

Pathways From Intimate Partner Violence to Academic Disengagement Among Women University Students

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More knowledge is needed related to collegiate intimate partner violence (IPV) and the pathways between experiencing physical and psychological IPV and academic disengagement. Students in a University System in the southwest completed an online survey including measures of physical and psychological IPV, academic disengagement, sense of community, and safety on campus. Conditional process analyses were used to understand key pathways for 6,818 woman identified students. All models found a significant indirect path between physical and psychological IPV and academic disengagement via depression symptoms. Students' sense of community on campus was associated with less academic disengagement regardless of physical violence. The impact of psychological IPV on disengagement was stronger for those with lower senses of community. Enhancing screening and education, providing effective mental health counseling, and increasing advocacy will help institutions better address IPV.

Keywords: intimate partner violence; campus climate; academic disengagement; depression

Intimate partner violence (IPV) in the lives of women attending college impacts their health, mental health, academic success, and access to equal education (Voth Schrag, Edmond & Nordberg, 2019; Amar & Gennaro, 2005; Mengo & Black, 2016; Sabina & Straus, 2008). IPV survivors experience heightened risk for depression, anxiety, and post-traumatic stress disorder (PTSD), along with poorer health outcomes (Exner-Cortens, Eckenrode, & Rothman, 2013; Jones, Hughes, & Unterstaller, 2001). For college students, negative academic outcomes influenced by IPV may prove particularly pernicious, effecting longer term economic health and well-being long past the end of college or a

relationship (Adams, Greeson, Kennedy, & Tolman, 2013; Pandey & Zhan, 2007). Perception of campus and community climate and safety may offer both protection and risk for students when addressing violence experiences (Kelly & Torres, 2006). Federal Title IX protections include IPV (referred to as dating violence), along with sexual assault and harassment and stalking, however, the majority of Title IX compliance efforts have focused on sexual assault and harassment and subsequent impacts (Authors, 2016). While research on the impact of campus sexual assault has proliferated in recent years, especially in the period after the Department of Education 2011 “Dear Colleague Letter” and the Obama-era task White House Taskforce to Protect Students from Sexual Assault (White House Task Force to Protect Studies form Sexual Assault, 2014), research on IPV in the lives of college students is still much needed. While potential consequences of IPV in the lives of college students are beginning to be examined (Banyard, et al. 2017; Kaukinen, 2014), the pathways between experiences of IPV, depression, campus climate indicators, and academic outcomes are underexplored. Previous research has indicated that campus wide initiatives such as Green Dot may reduce rates of IPV (Coker et al., 2016), however the role of the campus climate and perception of campus safety in moderating the impact of IPV on academic outcomes remains unknown. Thus, the current study explores the pathways through which physical and psychological IPV impact academic disengagement. The research questions were

1. To what extent is the impact of *physical and psychological* IPV among women college students on behaviors of academic disengagement mediated by depression symptomology (depression) and moderated by sense of campus community?
2. To what extent is the impact of *physical and psychological* IPV among women college students on behaviors of academic disengagement mediated by depression symptomology (depression) and moderated by sense of safety on campus?

LITERATURE REVIEW

Prevalence of College Dating Violence

Previous longitudinal research indicates an estimated 88% of women experience at least one incident of physical or sexual violence from adolescence through their fourth year of college (Smith, White, & Holland, 2003). Estimates for the prevalence of IPV among collegians range from 10% to 50% of ever-partnered students (Kaukinen, 2014). In a recent study of students on 27 campuses, the American Association of Universities found that nearly 10% of partnered students reported IPV experiences since the beginning of college (Cantor et al., 2015). Previous studies have found a range of types of dating violence, with 20%–30% of relationships reporting physical violence and upward of 50% of relationships reporting forms of psychological violence (Grover, Kaukinen, & Fox, 2008; Kaukinen, 2014; Shorey, Stuart, & Cornelius, 2011). More recently, Wood, Voth Schrag, and Busch-Armendariz (2018) found that 31% of female college students in a large University system had experienced some form of IPV since enrollment at their institution, with psychological and physical forms of violence being the most common. While differences in populations and methodologies have led studies to find a range of prevalence estimates, there is no doubt that IPV is a serious issue for female students on college campuses.

Trauma, Depression, and College Dating Violence

Trauma theory identifies the psychological harm created by exposure to terror and/or fear, and has been central to developing an understanding of the causes and effects of interpersonal violence (Becker-Blease & Freyd, 2005; Tseris, 2013). Trauma theory situates problems experienced by survivors of violence and/or abuse as part of a physical and mental reaction to the stress created by traumatic incidents. Reactions are influenced partly by the broader environment in which the trauma occurs. This places the causes of psychological distress experienced by survivors in their environment, as well as within the individual (Tseris, 2013). It also recognizes that traumatic experiences disrupt homeostasis, and can have serious short- and long-term neurobiological impacts, which could be especially salient for college students using high levels of cognition (Di Pietro, 2018; Solomon & Heidi, 2005).

Strong evidence exists for the traumatic consequences of IPV for college students (Coker, Smith, McKeown, & King, 2000; Kaura & Lohman, 2007). Significant and lasting direct impacts have been observed between IPV and depression, along with PTSD, anxiety, negative self-perception, and internalizing problems (Kaura & Lohman, 2007). Among a population of women at a historically Black college/university (HBCU) in the South, Amar and Gennaro (2005) found that survivors of multiple types of dating violence (i.e., physical and psychological) had significantly higher levels of depression and anxiety than their peers. Depression among collegiate survivors of IPV also partially mediates perception of risk for future episodes of abuse, indicating that depression can be a risk factor for subsequent victimization (Helweg-Larsen, Harding, & Kleinman, 2008). Depression and other negative mental health outcomes pose serious challenges for student survivors in their own right. Follingstad (2009) advocated for the exploration of mediating and moderating variables to better understand consequences of psychological violence.

Academic Consequences of College Dating Violence

Experiencing IPV while in college has been linked to a number of negative outcomes for students, including reduced Grade Point Average (GPA), and increased risk of dropout (Kaukinen, 2014; Mengo & Black, 2016; Voth Schrag & Edmond, 2017; Voth Schrag & Edmond, 2018; Voth Schrag, Edmond, & Nordberg, 2019; Wood, Voth Schrag, & Busch-Armendariz, 2018). Brewer, Thomas, and Higdon (2018), found that student health mediated an observed association between IPV and decreased GPA in a national sample of 18- to 24-year-old undergraduates. Academic disengagement has been defined as “the degree to which students are ‘connected’ to what is going on in their classes” (Steinberg, Brown, & Dornbusch, 1996, p. 131). Academic disengagement is a red flag for difficulties in higher education, including reduced GPA and increased risk of drop out (Fredricks, Blumenfeld, & Paris, 2004). It has been conceptualized as having psychological, behavioral, and emotional components (Fredricks et al., 2004). Behavioral evidence of academic disengagement comprises actions such as being late for, or missing, class, attending class “high” or intoxicated, and turning assignments in late (Huerta, Cortina, Pang, Torges, & Magley, 2006). High levels of disengagement are linked to increased course withdrawals and increased risk of dropping out (Rumberger, 2004).

IPV has also been linked to academic outcomes including reduced GPA and increased drop out (Banyard et al., 2017; Voth Schrag & Edmond, 2017; Voth Schrag, Edmond, & Nordberg, 2019; Wood, Voth Schrag & Busch-Armendariz, 2018). In a large recent study of over 6,000 college students, Banyard et al. (2017) found that relationship violence significantly predicted lower academic efficacy, colligate stress, institutional commitment, and scholastic conscientiousness.

Addressing these experiences in the context of school can have important cascading effects for survivors, as education is an important determinant of economic stability, employment, and lifetime earnings (Adams et al., 2013; Pandey & Zhan, 2007). Data from the 2009 U.S. Census underscores the importance of higher education and completion of any college coursework for women. As analyzed by Adams et al. (2013), “When compared with women with less than a high school education, women’s earnings increased by 57% with a high school degree, 81% with some college education, 181% with a college degree, and 318% with an advanced degree” (p. 3284). For female IPV survivors in particular, access to economic resources expand women’s opportunities, increase self-sufficiency, and can buffer against dependence on an abusive partner leading to increased long-term safety from violence victimization (Adams et al., 2013; Voth Schrag & Edmond, 2017).

The Role of the Campus Community in IPV Survivor Outcomes

Universities offer a wide range of services to survivors of violence. These include on-campus counseling, police, crisis centers, victim advocacy, and medical services, which aim to prevent negative impacts, enhance a survivor’s sense of safety, and improve the campus community response to violence (Murray & Kardatzke, 2011; Sabina, Verdiglione, & Zadnik, 2017). However, many students still report not knowing about, or feeling capable of, accessing campus resources (Sabina & Ho, 2014). Support provided by the campus community has been demonstrated to buffer many of the negative impacts of IPV (Kaukinen, 2014). IPV survivors who have sought help from social institutions, peers, and family have been demonstrated to have decreased negative post-trauma outcomes (Folger & O’Dougherty, 2013). Additional insight into the potential impact of campus climate indicators, including campus community and sense of safety on campus, can be gained exploring the literature related to experiences and impacts of sexual assault on campus. Several studies have found that a strong sense of campus community is associated with increased feelings of safety on campus, and greater likelihood of intervening in situations of sexual violence, more examples of assisting friends in the case of sexual violence, and increased willingness to use bystander behaviors (Banyard, 2008; Bennett, Banyard, & Garnhart, 2013; Sulkowski, 2011). These findings can be paired with the strong evidence for the important role of informal social support in buffering negative impacts stemming from IPV to help explicate why it is possible that those with a strong sense of campus community may experience some buffering of the negative impacts of dating violence (Coker et al., 2002; Kamimura, Parekh, & Olson, 2003; Kaukinen, 2014). As such, the current study investigates the role of campus community and sense of safety in the relationship between IPV and academic disengagement.

METHODS

Study Content

The current analysis is of data collected as part of a campus climate survey of prevalence and perceptions of interpersonal violence among students enrolled on eight academic campuses of a large university system in the Southwestern United States. The survey uses behaviorally based questions to measure prevalence of IPV, along with depression, academic engagement, and institutional perceptions outcomes (Busch-Armendariz et al., 2017).

Data Collection

The anonymous web-based survey was administered through the Qualtrics platform, to students who were at least 18 or older. Students were recruited via e-mail. Depending on campus size, students were selected randomly or by census sampling. To mitigate response bias, the study was advertised as a health and well-being survey rather than a victimization survey, and the survey was open for over 4 weeks, with several reminders sent. Data were later weighed to reflect the student population. Students were randomized in the Qualtrics platform to three different survey versions to minimize length and reduce participant burden. The pathways differed on measures included. Two pathways included IPV related questions (see below for measures included). For more information on survey methods, please see Busch-Armendariz et al, (2017). Incentive drawings were offered to participants for campus-specific prizes. Study protocols were approved by the Institutional Review Board of (the 2nd and 3rd author's institution) prior to the beginning of data collection.

The Registrar from each institution provided a population file and, depending on student population size, a random sample or census approach was used to reach participants. A total of 186,790 students across the academic campuses were invited to participate and 26,417 completed the survey for a response rate of 14.1%. Respondents were included in the current analysis if they (a) self-identified as female and (b) reported having been in a dating or marriage relationship at any point since they entered college. More details on the methodology of the larger study can be found at (Busch-Armendariz et al., 2017). Due to survey pathway differences, the current sample comprises 6,818 female-identified students who had been in a relationship since beginning at the Institution of Higher Education (IHE). A description of the sample can be found in Table 1. Included students were 25.27 years old on average ($SD = 8.11$, Range 18–67).

TABLE 1. Description of the Participants ($n = 6,818$)

Demographics	Mean/ SD or %
Age at last birthday	25.27 (8.11)
Classification in school	
Freshman	13.13%
Sophomore	13.51%
Junior	20.78%
Senior	24.77%
Graduate/Professional	26.58%
Other	1.11%
Race/Ethnicity ^a	
White Non-Hispanic	41.73%
Hispanic or Latino	45.26%

(Continued)

TABLE 1. Description of the Participants ($n = 6,818$) (Continued)

Demographics	Mean/ <i>SD</i> or %
Asian	10.19%
African American	5.41%
Bi or multiracial	3.94%
Another race/ethnicity	7.64%
Sexual orientation	
Heterosexual/Straight	89.1%
Lesbian	1.9%
Bisexual	5.8%
Other	3.2%
Current living situation	
On-campus residence	14.92%
Off campus	56.51%
Off campus—with parent/guardian	24.48%
Currently taking care of children at home	18.51%
Extent of IPV victimization:	
Physical IPV	11.38% (any)
Psychological IPV	20.96% (any)

Note. IPV = intimate partner violence.

^aAdds to more than 100% because participants could choose more than one category.

Measures. Participants were asked about experiences that occurred since enrollment at their institution. Physical and psychological violence questions were asked of participants who indicated they had been in a dating relationship since enrollment. See Table 2 for bivariate analysis (Pearson correlation) for relationships between study variables. Additional information on all study measures can be found in Busch-Armendariz et al. (2017).

Physical Violence. Physical violence was measured with a scale developed by the Center for Research on Violence Against Women (2015) and previously used in similar campus climate surveys. Participants were asked about nine types of physical violence, not done in a playful or joking manner. Participants indicated the extent of behaviors (0–6+ time). In the current sample, the mean for physical violence severity was .45 ($SD = 2.61$), and the coefficient alpha is .92.

Psychological Violence. A version of Follingstad's (2011) validated tool, which has previously been used in similar campus climate surveys, was used. The measure uses five behaviorally specific questions (0–6+ times). The measure asks if a dating partner or spouse has done something like *threaten or intimidate you* or *tried to make personal decisions for you*, specifying actions not done in a playful or joking manner. In the current sample, the

TABLE 2. Means, Standard Deviations, and Pearson Correlations Between Study Variables

	Mean (SD)	1	2	3	4	5
1 Physical IPV	.45 (2.61)	–				
2 Psychological IPV	1.15 (3.68)	.54***	–			
3 Depression	8.84 (5.64)	.10***	.15 ***	–		
4 Academic disengagement	3.19 (2.48)	.09***	.14 ***	.33 ***	–	
5 Sense of campus community	29.41 (7.22)	-.06***	-.06***	-.27 ***	-.11 ***	–
6 Sense of safety on campus	2.48 (.87)	-.02	-.03*	-.12 **	.03 **	.34 ***

Note. IPV = intimate partner violence.

* $p < .05$. ** $p < .01$. *** $p < .001$.

mean for psychological violence severity was 1.15 ($SD = 3.68$), and the coefficient alpha was .87.

Depression. The Center for Epidemiological Studies Depression Scale (CESD-10) was used to measure depression (Eaton, Muntaner, Smith, Tien, & Ybarra, 2004). In the current analysis, depression symptomology is measured continuously, and the coefficient alpha is .81.

Academic Disengagement. Academic disengagement was measured using a 5-item scale modified by the team of violence and harassment researchers and student affairs professionals who developed the Administrator-Researcher Campus Climate Collaborative survey, based on the work of Hanisch and Hulin (1990) and Huerta et al. (2006). Participants were asked about the frequency of the following behaviors: being late for class, doing poor work, missing class, attending class intoxicated or “high,” and making excuses to get out of class. The scale also assess the frequency of disengagement, ranging from never to always. In the current sample, the mean is 3.19 ($SD = 2.48$), and coefficient alpha is .67.

Sense of General Safety on Campus. A measure of sense of safety on campus was adapted from a tool created by (Furlong, 1996). Participants were asked eight questions like: perception of safety walking across campus in the day and night, attending campus events and walking in parking lots or garages. Perception of safety was measured with a 5-point scale (strongly agree to strongly disagree). The coefficient alpha in this sample is .75.

Sense of Community on Campus. Sense of community on campus was measured with eight items using a 5-point scale (strongly agree to strongly disagree) adapted from Peterson, Speer, and McMillan (2008). Items included: *I can get what I need, I feel like a member of this university, and I belong at this university.* The coefficient alpha for the current sample is .92.

Demographics. Demographic questions were modified from the Johns Hopkins climate survey (Johns Hopkins University, 2014). Some demographic categories were collapsed for analysis and reporting. Caretaking of children and housing situation are controlled in multivariate models because each has been identified as a strong predictor of academic engagement in IHEs, with caretaking students and those living on campus more likely to demonstrate academically engaged behaviors (Pascarella & Terenzini, 2005).

DATA ANALYSIS

Conditional process analyses were conducted to determine whether the associations between physical and psychological IPV and academic disengagement were mediated by depression symptoms, and if these relationships were moderated by campus climate factors including sense of safety on campus and sense of community on campus.¹ The significance of hypothesized pathways was tested directly using the PROCESS macro for SPSS (Hayes, 2018). This technique applies a regression-based path analysis strategy which estimates relationships simultaneously. Models were conducted for each type of IPV (i.e., psychological and physical) and each moderating factor (campus safety and community community). PROCESS employs bootstrapping to estimate 95% bias-corrected confidence intervals for all pathways. Figures 1–4 illustrate the four statistical models, with coefficients for each pathway indicated. Pathways that were found to be insignificant are represented via a dashed line. The sample size of 6,818 is well above the needed number of observations for power to detect differences in a five-variable conditional process model (Hayes, 2018). All conditional process models controlled for demographic characteristics including age, housing situation (on campus, off campus, and off campus with parents), and having children at home.

RESULTS

All four models find a significant indirect path between physical or psychological IPV and academic disengagement behavior through depression symptomology. In each model, an increase in severity of IPV experienced leads to increased depressive symptoms, which in turn leads to increased behaviors of academic disengagement. In *model one* (illustrated in Figure 1) the direct path between physical IPV severity and academic disengagement was insignificant in the full model, $\beta = .05$, $t = 1.62$, $p = .10$. In this model, a student's sense of community on campus has a significant direct effect on their academic disengagement behaviors, $\beta = -.01$, $t = -2.04$, $p = .04$, but there is no interaction effect between extent of IPV and sense of campus community on a student's disengagement behaviors, $\beta = .00$, $t = .38$, $p = .70$. Students with a stronger sense of community on campus had disengagement behaviors irrespective of experiences of physical IPV. In *model two* (illustrated in Figure 2) the direct path between severity of psychological IPV and academic

disengagement remains significant in the full model, $\beta = .12, t = 4.31, p = .00$. Higher levels of psychological IPV are associated with more academic disengagement above and beyond the mediational effect of depression symptoms. In this model, the direct effect of sense of campus community on academic disengagement becomes insignificant, $\beta = -.01, t = -1.36, p = .17$. However, a significant interaction between extent of psychological IPV and sense of campus community is observed, $\beta = -.002, t = -2.09, p = .03$. For students with higher senses of community on campus, the impact of psychological IPV on academic disengagement behaviors is lower than for students with lower senses of community on campus.

In *model three* (illustrated in Figure 3) the direct path between severity of physical IPV and academic disengagement remains significant, $\beta = .07, t = 3.64, p = .00$. Higher levels of physical IPV are associated with more academic disengagement above and beyond the

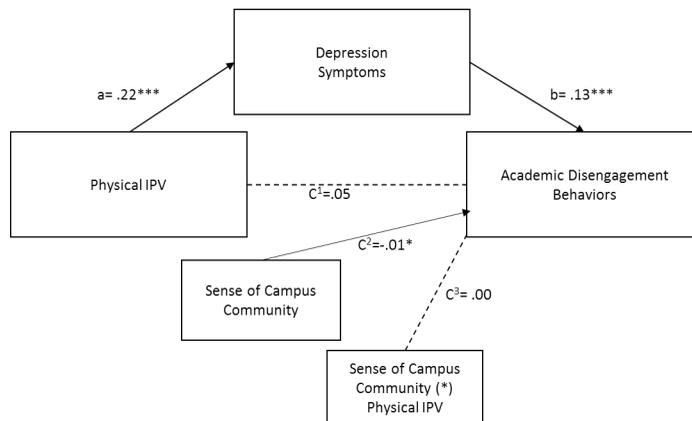


Figure 1. Moderated mediational analysis for the association between physical IPV and academic disengagement with depression symptomology and sense of campus community.

Note. IPV = intimate partner violence.

* $p < .05$. ** $p < .01$. *** $p < .001$.

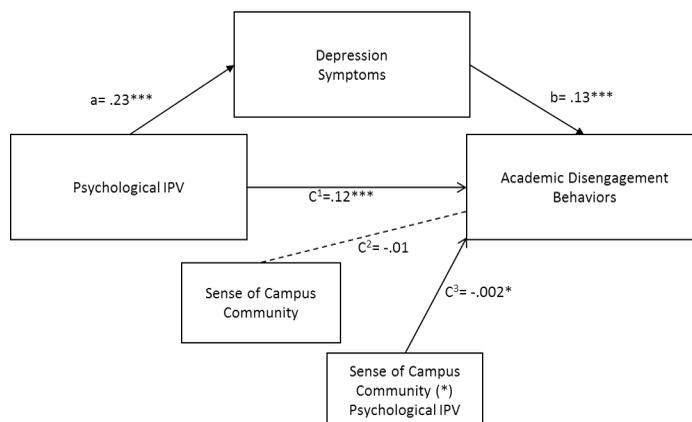


Figure 2. Moderated mediational analysis for the association between psychological IPV and academic disengagement with depression symptomology and sense of campus community.

Note. IPV = intimate partner violence.

* $p < .05$. ** $p < .01$. *** $p < .001$.

mediational effect of depression symptoms. In this model, a student’s sense of general safety on campus has a significant direct effect on their academic disengagement behaviors, $\beta = .10, t = 4.63, p = .00$, but there is no interaction effect between extent of IPV and sense of safety on campus on a student’s disengagement behaviors, $\beta = .00, t = -.13, p = .90$. Students with a stronger sense of safety on campus had fewer disengagement behaviors regardless of their experiences with physical IPV.

In *model four* (illustrated in Figure 4), the direct path between severity of psychological IPV and academic disengagement remains significant, $\beta = .08, t = 5.38, p = .00$. Higher levels of psychological IPV are associated with more academic disengagement above and beyond the mediational effect of depression symptoms. In this model, a student’s sense of general safety on campus has a significant direct effect on their academic disengagement

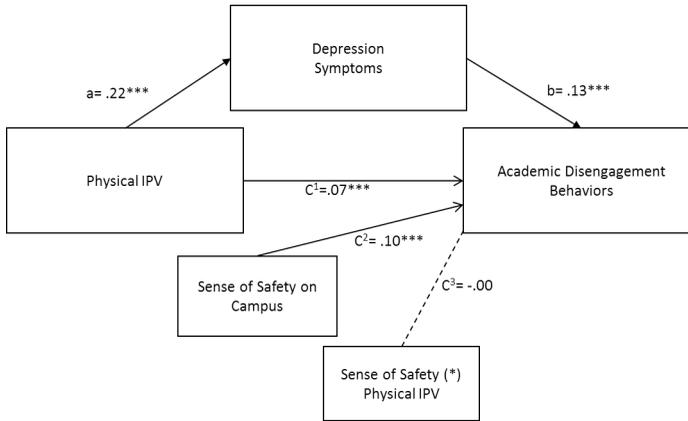


Figure 3. Moderated mediational analysis for the association between physical IPV and academic disengagement with depression symptomology and sense of campus.

Note. IPV = intimate partner violence.

* $p < .05$. ** $p < .01$. *** $p < .001$.

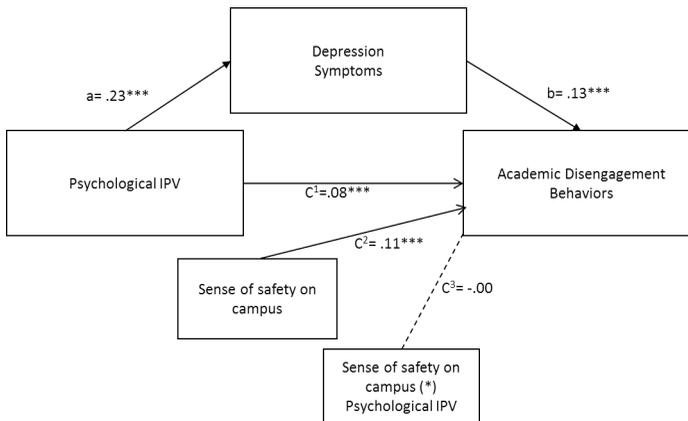


Figure 4. Moderated mediational analysis for the association between psychological IPV and academic disengagement with depression symptomology and sense of campus.

Note. IPV = intimate partner violence.

* $p < .05$. ** $p < .01$. *** $p < .001$.

behaviors, $\beta = .11$, $t = 5.04$, $p = .00$, but there is no interaction effect between extent of IPV and sense of safety on campus on a student's disengagement behaviors, $\beta = -.00$, $t = -.73$, $p = .46$. Students with a stronger sense of safety on campus engage in fewer disengagement behaviors regardless of their experiences with psychological IPV.

DISCUSSION

The findings of the current study highlight the importance of addressing IPV and its impacts for college students. All four tested models found a significant indirect path between physical and psychological IPV and academic disengagement through symptoms of depression. Physical violence was found to be associated with academic disengagement via depression symptoms, but not directly linked to disengagement when the model controls for the student's sense of community on campus. Psychological violence is significantly associated with academic disengagement both directly and indirectly via depression symptoms. Students' sense of community on campus was associated with fewer academic disengagement behaviors, regardless of physical violence experiences. However, the impact of psychological IPV on academic disengagement was significantly higher for those that had a lower sense of community on campus. When considered in the context of trauma theory, which highlights how the context of a traumatic event can shape survivors reactions, this could suggest that the school environment can have a role in shaping post-trauma academic outcomes for survivors of psychological IPV. While increased sense of safety on campus was significantly associated with fewer academic disengagement behaviors, the extent of this impact did not vary by extent of physical or psychological IPV.

These findings underscore the impact of psychological forms of IPV in the lives of college women. Psychological violence increased academic disengagement impacts directly and as a result of increased depression symptomology, especially when moderated by lower sense of community on campus. Previous literature has established the impact of psychological violence on mental and physical health outcomes for women in the general population (Coker et al., 2000) and particularly for depressive symptoms (Follingstad, 2009). Previous literature with female college IPV survivors indicates that barriers to increasing safety and potentially leaving an abusive relationship may stem from a lack of information about recognizing risks involved with abusive relationships (Edwards et al., 2012). As polyvictimization of IPV types is a significant predictor of depression among female survivors (Sabina & Straus, 2008), advocates and counselors on campus should assess for different types of IPV, including sexual, physical, psychological, and economic abuse. These findings emphasize the need to help counselors, preventionists, student affairs, and other professionals recognize psychological IPV and include it in programming and screening. Counselors on college campuses may also benefit from making a practice of screening for IPV in cases where depression symptomology is observed, in an effort to identify and address potential root causes of mental distress.

Findings also suggest that students with a stronger sense of community on campus may experience some buffering from the impact of psychological IPV on academic disengagement. While additional research is needed to further understand this result, it suggests that the social support and informal and formal resources that students experience in their campus communities can help to keep them engaged and active in the classroom, even in the face of IPV. Depression was a partial mediator of the link between physical and psychological IPV and increased academic disengagement. It is imperative that campuses

provide services in the immediate aftermath of violence to address needs and make academic accommodations, and also provide longer term mental health support to address experiences of depression that could impact success in school. These data point to the role of IHEs in enhancing survivors' sense of community as a strategy for decreasing the *impact* of abuse. Given the wide range of students attending modern IHEs, schools should use a variety of strategies for promoting community, including targeting sometimes overlooked student groups like commuter and nontraditional students.

The broader higher education literature provides some guidance related to building campus community as well. Research shows that academic and social integration are critical to enhancing students' feelings of belonging and community on campus, especially for students with marginalized identities including students of color and Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, + (LGBTQ+) students (Hurtado & Ponjuan, 2005; Maestas, Vaquera, & Zehr, 2007). For these students and others, developing ties to the community enhance access to formal and informal supports on campus, and drive increased engagement in academic and social venues. Students could benefit from opportunities to interact with and gain support from faculty and students in their academic disciplines, as well as engage with those who share interests or identities in common. Research related to building virtual communities among in-person and online students could point to important strategies for building community in the evolving landscape of higher education (Wighting, Liu, & Rovai, 2008). Taken together, strategies that aim to enhance students' campus community integration should be viewed much as social support interventions for IPV—aiming to bolster the informal support networks that are critical to dealing with challenges in the face of violence.

When resources are not available, or when institutions react insensitively or fail to take action, survivors may experience institutional betrayal (Smith & Freyd, 2014). Rooted in trauma and betrayal theory, experiences of institutional betrayal involve acts committed by the institution or institutional representatives, including acts of commission (such as harassment or retaliation) or omission (such as lack of services or failure to respond) that could increase trauma after victimization. Recent scholarship on institutional betrayal indicates that it increases trauma symptoms among interpersonal violence survivors on college campuses, which could impact the academic outcomes of collegiate survivors (Smith & Freyd, 2014). These findings underscore the need for campuses to minimize risk for institutional betrayal by having transparent, protective, and supportive responses to survivors in place, which may decrease the sense of social betrayal that can contribute to traumatic responses (Becker-Blease & Freyd, 2005; Smith & Freyd, 2014). Given the importance of the sense of community on campus for IPV survivors, future research should address the impact of institutional betrayal on survivors' experiences of the campus community and its resultant impact on student outcomes. Research should also investigate specific steps campuses can take to decrease the likelihood of experiences of institutional betrayal.

One potential strategy for building a strong sense of community and preventing a sense of institutional betrayal is the provision of campus-based advocacy services. Advocacy approaches on campus are borrowed from the community models and involve case management, psychoeducation, resource and referrals, and empathic listening (WHTFPSSA, 2014). Many advocacy interventions are centered in empowerment theory, emphasizing survivor autonomy, cultural competence, choice, and decision-making rather than taking a prescriptive approach to services (Campbell, 2001; Davis & Lyon, 2014). Empowerment practice can be infused throughout micro- and macroprograms that serve as system brokers and aim to decrease self-blame, increase responsibility, and connect survivors with shared

experiences (Busch-Armendariz & Valentine, 2000). These survivor-centered approaches could be effective in increasing survivor empowerment and decreasing experiences of institutional betrayal. They also depend on a trauma-informed lens that recognizes the ongoing impacts of past and current violence on survivors (Goodman & Epstein, 2008). For colleges, expanding such services could be central to improving survivor outcomes, including academic and mental health outcomes.

LIMITATIONS

The study results should be viewed in light of several important limitations. First, the measures of IPV used, only capture some facets of abusive relationships, and may miss domains of violence that are salient to college students, including sexual and cyber abuse. The study was cross-sectional in design, preventing an analysis of change over time. Future work should assess the impact of dating violence on academic outcomes of students, longitudinally. The extent to which participants accessed IPV or sexual assault services, or the extent to which these services impacted the academic or mental health outcomes of students is not controlled for in the current analysis. Information related to services seeking and disclosure of violence experiences in the broader study sample can be found in (Busch-Armendariz *et al*, 2017). While the extent of services engagement was measured in the survey the study is also focused on female-identified IHE students. While this is an important population, it misses any potential differences in effect or impact for male-identified and nonbinary students.

Because these data come from students on eight campus, there may be some campus-specific (i.e., nested) effects with regard to campus climate or academic indicators that are not captured in the current analysis. A structural equation modeling approach that considers such nesting could provide additional insight into the layers of influence at play.

As previous work (e.g., Banyard *et al.*, 2017) has identified links between academic difficulty and experiences of sexual violence for college students, the role of sexual violence within intimate relationships deserves future sustained attention. Additionally, the disengagement scale has a mediocre reliability coefficient, suggesting more work could be done to improve the measurement of the disengagement behaviors in this population. Care should be taken in generalizing these findings. Given the sample size and rigor in design, these findings are potentially generalizable to other large university systems in the southwest, but demographic differences mean that institutions should evaluate the extent to which these data reflect their student bodies. Finally, it should be noted that those who have been most academically impacted by IPV may have dropped out prior to study administration, removing them from the sample and analysis.

IMPLICATIONS FOR CLINICAL PRACTICE

The current findings underscore the importance, and potential for a multiplicative positive impact, of IHEs fully funding group-based programming for survivors. These formats are cost effective, allowing for overburdened student mental health services to serve more students at a time. Importantly, group formats could be especially effective at building the

kind of social supports and sense of community that these findings suggest could be a protective factor against academic disengagement for this population (Davies, Burlingame, & Layne, 2006). Trauma interventions including cognitive behavioral therapy and cognitive processing therapy can be provided in a group format and over a short time period. These interventions have been found to be effective in addressing depression symptoms in IPV survivors, as well as at ameliorating survivors' risks of future violence victimization (Fritch & Lynch, 2008). However, group-based mental health intervention may not be appropriate for all survivors, as some may feel more comfortable discussing experiences of dating violence one-on-one with a counselor (Hansen, Eriksen, & Elklit, 2014). The significant impact of depression in these models suggests that University counseling centers should provide effective mental health treatment in individual or group formats, as requested by survivors, to meet the needs and preferences of survivors.

IMPLICATIONS FOR PREVENTION, POLICY, AND RESEARCH

The current findings highlight the continued necessity of violence prevention efforts aimed at adolescents and young adults, particularly those seeking to further their education. In a national and state policy environment that combines Title IX retrenchment with increased focus on retention and completion, the current study provides evidence for the importance of strong violence prevention and intervention services on campus. College prevention programs have focused mostly on sexual assault, such as bystander intervention (McMahon & Banyard, 2012) with some focus on IPV (Coker et al., 2016). Program modifications and testing are needed to see if existing models will work to prevent IPV in the college context. Several promising and evidence-based IPV prevention approaches exist in the middle and high school age to promote healthy relationship skills, and decrease victimization and perpetration such as Safe Dates and The Fourth R (Niolon, et al., 2017). Adapting these programs for a college audience is a potential approach for addressing the primary and secondary prevention education needs of emerging adults.

Policy in the campus context must address the lived experiences of IPV among students. Increased focus on sexual assault has contributed greatly to the implementation of prevention and intervention programming, and comprehensive policies to address consent, reporting, and services on campus. While IPV survivor experiences may be applicable to many of these policies, the unique experiences of this group of people may merit additional solutions. This may include community collaboration; safety planning; application of protective orders on campus; and accommodations for injuries, as well as academic accommodations. As there is an increasing focus on training staff and faculty for sexual assault disclosures, training and preparation for IPV is needed, particularly considering the potential for ongoing violence and safety concerns. Faculty training should explicitly acknowledge the observed association between experiences of IPV victimization and academic disengagement behaviors. These policy approaches may increase sense of community and decrease risk for institutional betrayal.

These findings suggest several areas in need of additional research. Campus climate surveys could include indicators of community connectedness and a range of academic factors to provide on-the-ground feedback to administrators on the impacts of IPV on their campuses. This could both build the general knowledge base and provide institution-specific information from which to build tailored response plans. While the current study provides

evidence for the role of depression, future work is needed to explore mental health factors such as PTSD, substance use, and anxiety. Longitudinal research is needed to measure change over time. Evaluation is also needed to test implementation and program outcomes, and cultural adaptability for diverse populations. Studies repeatedly demonstrate that bisexual college women experience increased rates of sexual assault, and this could include sexual assault within the context of dating relationships (Martin, Fisher, Warner, Krebs, & Lindquist, 2011). However, this phenomenon is not well understood, and deserves future-specific attention, particularly to understand the extent to which forms of IPV victimization (including nonsexual forms) may be influencing the academic and mental health trajectories of bisexual students. There is also evidence to suggest that key subpopulations of college students feel less safe on campus, including women of color and sexual minority students (Tomsich, Gover, & Jennings, 2010). Given the findings of the current study, further investigation to understand the impact of campus climate variables specifically among sexual minority students and students of color is clearly needed in order to understand the influence of social location on the pathway between IPV and academic outcomes.

NOTE

1. Conditional process analysis is uniquely suited to answering the current research questions. As described by Hayes (2018), it is a statistical technique using a regression-based framework which “describe[s] the conditional nature of the mechanism or mechanisms by which a variable transmits its effect on another . . . Conditional process analysis . . . focuses on the estimation and interpretation of the conditional nature of the indirect and or direct effects of X on Y in a causal system” (Hayes, 2018, pp. 10–11).

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