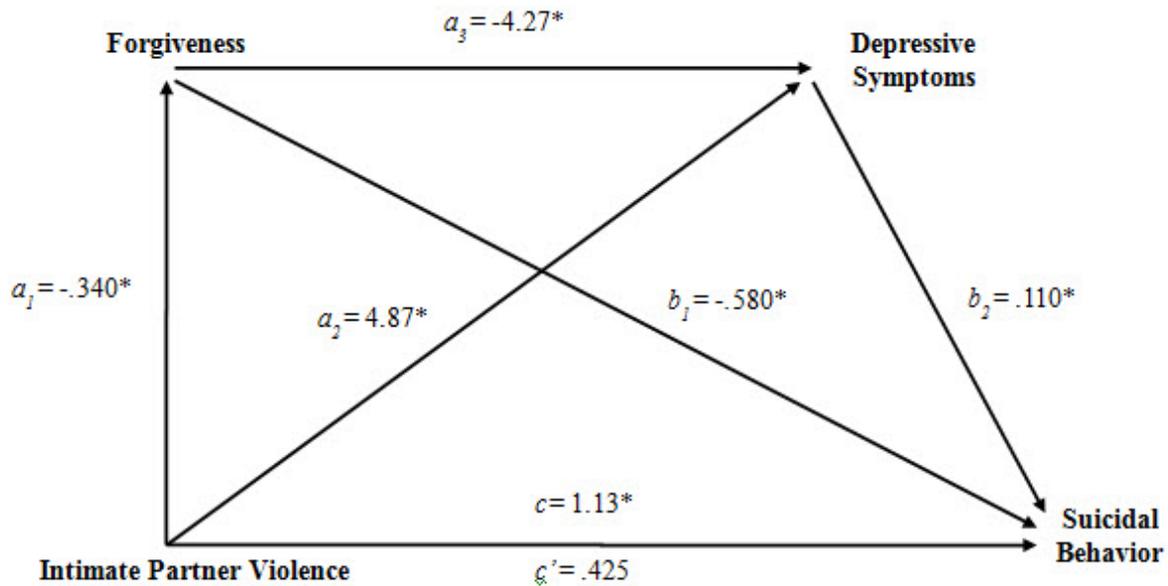
Note: $*p < .001$, $**p < .01$; Intimate Partner Violence = Abuse Status Questions, National College Health Assessment Scale; Forgiveness = total score of the forgiveness subscale from the Fetzer Multidimensional Measure of Religiousness and Spirituality Scale; Depressive Symptoms = Beck Depression Inventory; Suicidal behavior = Suicide Behavior Questionnaire – Revised.

Note: Confidence intervals: $a_1a_3b_2 = .087$, $CI = .026$ to $.215$; $a_2b_2 = .159$, $CI = .041$ to $.343$.

For the collegiate sample, a significant total effect occurred ($c = 1.32$, $SE = .274$, $t(529) = 4.81$, $p < .001$, $CI = [.780, 1.86]$), as the 95% CI of the point estimate did not cross zero. The direct effect between abuse status and suicidal behavior neared, but did not reach, significance ($c' = .425$, $SE = .244$, $t(529) = 1.74$, $p = .08$, $CI = [-.054, .903]$), indicating serial mediation. Greater levels of IPV were associated with less forgiveness and, sequentially, to more depressive symptoms and consequent suicidal behavior ($a_1a_3b_2 = .160$, $SE = .053$, $CI = [.076, .290]$). As well, IPV was related to suicidal behavior via forgiveness alone ($a_1b_1 = .197$, $SE = .171$, $CI = [.086, .367]$), and via depressive symptoms alone ($a_2b_2 = .537$, $SE = .127$, $CI = [.310, .817]$). These pathways are further described and depicted in Figure 2.

Figure 2

Serial mediation of forgiveness and depression on relation between IPV and suicidal behavior in primary care patients.



Note: $*p < .001$; Intimate Partner Violence = Hurt Insult Threaten Scream scale; Forgiveness = total score of the forgiveness subscale from the Fetzer Multidimensional Measure of Religiousness and Spirituality scale; Depressive symptoms = Center for Epidemiologic Studies Depression Revised Scale; Suicidal behavior = Suicide Behavior Questionnaire - Revised.

Note: Confidence intervals: $a_1a_3b_2 = .160$, $CI = .076$ to $.290$; $a_1b_1 = .197$, $CI = .086$ to $.367$; $a_2b_2 = .537$, $CI = .310$ to $.817$.

Discussion

Across two samples, including low SES primary care patients and college students, our bivariate results were significant and, as predicted, IPV was positively associated with depressive symptoms and suicidal behavior, and all of these variables were negatively related to forgiveness. At the multivariate level, also supporting hypotheses, the experience of IPV was related, serially, to lower levels of forgiveness, more depressive symptoms and greater engagement in suicidal behavior. In our collegiate sample, IPV was directly related to suicidal behavior, but also via its serial effects on forgiveness and depressive symptoms. In our community sample, we found an “indirect only” effect; that is, IPV was related to suicidal behavior *only* through forgiveness and depression.

Our findings replicate and support previous research indicating the deleterious association between the experience of IPV and psychopathology (i.e., depressive symptoms) and suicidal behavior (Silverman, Raj, Mucci, & Hathaway, 2001), and the beneficial relation between forgiveness, depression, and suicidal behavior (Burnette, Davis, Green, Worthington, & Bradfield, 2009), including its relation to IPV (Mitchell et al., 2006). We extend previous research, by proposing a model of underlying cognitive-emotional factors that may help to explain the IPV-suicide linkage, and which incorporates the extant theory and research on IPV, forgiveness, and mental health. For example, research shows a strong relationship between IPV

and suicidal behavior but fails to account for the cognitive emotional nuances of the relationship (Kelly & Johnson, 2008). According to extant literature, lack of forgiveness and suicidal behavior are also related and often researched in regards to the role guilt plays in the relationship (Colucci & Martin, 2008). However, our more exhaustive and concise model looks at the roles these cognitive-emotional factors play in the relationship.

Our findings suggest that not only might IPV be directly related to suicidal behavior, but is more readily related to suicidal behavior via its negative impact on an otherwise protective cognitive-emotional factor (i.e., forgiveness) and the manifestation of psychopathology (i.e., depressive symptoms). Across both of our samples, we found simple indirect effects; that is, IPV was related to less forgiveness and, in turn, to greater suicidal behavior and, similarly, IPV was related to greater depressive symptoms and, in turn, to greater suicidal behavior. This pattern of results suggests that IPV negatively affects cognitive-emotional and mood functioning independently.

With the conceptualization of IPV as a transgression-based experience, it is intuitive that such an offense may be difficult to forgive (MacLachlan, 2009). Further, a victim of IPV may feel, rightly or wrongly, that they played some role in the abuse (e.g., that they remained in an abusive relationship), making self-forgiveness more difficult (Cusack & Telesco, 2012). Finally, the shame of experiencing IPV may be overwhelming for the victim, who may feel deserted and alone, or in despair, perhaps resulting in a spiritual or existential crisis whereby they feel they need forgiveness from God (Beck, McNiff, Clapp, Olsen & Avery, 2011). It is also effortless to envision the association between IPV and symptoms of depression; for instance, abuse may result in feelings of worthlessness, social withdrawal, thoughts of death and disruption to somatic

functioning (Naeem, Irfan, Zaidi, Kingdom, & Ayub, 2008). In each case, whether low forgiveness or greater depression is examined as a mediator, suicidal behavior emerges, suggesting the salience of these factors as potential targets for therapeutic intervention.

However, it may be that, in the context of IPV, a pattern of effects occurs whereby an evaluative process is initiated that includes a cognitive-emotional assessment of the offense (e.g., forgiveness versus lack of forgiveness) with a corresponding manifestation of reactive mood (e.g., depressive symptoms), which corresponds to our results (Tsang & Stanford, 2007). We found that IPV was related to less forgiveness and, sequentially, to greater depressive symptoms and greater consequent engagement in suicidal behavior. Thus, in the context of IPV, the absence or diminishment of forgiveness as a protective factor may lead to depression because of the guilt and feelings of worthlessness that are often related to IPV (Reed & Enright, 2006). Yet, to the extent that an individual can maintain or cultivate forgiveness, there may be less deleterious influence by factors such as self-guilt (Spraitz & Bowen, 2016), greater ability to regulate emotions, and less impact on mental health functioning (Nsamenang, Webb, Cukrowicz, & Hirsch, 2013). Forgiveness of one's self and one's attacker may allow a victim of IPV to spiritually and psychologically transcend the experience of abuse, thereby allowing greater cognitive and emotional resources to be applied to maintaining mental health and refraining from suicidal behavior, perhaps in the form of problem-solving or goal-setting (Eckhardt et al., 2013).

Limitations

Our novel findings must be considered in the context of some minor limitations. Our cross-sectional design precludes examination of causality, and bi-directionality may be a possibility; for instance, depressed individuals may be less likely to be forgiving (Brown, 2003). Both of our

samples were primarily female and Caucasian, which may impact generalizability. However, females in both college and community samples are more likely to report IPV, depressive symptoms and suicidal behavior, warranting investigation (Cascardi, O’Leary, & Schlee, 1999); as well, both college and primary care samples often report higher levels of depression and suicidal behavior than the general population (Deveries et al., 2013; Kirsh, Leino, & Silverman, 2005). Although our two-sample study is a strength, different measures were utilized across samples, and so direct comparisons were not possible. However, the consistent pattern of results that emerged across samples and measures helps to confirm the robustness of our findings. Yet, future research of a prospective and longitudinal nature in diverse samples and using standardized measures is necessary to replicate and substantiate our findings.

Implications

Despite minor limitations, our results may have implications for future suicide research and prevention efforts. Incorporating forgiveness education and interventions in the treatment of individuals who have suffered IPV may be useful (Worthington, 2007). Forgiveness interventions such as REACH may help lessen the impact of IPV on depression and suicidal behavior (Worthington et al., 2000). The REACH model, designed as a forgiveness intervention, asks clients to recall the hurt, make a commitment to forgive, and hold on to forgiveness in such a way that will not only help them overcome the hurt of the transgression but may also help to overcome future offenses.

Addressing the role of depression in the relation between IPV and suicidal behavior is also important. Not only could the presence of depressive symptoms complicate the IPV healing process they may also facilitate the transition from IPV to suicidal behavior (Baker, 2009).

With regard to research, the phenomenon of suicide is complex, and involves biological, psychological, and social factors, including elements of culture, all of which need to be considered in future research to substantiate our model. For instance, the incidence and consequence of IPV, and the roles of forgiveness and depression, may differ across racial and ethnic groups, and across sex and gender groups (Hirth & Berenson, 2012). When abused, males, for instance, may be less likely to emote forgiveness due to the role gender stereotyping and masculinity may play in their experience of IPV (Balsam, & Szymanski, 2005). Same-sex IPV may also contribute particular risk for psychopathology and suicidal outcomes, as the societal pressure and stigma that currently exists for gay or lesbian, or transgender, individuals may make them more likely than heterosexual couples to stay in an abusive relationship (Coker et al., 2002), perhaps altering the manifestation and function of forgiveness (Peterman & Dixon, 2003).

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Conflict of Interest: Mariah Montgomery, Alexis Turner, Andrea Kaniuka, Jessica McKinney, Byron Brooks, and Jameson Hirsch declare that they have no conflict of interest.

Ethical Approval: All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000.

Informed consent: Informed consent was obtained from all individual participants included in the study

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