



COVID-Specific Coercive Control among Emerging Adults Attending College: A Brief Note

Heather Littleton¹ · Katie M. Edwards² · Kayla E. Sall³ · Stephanie Lim² · Victoria Mauer²

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Abstract

The COVID-19 pandemic represents a “perfect storm” with regards to risk for intimate partner violence (IPV). Abusive partners may engage in novel forms of coercive control, such as pressuring their partner to engage in activities associated with COVID-19 infection risk (e.g., attend a large gathering). However, no empirical research has focused on COVID-specific coercive control. The current study sought to evaluate the prevalence of COVID-specific coercive control in a large sample of U.S. college students, as well as its association with other forms of IPV and depression and anxiety. A total of 2,289 undergraduate students attending eight U.S. universities who were currently in a sexual/dating/romantic relationship completed an online survey in Fall 2020 about COVID-specific coercive control, other forms of IPV (psychological, physical, sexual, coercive control) and depression and anxiety symptoms. Overall, 15.5% ($n = 355$) of students reported experiencing COVID-specific coercive control. Individuals who experienced COVID-specific coercive control were more likely to have experienced all other forms of IPV than those who did not experience COVID-specific coercive control. Further, individuals who experienced COVID-specific coercive control had significantly greater anxiety than individuals who did not experience any form of IPV. Individuals who experienced both COVID-specific coercive control and other forms of IPV had the highest levels of depression and anxiety. COVID-specific coercive control may serve to increase depression and anxiety, particularly if it co-occurs with other forms of IPV. Future work should evaluate the prevalence and long-term impact of coercive control during the COVID-19 pandemic.

Keywords COVID-19 · Intimate partner violence · Depression · Anxiety Coercive control · College students

It is well-documented that mass trauma events are associated with increases in violence, particularly intimate partner violence (IPV), defined as violence occurring between dating/romantic/sexual partners (Sety et al., 2014). IPV can take multiple forms including physical violence (e.g., hitting, beating, throwing things), psychological violence (e.g., swearing, belittling, insulting), and sexual violence (e.g., rape, sexual coercion; World Health Organization, 2021). IPV can also include coercive behaviors (e.g., isolating, controlling partner’s finances), with IPV that includes coercive control associated with more frequent and severe violence

as well as negative mental health outcomes (Hardesty & Ogolsky, 2020). Like other disasters, a growing body of literature supports that the COVID-19 pandemic is associated with increases in IPV (Viero et al., 2021). Indeed, it is posited that the pandemic represents a unique confluence of stressors and social conditions which can be conceptualized as a “perfect storm” as far as increasing risk for IPV (Usher et al., 2021).

Specifically, individuals are likely to experience a host of stressors in connection to the pandemic, including financial uncertainty, loss of employment, social isolation, disruption in daily routines, increased caregiving responsibilities, fear of COVID-19 infection, physical health complications following COVID-19 infection, and grief due to loss of loved ones from COVID-19 (Gresham et al., 2021; Moreira & da Costa, 2020; Usher et al., 2021). These stressors increase conflict and stress within romantic/dating relationships and thus increase the likelihood of IPV (Gresham et al., 2021). At the same time, individuals experiencing IPV have

✉ Heather Littleton
hlittlet@uccs.edu

¹ Lyda Hill Institute for Human Resilience, University of Colorado Colorado Springs, Colorado Springs, CO, USA

² University of Nebraska Lincoln, Lincoln, NE, USA

³ East Carolina University, Greenville, NC, USA

decreased access to both informal and formal supports to assist them in managing IPV or leaving an abusive relationship (Moreira & da Costa, 2020; Usher et al., 2021). Finally, abusive partners are more able to monitor and control their partner's behavior and access to resources because their partners are home more often (Moreira & da Costa, 2020). Supporting these assertions, several studies have documented an association between COVID-19 related stressors and risk for IPV victimization (e.g., Arenas-Arroyo et al., 2021; Cannon et al., 2021; Gresham et al., 2021).

Individuals may also engage in coercive behaviors that exploit their partner's fears of COVID-19 infection. Indeed, anecdotal reports have documented incidents of individuals preventing their partners from washing their hands to reduce infection risk or threatening to bar their partners from seeking medical care if they develop COVID-19 symptoms (Campbell, 2020). In addition, a recent qualitative study of IPV victims' social media posts revealed that victims reported that their partners leveraged aspects of the COVID-19 pandemic to control and isolate them, including berating them for engaging in behaviors that could increase their risk for COVID-19 infection, falsely informing others that they were infected with COVID-19, and purchasing weapons under the guise of protecting the household from potential social unrest (Lyons & Brewer, 2021). Despite this initial evidence that partners may engage in coercive behaviors specific to COVID-19, to our knowledge no extant empirical research has documented the prevalence of COVID-specific coercive control behaviors or the impact of experiencing COVID-specific coercive control, including in the context of other forms of IPV.

The goal of this brief note was to examine the prevalence of COVID-19-specific coercive behaviors related to pressuring one's partner to do things that can increase their risk of infection (e.g., not socially distance, attend a large social gathering). The present study utilized a large sample of undergraduate students attending eight U.S. universities who participated in a study of college student relationships in the Fall 2020 academic semester. College students are an important population to study with regards to IPV during the pandemic given the documented high rates of IPV among students pre-pandemic (e.g., Duval et al., 2020) and the unique ways (e.g., displacement from campus, increased financial and caregiving responsibilities, large outbreaks of COVID-19 on college campuses) in which COVID-19 has affected them (Liu et al., 2020; Walke et al., 2020). As such, one would expect that college students would be vulnerable to IPV during the pandemic, as well as vulnerable to COVID-related coercive control. Given some evidence that certain racial/ethnic, sexual, and gender minority groups may experience IPV at higher rates, we also evaluated whether minority status (e.g., gender, race, sexual orientation) was related to risk for COVID-specific coercive control (Cho

et al., 2020; Pittman et al., 2022; Whitfield et al., 2021). We also examined the association of COVID-specific coercive control with other forms of IPV victimization. Finally, we evaluated the association of COVID-specific coercive control with depression and anxiety symptoms, including whether this association varied among individuals who also reported experiencing other forms of IPV as compared to those who did not experience other forms of IPV and those who experienced IPV in the absence of COVID-specific coercive control. Given prior research supporting that coercive control is associated with more severe violence and negative outcomes of IPV (Hardesty & Ogolsky, 2020) we hypothesized that individuals who experienced COVID-specific coercive control along with other forms of IPV would report the highest level of depression and anxiety symptoms. Additionally, given that COVID-specific coercive control involves exploiting one's partner's fears of COVID-19 infection, we hypothesized the COVID-specific coercive control would be associated with elevated anxiety symptoms.

Method

Participants

Participants were 2,289 undergraduate students attending eight medium or large U.S. universities (1 in the East, 2 in the Northeast, 2 in the South, 2 in the Southwest, and 1 in the West) who completed an online survey in the Fall 2020 academic semester regarding their experiences with COVID-specific coercive control as part of a larger study of IPV. The study was open to currently enrolled undergraduate students between the ages of 18 and 24. Participants were drawn from a total sample of 5,461 respondents and were restricted to those who reported that they were currently in a dating/romantic/sexual relationship and who completed the entire survey. Participants were 20.0 years of age on average ($SD = 1.6$). The majority were women (77.4%, $n = 1,771$), 19.1% ($n = 448$) were men, and 3.0% ($n = 68$) were transgender/gender diverse (TGD). Most participants identified as heterosexual (75.8%, $n = 1,734$) with 14.6% ($n = 334$) identifying as bisexual/pansexual, 3.6% ($n = 81$) as gay/lesbian, and 3.7% ($n = 85$) as another sexual minority identity. As far as race/ethnicity, 67.2% ($n = 1,538$) were White, 15.0% ($n = 344$) were Latinx, 5.2% ($n = 120$) were Black, 5.3% ($n = 121$) were multiracial, and 4.4% ($n = 100$) were Asian/Pacific Islander. The remaining 2.1% ($n = 48$) of participants selected another racial/ethnic identity (e.g., Native American) or selected "other." A total of 79.3% ($n = 1,815$) were currently in a serious/committed relationship, 16.9% ($n = 388$) in a casual relationship, and 3.8% ($n = 86$) in more than one type of relationship. Finally, 71.2% ($n = 1,629$)

were living either on campus or in a nearby apartment/home, with 37.0% ($n = 848$) living on campus.

Procedures

Participants were recruited to be in a confidential online survey about college student relationships in the Fall 2020 semester as part of the Student Health, Adjustment, and Relationship Experiences Study (SHARE study). The larger study from which these data are drawn focus on campus climate and college students' experiences with IPV (not specific to COVID-19). Participants were primarily recruited via individual emails sent to all undergraduate students on the eight participating campuses, with students receiving two to three recruitment emails. Information about the study was also disseminated via campus social media postings and listserv messages. The study was advertised as open to all enrolled undergraduate students between the ages of 18 and 24 and the enrollment window ranged from 4 to 10 weeks across campuses. Overall participation rates ranged from 1.2% to 7.9% ($M = 4.5%$) of the total undergraduate student body and participants completed the survey between September 13, 2020, and November 23, 2020. The online survey contained measures assessing demographics, relationship status, IPV in the past six months, past six months symptoms of depression and anxiety, and COVID-specific coercive control, as well as other measures not utilized in the current study.

Measures

Relationship Status

Participants were asked to indicate their current relationship status from a provided list. Those who indicated they were single/not dating were excluded. Individuals' current relationship status was categorized as serious/committed (serious/committed dating relationship, engaged, married) or casual (friends with benefits, casual dating relationship).

Intimate Partner Violence

Items drawn from the Sexual Gender Minority Conflict Tactics Scale-2 (SGM CTS-2; Dyar et al., 2021) were administered to assess psychological, physical, and sexual IPV victimization in the past six months. The SGM CTS-2 was derived from the Conflict Tactics Scale-2 (CTS-2; Straus et al., 1996), with items modified to be more inclusive of the experiences of sexual and gender minority individuals. For each item, individuals were asked if a dating or sexual partner had done the following to them in the past six months. Nine items assessed experiences of psychological IPV (e.g., swore at me, destroyed something that belonged

to me), eleven items assessed physical IPV (e.g., twisted my arm or hair, slapped me, kicked me), and five items assessed sexual IPV (e.g., used threats to make me have sex, had sex with me when I was unable to consent because I was high, drunk, or passed out). Individuals who endorsed any of the items on each subscale were coded as having experienced that form of IPV. Supporting the measure's psychometrics, a confirmatory factor analysis conducted with nearly 400 sexual and gender minority (SGM) individuals assigned female at birth replicated the factor structure of the original CTS-2. In addition, endorsing each form of IPV was associated with ineffective couple communication and jealousy, supporting convergent validity (Dyar et al., 2021).

Participants were also administered eight items modified by Dyar and colleagues (2021) to assess coercive control victimization. These items were drawn from the Coercive Behaviors Scale (Frankland & Brown, 2014) and the 2010 National Intimate Partner and Sexual Violence Survey (Black et al., 2011). Items assessed monitoring behaviors (e.g., monitored my time and made me account for my whereabouts), controlling and isolating behaviors (e.g., limited my use of the phone or computer; made it difficult for me to see friends or family), and threats (e.g., threatened to hurt someone I love). Individuals who endorsed any of the items were coded as having experienced coercive control. Supporting the scale's psychometrics, items loaded onto a single factor in a confirmatory factor analysis. Supporting convergent validity, coercive control was correlated with experiencing the other types of IPV (Dyar et al., 2021).

We conducted a confirmatory factor analysis of the IPV and coercive control items utilizing the current dataset. All factors were allowed to correlate. Results of the CFA supported overall model fit, $\chi^2(489) = 682.77$, $p < 0.001$, CFI = 0.99, TLI = 0.98, RMSEA = 0.01 (90% CI = 0.009–0.014), SRMR = 0.09. Further, all items significantly loaded on their respective factor (psychological 0.79–0.92, physical 0.72–0.92, sexual 0.75–0.94, coercive control 0.80–0.92).

COVID-Specific Coercive Control

Five researcher-created items assessed COVID-specific coercive control. Items assessed experiences of being pressured or coerced to engage in common behaviors among college students that could increase risk for COVID-19 infection (e.g., attending a large gathering/party, spending time with someone who potentially had an active COVID-19 infection). For each item, individuals were queried as to whether they felt pressure from a dating or hook-up partner to engage in each behavior in the past six months. Specifically, items assessed pressure to not wear a mask, to not socially distance, to attend a large gathering, to see one's partner despite being worried about them possibly being infected with COVID-19, and to have sex or hook-up with

one’s partner despite being worried about them possibly being infected with COVID-19. Individuals who endorsed having experienced one or more of these behaviors were coded as having experienced COVID-specific coercive control. A factor analysis conducted on these items utilizing principal axis factoring with a varimax rotation supported that all items loaded onto a single factor (item loadings ranged from 0.79 to 0.88) which accounted for 75.56% of the variance.

Depression and Anxiety Symptoms

Participants were administered the depression and anxiety subscales from the 21-item Depression Anxiety Stress Scale (DASS-21; Antony et al., 1998). Due to the nature of the larger study, participants were queried about symptoms during the past six months rather than the past week. Response options ranged from 0 (*Did not apply to me at all*) to 3 (*Applied to me very much or most of the time*). Items on each subscale were summed and scores were doubled (to allow direct comparison with scores on the full 42-item version of the DASS) with higher values indicating higher levels of symptoms. The DASS-21 has been shown to have good internal consistency among college students (Osman et al., 2012) and criterion validity for the depression scale is supported in three studies utilizing the Structured Clinical Interview for DSM-IV for Axis I Diagnoses (Lee et al., 2019). Construct validity of both the depression and anxiety subscales has been supported in multiple studies utilizing well-validated self-report measures of depression and anxiety (Lee et al., 2019). In the current study, internal consistency for the subscales was good: anxiety $\alpha=0.88$ and depression $\alpha=0.93$.

Results

Prevalence of COVID-Specific Coercive Control

A total of 15.5% ($n=355$) of participants reported experiencing at least one form of COVID-specific coercive control from a dating or sexual partner in the past six months. The most commonly reported form was being pressured to attend a large gathering (8.1%, $n=186$) followed by being pressured to not socially distance (7.6%, $n=174$). A total of 6.4% ($n=147$) of participants reported being pressured to see their partner despite being worried their partner may be infected with COVID-19, and 6.1% ($n=139$) reported being pressured to not wear a mask. Finally, 2.9% ($n=67$) of participants reported being pressured to hook up or have sex despite being worried about their partner’s possible COVID-19 infection.

Demographic Differences in COVID-Specific Coercive Control

COVID-specific coercive control did not differ significantly by gender (men, women, TGD individuals), $\chi^2(2, N=2,277)=0.85, p=0.654$, or by race/ethnicity, $\chi^2(5, N=2,271)=3.98, p=0.552$. There also were no differences in COVID-specific coercive control among those living on or near campus compared to those who did not live on or near campus, $\chi^2(2, N=2,283)=2.47, p=0.116$. Sexual minority individuals (19.4%, $n=97$) were significantly more likely to report experiencing COVID-specific coercive control than heterosexual individuals (14.2%, $n=246$), $\chi^2(1, N=2,234)=8.12, p=0.004$. In addition, individuals who were currently in a casual relationship (23.1%, $n=36$) were significantly more likely to experience COVID-specific coercive control than individuals in a serious/committed relationship (14.7%, $n=283$), $\chi^2(1, N=2,076)=7.71, p=0.005$.

COVID-Specific Coercive Control and Other Forms of IPV

As summarized in Table 1, individuals who experienced COVID-specific coercive control were significantly more likely to report experiencing all forms of IPV in the past six months than individuals who had not experienced COVID-specific coercive control. Overall, 52.3% ($n=170$) of individuals who reported COVID-specific coercive control also reported experiencing other IPV, as compared to 27.2% ($n=503$) of individuals who did not experience COVID-specific coercive control, $\chi^2(1, N=2,171)=81.13, p<0.001$.

COVID-Specific Coercive Control and Depression and Anxiety Symptoms

Depressive and anxiety symptom scores among individuals reporting no IPV/COVID-specific coercive control, COVID-specific coercive control only, other forms of IPV only, and

Table 1 Frequency of past six months IPV among individuals who reported COVID-specific coercive control as compared to individuals not reporting COVID-specific coercive control

Type of IPV	COVID-Specific Coercive Control		No COVID-Specific Coercive Control		$\chi^2(1)$
	%	<i>n</i>	%	<i>n</i>	
Psychological	44.0	150	22.3	423	71.28*
Physical	14.4	50	6.6	127	24.31*
Sexual	23.6	81	6.9	132	94.52*
Coercive Control	21.5	74	9.9	187	38.43*

* $p<.001$

both COVID-specific coercive control and other forms of IPV are summarized in Table 2. Results of an ANOVA comparing depression scores among these groups was significant, $F(3, 2152) = 24.27, p < 0.001$. Follow-up Tukey HSD tests supported that individuals reporting other forms of IPV only had significantly higher depression scores than individuals reporting no forms of IPV/COVID-specific coercive control. Further, individuals reporting both COVID-specific coercive control and other forms of IPV had significantly higher depression scores than the other three groups. Likewise, an ANOVA comparing anxiety scores among IPV groups was significant, $F(3, 2145) = 23.41, p < 0.001$. Follow-up Tukey HSD tests supported that all three IPV/coercive control groups reported significantly higher anxiety scores than individuals reporting no IPV/coercive control. In addition, individuals reporting both COVID-specific coercive control and other forms of IPV had significantly higher anxiety scores than the other two IPV/coercive control groups.

Discussion

COVID-specific coercive control was common among students, with over 15% reporting experiencing at least one form of COVID-specific coercive control from their dating/romantic/sexual partner in the past six months. Given the outbreaks of COVID-19 infections that occurred in the Fall 2020 academic semester on college campuses throughout the U.S. (Walke et al., 2020), it is likely that fear of infection was high among many students. However, at the same time, perceived risk of COVID-19 infection varied among students, resulting in differing levels of risk-taking behaviors such as hand washing, mask wearing, and avoiding group gatherings or public places (Yang et al., 2020). Further, students varied in their everyday exposure to risk for COVID-19 infection, with some students attending in-person classes and/or holding jobs with high occupational risk of COVID-19 infection

(e.g., retail, hospitality), as well as in their risk of infecting others vulnerable to COVID-19 related complications, such as older or immunocompromised relatives. Given all these factors, it is not surprising that conflict and coercion related to engaging in COVID-19 related risk behaviors occurred so frequently. Further, given the association of COVID-specific coercive control with other forms of IPV, those in relationships where other forms of abuse and coercive control were occurring were more vulnerable to having their partners exploit their COVID-19 fears.

There were few demographic differences in the prevalence of COVID-specific coercive control, with racial/ethnic minority students, women, and gender minority individuals being just as likely to report COVID-specific coercive control as their peers. However, sexual minority individuals reported slightly but significantly higher rates of COVID-specific coercive control as compared to heterosexual individuals. This finding is congruent with other studies of IPV, particularly psychological IPV, among college students, which supports few or inconsistent gender or racial/ethnic differences in several forms of IPV, but higher rates of IPV among sexual minority individuals (Cho et al., 2020; Pittman et al., 2022; Whitfield et al., 2021). The lack of differences in IPV among TGD students is in contrast to other research (e.g., Whitfield et al., 2021), but the number of TGD students in the current sample was very small, limiting our ability to detect differences in COVID-specific coercive control risk. Finally, individuals in casual relationships were more likely to report COVID-specific coercive control than those in serious/committed relationships. One possibility is that individuals in casual relationships were more likely to differ from their partner in their risk perceptions and risk-taking behaviors related to COVID-19 as compared to those in serious/committed relationships.

Supporting the importance of assessing COVID-specific coercive control, individuals experiencing COVID-specific coercive control along with other forms of IPV reported the highest level of depression and anxiety symptoms. Further, those experiencing COVID-specific coercive control in the absence of other forms of IPV reported elevated anxiety symptoms. Thus, COVID-specific coercive control may represent an additional source of stress for students likely already managing a number of other COVID-related stressors, thus leading to increased anxiety. Alternatively, individuals with high levels of anxiety may be particularly vulnerable to having their COVID-19 infection fears exploited by their partners. Notably, for individuals experiencing other forms of IPV, COVID-specific coercive control could be part of a pattern of more severe IPV during the pandemic, leading to increased depression and anxiety.

Limitations of the study should be noted. First, while the overall sample was large, individuals with certain identities were underrepresented (e.g., TGD individuals, individuals

Table 2 Depression and anxiety symptoms stratified by IPV group

IPV Group	Depression symptoms		Anxiety symptoms	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
No IPV	9.87	10.16	9.45	10.16
COVID-Specific Only	11.62	9.82	11.90	10.46
Other IPV Only	12.20	9.85	13.21	11.08
Combined IPV	15.08	10.91	15.79	11.16

Note: COVID-Specific Only = Individuals reporting COVID-specific coercive control and no other forms of IPV. Other IPV Only = Individuals reporting other forms of IPV but not COVID-specific coercive control. Combined IPV = Individuals reporting COVID-specific coercive control and other forms of IPV

of certain racial/ethnic minority groups) limiting our ability to evaluate differences in risk for COVID-specific coercive control among these groups. In addition, items assessing COVID-specific coercive control were developed for the study, and as such, have not previously been validated. Certain forms of COVID-specific coercive control were not captured, such as being pressured to not engage in certain risk reduction behaviors (e.g., hand washing, being tested for COVID-19) or having one's partner falsely claim you were infected with COVID-19. In addition, other variables potentially associated with COVID-specific coercive control were not assessed, such as COVID-related stressors. We also did not assess participants' appraisals of their partner's COVID-specific coercive control behaviors, including the extent to which they felt pressured, threatened, or forced by their partner to engage in risk behaviors. Finally, the study was cross-sectional, reducing our ability to make causal inferences regarding the relations found between COVID-specific coercive control and depression and anxiety.

Bearing these limitations in mind, findings strongly support the need to assess COVID-specific coercive control along with other forms of IPV. In addition, there is a need for longitudinal research focused on patterns of IPV during and following the COVID-19 pandemic, including the longer-term mental health impact of IPV, as well as the impact of reduced access to formal and informal victim resources. There is also a need to examine the impact of COVID-specific coercive control on health outcomes (e.g., COVID-19 infection, vaccination rates) among survivors. What is more, there is an urgent need to identify risk factors for perpetration of COVID-specific coercive control so that these risk factors can be addressed in IPV prevention efforts. Such work is critical to mitigating the staggering cost of the IPV pandemic within the COVID-19 pandemic.

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Declarations

Conflict of Interest The authors declare that they have no conflict of interest.

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