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## Emotion Regulation and Intimate Partner Violence Perpetration in Undergraduate Samples: A Review of the Literature

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### Abstract

Intimate partner violence (IPV) perpetration increases throughout young adulthood and is particularly widespread among college students, resulting in mental health and academic consequences. Deficits in emotion regulation (ER) are an important factor associated with IPV perpetration; the developmental tasks and challenges associated with college, including relationship stressors and hazardous alcohol use, implicate ER as a particularly relevant risk factor for IPV perpetration. Thus, college presents an important opportunity for intervention in order to change the trajectories of IPV perpetration across young adulthood. The purpose of this review was to synthesize findings regarding ER and psychological, physical, and sexual IPV perpetration among college students. Twenty-one articles met inclusion criteria. Studies were organized into five categories: (a) direct associations of ER with IPV perpetration, (b) qualitative assessment of ER and IPV, (c) ER in indirect effects models, (d) ER in moderation models, and (e) experiments with ER instructional sets. Overall, ER emerged as an important inhibiting factor for IPV perpetration, particularly impulse-control and access to ER strategies. ER deficits in the context of impelling (e.g., negative affect, trauma history) and instigating (e.g., provocation) factors emerged as consistent predictors of psychological and physical IPV perpetration for both male and female students. Deficits in ER were associated with sexual IPV perpetration among men, however very few studies examined sexual IPV. Experimental paradigms suggest cognitive reappraisal may reduce IPV perpetration, while suppression may, in some contexts, increase perpetration. Methodological strengths and weaknesses and implications for IPV prevention and interventions programming for college students are discussed.

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Intimate partner violence (IPV) within college populations is an endemic problem with persistent negative consequences. IPV refers to aggressive behaviors against a significant other, including former or current spouses, dating, and sexual partners (Breiding et al., 2015). IPV includes nonphysical acts intended to upset a partner or harm their self-worth,

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such as shaming or name-calling (psychological IPV), physical harm, such as hitting, slapping, or shoving (physical IPV), and coercion, threats, or physical force to obtain unwanted sexual contact (sexual IPV; Breiding et al., 2015). Undergraduate students who experience IPV victimization are at increased risk for academic difficulties, lower GPAs, and lower academic efficacy relative to their peers (Banyard et al., 2017; Brewer et al., 2018). IPV victimization during college is also associated with vulnerability to physical and mental health concerns, including posttraumatic stress and depressive symptoms (Basile & Smith, 2011; Sabina & Straus, 2008). Extensive research over the last several decades has confirmed that IPV has deleterious outcomes and impairs college students' functioning and achievement across domains.

Because IPV typically increases throughout adolescence until reaching a peak between ages 20 and 25 (O'Leary & Slep, 2011), college students are a particularly vulnerable population. Rates of IPV within college samples typically outpace the general population. A study of U.S. colleges and universities found over 50% of college students experienced at least one form of IPV (Sabina & Straus, 2008), relative to 22% in the general population (Langhinrichsen-Rohling et al., 2012). Notably, college students who are gender and/or sexual minorities (GSM) report higher rates of IPV victimization than non-GSM college students (Whitfield et al., 2018). Regarding perpetration, approximately 30% of a large, international sample of college students reported perpetrating any physical violence against an intimate partner (Straus, 2008).

While over half of IPV within college samples is bidirectional (Langhinrichsen-Rohling et al., 2012), there are notable distinctions between men and women in IPV victimization severity and outcomes among general and college populations. For example, in one year, women accounted for 70% of intimate partner-perpetrated homicide deaths (Catalano et al., 2009). Coercive control has long been theorized as an underlying dynamic of IPV perpetration, positing that IPV functions as an attempt to maintain power and control over an intimate partner (for review, Hamberger et al., 2017). Specifically, scholars have theorized coercive control as a critical motive for men's perpetration of violence against women and is an outcome of social forces that seek to legitimize men's dominance over women (Kennedy et al., 2021). However, recent research has complicated this sociopolitical conceptualization. Among college students female college students typically report equal, if not higher, rates of psychological and physical IPV perpetration than male students (Langhinrichsen-Rohling et al., 2012). Further, among college students, motives for engaging in IPV also reflect gender symmetry, with the most commonly cited reasons including communication difficulties and self-defense (Elmquist et al., 2016). However, a comprehensive review inclusive of college samples concluded that males are more likely than females to perpetrate severe IPV resulting in physical injuries (Chan, 2011). Similarly, a meta-analysis including studies on college students found that women reported experiencing more injuries than men did (Archer, 2000). However, men may experience more injuries than women when violence is minor and less frequent whereas women may experience more injuries when violence is frequent (Harned, 2001).

## Emotion Regulation

ER is the process by which individuals influence the emotions they have, when they have them, how they experience them, and how they express them (Gross, 1998). Gross' model of emotion generation theorizes that emotions are generated by perceiving environmental stimuli (or events), evaluating stimuli as salient, attaching meaning to stimuli (giving rise to behavioral, experiential, and physiological emotional response tendencies), and lastly, modulating response tendencies, which determines the expression of the emotional response (Gross, 1998). Modulation of emotional responses may involve automatic and deliberate processes, including the use of ER strategies. An expansion of Gross' model involves an evaluative component, whereby in the process of employing ER, an individual assesses whether the current emotion is effective in the context of a personally meaningful goal (Aldao et al., 2015; Gross, 2015). Whereas the modulation component of Gross' model is often highlighted as foundational to regulation, ER is multidimensional and also includes one's awareness of emotion (an ability to attend to and acknowledge emotions), understanding and clarity of what emotion one is feeling, and acceptance of emotions (the ability to experience emotions without a secondary negative emotional response to the emotions; Gratz & Roemer, 2004). ER also includes one's ability to act according to one's goals (e.g., goal-directed behavior), rather than acting impulsively, when experiencing an emotion (Gratz & Roemer, 2004). Although there are several scales measuring ER, one validated, commonly utilized scale is the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) which assesses the variety and expanded facets of ER.

Certain ER strategies are generally associated with positive outcomes. For example, cognitive reappraisal, whereby an individual identifies an alternative interpretation of the emotional-inducing cue to change the meaning or emotional impact (Gross & John, 2003), is generally associated with effective modulation, whereas, suppression, in which an individual attempts to hide or inhibit expression or experience of the emotion, may reduce an emotion, it is associated with longer-term negative consequences (Gross & John, 2003). Notably, adaptive ER necessitates a repertoire of ER abilities, with an ability to implement ER strategies flexibly in the pursuit of specific goals and in response to changing environmental demands (Aldao et al., 2015).

## ER and IPV Perpetration

Given the extent to which ER is posited to contribute to psychopathology and its presence in numerous clinical interventions, ER has emerged as a potential contributor to IPV perpetration. A prevailing process-oriented framework of IPV perpetration is the I<sup>3</sup> model (Finkel, 2008; Finkel & Eckhardt, 2013), which posits that patterns of three factors contribute to the likelihood of IPV perpetration. The I<sup>3</sup> model purports that IPV perpetration occurs as a result of the synergistic effects of instigating, impelling, and inhibiting (or disinhibiting) factors. Instigation refers to a perpetrator's exposure to discrete social dynamics with the potential victim that may trigger an urge to aggress (e.g., argument with a partner). Impelling processes are the dispositional or situational factors that psychologically prepare the perpetrator to experience a strong urge to aggress in response to instigation (e.g., trait anger; Finkel, 2007, 2008; Finkel & Eckhardt, 2013). Inhibition (or disinhibition)

denotes the dispositional or situational factors that increase the likelihood that a perpetrator will override the urge to aggress or dispositional or situational factors that decrease the likelihood that a perpetrator will override the aggressive urge (e.g., alcohol intoxication). Perfect storm theory (Birkley & Eckhardt, 2019) suggests that IPV is most likely to occur when an individual experiences strong instigating and impelling factors as well as low inhibition (or high disinhibition). ER may be conceptualized as an inhibiting factor, such that the ability to utilize facets of ER may enable an individual to override instigating and impelling forces within the interaction. ER may be particularly relevant when the impelling factors are emotion-related; for example, intense anger or jealousy may serve as impelling factors and one's ER may increase the likelihood that the individual can override these impelling factors and inhibit urges to aggress.

Extensive empirical and theoretical research has identified ER as an important factor in the perpetration of various forms of IPV across genders. Perpetrators of IPV have identified expression of emotion as a motive for IPV or IPV perpetration as a consequence of emotion dysregulation (Langhinrichsen-Rohling et al., 2012). Research suggests that broad difficulties across facets of ER are associated with perpetration of psychological and physical IPV, but not sexual IPV, among women (Shorey et al., 2011a). Importantly, the different facets of ER may be uniquely associated with IPV perpetration. For example, although one's ability to tolerate negative emotions without secondary distress (e.g., acceptance) and one's ability to modulate emotions through ER strategies may capture different facets of ER, both have implications for one's ability to override aggressive urges. Indeed, a lack of impulse control when experiencing strong negative emotions has been linked to the perpetration of psychological, physical, and sexual IPV by men (Shorey et al., 2011a). Because ER interacts with other individual-level and event-level variables consistent with the I<sup>3</sup> model, ER is conceptualized as one facet of a transactional, dynamic process of IPV perpetration. Research has sought to understand the factors that contribute to ER and IPV, including developmental factors such as childhood maltreatment, individual factors such as trait anger, and contextual factors, such as alcohol intoxication.

## ER and IPV Perpetration among College Students

The association between ER and IPV among college students is particularly relevant given the developmental tasks and challenges within this population. College involves a unique transition toward greater independence in academic, social, and occupational functioning with extensive accompanying stress. Consistent with the developmental task of emerging adulthood, college students engage in a variety of romantic and sexual experiences (Shulman & Connolly, 2013). Although casual sexual relationships are very common among college students, many college students possess an interest in forming long-term intimate relationships (Fielder et al., 2013; Zimmer-Gembeck & Gallaty, 2006). Relative to adolescence, intimate relationships initiated during college are more committed and interdependent, thus requiring students to navigate increasingly complex relationship tasks (Shulman & Connolly, 2013). While this is characteristic of young adulthood, college students navigate relationship tasks while managing the educational and occupational demands of college (Shulman & Connolly, 2013). Unsurprisingly, difficulties with romantic relationships and relationship problems are one of the most commonly reported challenges

among students seeking services at college and university counseling centers (Erdur-Baker et al., 2006). Finally, although not the exclusive subject of this review, college students regularly engage in hazardous drinking, which has been associated with IPV perpetration (Cafferky et al., 2018). Alcohol is theorized to disrupt the higher-order cognitive processes necessary for ER (Giancola, 2000), suggesting that the ER-IPV link is particularly relevant for college students who engage in heavy drinking. Given the convergence of these specific vulnerabilities (i.e., adjustment-related stress, novel relationship demands, culture of heavy drinking), it is vital that an examination of ER as a predictor of IPV perpetration highlights the experiences of college students to help guide the development of targeted interventions.

## Review of the Literature

By synthesizing the relevant literature related to ER and IPV perpetration, the present review seeks to ascertain whether ER emerges as a consistent predictor of IPV perpetration within college samples. In addition to evaluating the methodological strengths and weaknesses of the literature, this review will outline recommendations for research needed to inform prevention and intervention and highlight policy implications to address IPV within college samples.

## Method

Relevant studies were obtained by searching the PubMed and EBSCO Host databases in September 2019, July 2020, and April 2021 for combinations of key terms associated with ER (“emotion regulation”, “emotion dysregulation”, “affect regulation,” and “affect dysregulation”). Key terms of IPV perpetration – “intimate partner violence perpetration,” “domestic violence perpetration,” “relational aggression perpetration,” “intimate partner aggression,” and “dating violence” – were used. The search conducted in April 2021 added the terms “cyber abuse,” “cyber IPV,” and “cyber dating violence” due to the increased visibility of cyber dating abuse within intimate relationships (Sargent et al., 2016). Additionally, reference sections of identified articles were assessed for relevant studies. Search terms referencing college students were not included to ensure inclusive search results. A study was included in the review if it: (a) was published in a peer-reviewed journal after 1980, (b) recruited undergraduate college students, (c) was written in English, (d) included at least one measure of both ER and IPV perpetration, and (e) examined their association. All articles were reviewed by the first and second author who determined inclusion in the final review. In the event that the first and second authors disagreed, consultation from other authors was sought.

In addition to the above inclusion criteria (see Figure 1), articles were excluded if they: a) exclusively assessed the association between ER and IPV experiences other than perpetration (e.g., IPV victimization, witnessing IPV;  $n = 10$ ); b) recruited a combination of undergraduate students, graduate students, and community members ( $n = 13$ ); and c) did not include a specific measure of ER ( $n = 7$ ). One study examining dyadic associations between ER and IPV in which one partner was required to be an undergraduate student, while the other partner was not, was retained (Watkins et al., 2014). Two articles reviewed examined unwanted pursuit behaviors (e.g., stalking) after termination of a relationship, one of which

also examined IPV as a contributor to unwanted pursuit. Because we sought to focus our review on IPV occurring within the context of an ongoing relationship, we excluded these articles.

## Results

Twenty-one studies with independent samples satisfied inclusion and exclusion criteria and were incorporated in the present review. Results are summarized in text and Table 1 presents study details including the type and operationalization of both IPV and ER, and sample demographics. Critical findings are summarized in Table 2. Studies were organized into five categories: (a) direct associations of ER with IPV perpetration, (b) qualitative assessment of ER and IPV, (c) ER within indirect effects models, (d) ER in moderation models, and (e) experiments with ER instructional sets. Of the 21 studies included, four exclusively examined male undergraduates and five exclusively examined female undergraduates. Studies are listed in Table 1 in the order in which they appear below.

### Prevalence of IPV Perpetration

Rates of IPV perpetration varied throughout the studies; some provided the proportion of the sample that perpetrated IPV whereas others provided the mean number of IPV behaviors perpetrated by the total sample. Table 1 displays this information if provided by the study. There was a higher prevalence of psychological IPV perpetration relative to physical and sexual IPV perpetration. Lifetime perpetration of psychological IPV was most common, ranging from 24% to 94% of men sampled (Shorey et al., 2015; Watkins et al., 2014) and 54% to 96% of women sampled (Caiozzo et al., 2016; Watkins et al., 2014). Lifetime perpetration of physical IPV ranged from 6% to 51% for men sampled (Caiozzo et al., 2016; Stappenbeck et al., 2016; Watkins et al., 2014) and 13% to 33% for women (Caiozzo et al., 2016; Ortiz et al., 2015). Three studies examined sexual IPV (Caiozzo et al., 2016; Gildner et al., 2018; Shorey et al., 2011a). Only one study reported the proportion of sexual IPV perpetration and found that 4% of men and less than 1% of women perpetrated sexual IPV in the last two months (Caiozzo et al., 2016). One study examined cyber dating abuse (e.g., cyber IPV), finding 48% of male and females surveyed had engaged in an act of cyber dating abuse in the last 3 months (Brem et al., 2019).

### Direct Associations of ER with IPV Perpetration

Two studies (Bliton et al., 2016; Shorey et al., 2011a) examined the direct associations between both global ER scores and specific ER facets and psychological and physical IPV perpetration among male and female college students, one of which also examined sexual IPV perpetration. A third study examined ER as a consequence of psychological IPV perpetration among female college students (Shorey et al., 2012a). All three studies utilized the DERS, which assesses domains of ER through six subscales targeting emotional nonacceptance, difficulties engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, lack of emotional clarity, and limited access to ER strategies, with higher scores indicative of greater difficulties within each domain (Gratz & Roemer, 2004). Overall, results of direct associations of ER with IPV perpetration suggested that certain facets of ER (impulse-control difficulties and limited access to ER strategies) were



more consistently, although not always (Bliton et al., 2016), associated with psychological IPV perpetration in men and physical IPV perpetration in women. The association between broad difficulties in ER and psychological IPV perpetration was varied within women (Bliton et al., 2016; Shorey et al., 2011a; Shorey et al., 2012a). For women, no facet of ER consistently predicted the three forms of IPV, and ER difficulties were not associated with sexual IPV perpetration.

**Psychological IPV Perpetration.**—A large study of male and female undergraduates currently in a dating relationship for at least one month completed the DERS and reported the frequency with which they had perpetrated psychological IPV in the last six months (Shorey et al., 2011a). Among women, lack of emotional awareness, and no other facet of ER, was positively associated with frequency of perpetrating psychological IPV. Among men, total broad ER difficulties were positively associated with frequency of psychological IPV perpetration; notably, difficulties with goal-directed behavior, impulse-control difficulties, lack of emotional clarity, and limited access to ER strategies were positively associated with frequency of psychological IPV. In contrast, among men in a study by Bliton and colleagues (2016) recruited for a current or past dating relationship for longer than one month in the last year, only impulse-control difficulties and lack of emotional clarity were correlated at the bivariate level with frequency of psychological IPV; however regression-based analyses did not find a significant association between any facet of the DERS and psychological IPV for men. Gender did not moderate the association between facets of the DERS and psychological IPV. Similarly, among women, impulse-control difficulties, difficulties with goal-directed behavior, lack of emotional clarity, and limited access to ER strategies were correlated with psychological IPV for women at the bivariate level, however multivariate analyses failed to detect significant differences.

The above studies point to an inconsistent association between facets of ER and psychological IPV perpetration, with nuanced but inconsistent gender differences. When examining an exclusively female sample of undergraduates who had perpetrated at least one severe act of IPV in the last six months, Shorey and colleagues (2012a) investigated ER as an immediate consequence of psychological IPV, seeking to understand if certain consequences may function to reinforce perpetration. When recalling their most “troubling/distressing verbal disagreement” in the past six months when psychological IPV occurred, the most frequently endorsed immediate consequence was unrelated to ER (‘having one’s partner apologize for something they had done’). However, many participants reported IPV served an immediate emotion regulation function, such that 42.6% of the sample reported feeling less angry, 31.3% reported feeling “less upset”, and 30.1% reported they “felt more calm”. While a number of participants reported feelings of guilt and shame, participants who reported their emotions were more regulated after perpetration also reported this outcome as being pleasant or good.

**Physical IPV Perpetration.**—Within Shorey and colleagues’ (2011a) examination, total ER difficulties and all DERS subscales were associated with physical IPV perpetration among females. Within Bliton and colleagues’ examination, impulse-control difficulties, lack of emotional awareness, limited access to ER strategies, and lack of emotional clarity

were correlated with frequency of physical IPV perpetration among women, however no regression-based associations were found. Among men, only impulse-control difficulties were associated with physical IPV perpetration (Shorey et al., 2011a), and no facets of ER were associated with physical IPV perpetration among men within Bliton and colleague's (2016) study.

**Sexual IPV Perpetration.**—An examination of male and female undergraduates indicated that among men, difficulties with impulse control, goal-directed behavior, and limited access to ER strategies were positively associated with sexual IPV perpetration frequency (Shorey et al., 2011a). Among women, ER difficulties were not associated with sexual IPV perpetration.

### Qualitative assessment of ER and IPV

One study utilized a qualitative methodology to investigate ER as a reason or motive of psychological IPV perpetration (Hughes et al., 2016). The term 'motive' has been used to reflect a variety of reports, with some conceptualizations including "what drives perpetrators to engage in violence" or the self-identified reasons for engaging in perpetration (Neal et al., 2015, pg. 426). In contrast, a recent conceptualization of motives for psychological and physical IPV, IPV motives represent "the desire to effect physical, cognitive, or emotional change in the target" to achieve a goal (Stairmand et al., 2020, pg. 5). Grounded within both the I<sup>3</sup> model and Flynn and Graham's multi-level conceptual framework, which operationalizes motives as the specific reasons individuals offer as explanations for IPV, Hughes and colleagues recruited a sample of undergraduate women. Authors asked a subset of the sample that had initiated psychological IPV in a current or most recent intimate relationship to respond to open-ended questions drawn from the Reasons for Conflict Scale. Of participant-generated reasons for psychological IPV, the most frequently endorsed was "negative affect", followed by transgression by a partner, making the other person pay attention/understand, retaliation, self-soothing, and joking. The authors noted that women's references to negative emotionality was primarily described as occurring in response to a perceived offense committed by a partner (e.g., anger, frustration), or as a means to more effectively communicate with a partner. The authors note the motives are consistent with research findings on non-college samples regarding physical IPV, with the exception of self-soothing (e.g., "to make myself feel better"), which potentially suggests self-soothing as a novel reason for psychological IPV perpetration among female college students.

### ER within Indirect Effects Models

Six studies examined indirect associations between ER and IPV perpetration within an indirect effects model (Gratz et al., 2009; Guzmán-González et al., 2016; Marshall et al., 2011; Oliveros & Coleman, 2019; Ortiz et al., 2015; Shorey et al., 2011b), two of which exclusively recruited female students (Ortiz et al., 2015; Shorey et al., 2011b). Such models seek to ascertain the process or mechanism by which two constructs are indirectly associated via a third construct. Overall, ER was identified as a mediator in the association between past trauma and IPV perpetration and was indirectly associated with IPV via other IPV-risk factors, such as trait anger and alcohol use. Of those studies, three examined both



psychological and physical IPV perpetration, one exclusively examined psychological IPV perpetration, and two exclusively examined physical IPV perpetration.

Two studies examined the indirect role of ER on psychological IPV perpetration (Shorey et al., 2011b) and both psychological and physical IPV perpetration (Ortiz et al., 2015). Within a sample of undergraduate women who indicated a current or past dating relationship since age 18, Shorey and colleagues (2011b) examined the indirect association between ER and psychological IPV perpetration via trait anger, and found that greater reported difficulties in ER were associated with greater trait anger, which was in turn associated with more frequent perpetration of psychological IPV. Of note, the authors also investigated ER as a moderator of the association between trait anger and psychological IPV perpetration, but did not find support for ER as a moderator, suggesting that a broad inability to regulate emotions is associated with increased trait anger, which is associated with psychological IPV perpetration. Ortiz and colleagues (2015) recruited male and female undergraduates who had been in a relationship at least once in their life. They found that ER deficits contributed to psychological IPV perpetration via alcohol use. Additionally, ER deficits contributed to psychological IPV and subsequent physical IPV. The full path demonstrated that ER difficulties were associated with alcohol use, which in turn contributed to psychological IPV, which subsequently contributed to physical IPV. They noted that such research supports psychological IPV as a predictor of physical IPV perpetration.

**ER as a Mechanism of Trauma, Attachment, and IPV Perpetration.**—Three studies examined ER as a process through which prior trauma influences IPV perpetration, one of which exclusively examined physical IPV (Gratz et al., 2009), one of which examined both psychological and physical IPV (Marshall et al., 2011), and one of which examined both psychological and physical IPV and computed a composite IPV outcome (Oliveros & Coleman, 2019). For both male and female students with histories of trauma who had previously perpetrated physical IPV or severe psychological IPV, the associations between trauma cognitions and both physical and psychological IPV perpetration were each partially mediated by ER as measured by an Affect Dysregulation Subscale of the Inventory of Altered Self Capacities (Marshall et al., 2011). Specific to childhood maltreatment, overall ER (total DERS score or latent variable of DERS subscales) mediated the associations between childhood experiences and psychological and physical IPV perpetration (Gratz et al., 2009; Oliveros & Coleman, 2019). Notable gender differences emerged; childhood maltreatment was indirectly associated with physical IPV perpetration via ER for men only (Gratz et al., 2009), and father-perpetrated IPV was indirectly associated with a composite of psychological and physical IPV perpetration for men only (Oliveros & Coleman, 2019). Further, maternal and paternal parent-child conflict was indirectly associated with composite psychological and physical IPV via ER for women only (Oliveros & Coleman, 2019). Finally, in the only study to utilize a non-US sample of males and females, romantic attachment (anxiety about abandonment and avoidance of intimacy) was associated with general ER difficulties (e.g., total DERS score), which in turn predicted physical IPV (Guzmán-González et al., 2016).

## ER in Moderation Models

Nine studies utilized a moderation framework to examine the association between ER and IPV perpetration, four of which exclusively examined male undergraduates (Gildner et al., 2018; Harper et al., 2005; Stappenbeck et al., 2016; Watkins et al., 2014) and one of which exclusively examined female undergraduates (Bell et al., 2020). Within this framework, the strength of the association between two variables is contingent upon ER. This enables the researchers to examine the association between ER and IPV with critical context-related factors, such as alcohol (Brem et al., 2019; Stappenbeck & Fromme, 2014; Stappenbeck et al., 2016; Watkins et al., 2014). Five studies utilized a cross-sectional methodology, three utilized a longitudinal methodology, and one used an alcohol administration methodology.

Of these nine studies, one examined psychological IPV only (Harper et al., 2005), three examined both physical and psychological IPV (Bell et al., 2020; Caiozzo et al., 2016; Stappenbeck et al., 2016; Watkins et al., 2014), and two examined psychological, physical, and sexual IPV (Caiozzo et al., 2016; Gildner et al., 2018). However, it is important to note that Caiozzo and colleagues (2016) were unable to examine sexual IPV as an outcome due to low sample rates and Gildner and colleagues (2018) averaged the three types of IPV as their outcome variable. Notably, in addition to psychological and physical IPV, one study (Brem et al., 2019) examined cyber dating abuse, a form of dating violence distinct from other forms of IPV that includes abuse, threats, or harassment through technology, such as social network sites, text messages, or emails (Zweig et al., 2013). Another study examined a proxy of IPV perpetration via the Articulated Thoughts in Simulated Situations paradigm (Stappenbeck & Fromme, 2014). Overall, within studies utilizing moderation analyses to examine the interaction between IPV, ER, and other established risk factors for IPV, ER did not emerge as a moderator of psychological IPV, however ER appeared a more consistent moderator of physical IPV perpetration.

**Cross-sectional studies.**—Within a sample of undergraduate men currently in an exclusive dating relationship for longer than one month, Harper and colleagues (2005) found that ER, measured with the Negative Mood Regulation Scale (Catanzaro & Mearns, 1990), did not moderate the association between anger and psychological IPV. However, the authors noted that this measure captures expectancies about regulating emotions in future situations, thus may not capture actual behavior (Harper et al., 2005). Employing a cross-sectional design in an undergraduate sample of men, Stappenbeck and colleagues (2016) found that both impulse control difficulties and limited access to ER strategies, as assessed by the DERS, moderated the relation between heavy drinking and a composite of psychological and physical IPV perpetration such that the association between heavy drinking and IPV was stronger for men with these regulatory difficulties. When examining only the impulse-control facet of ER within a sample of undergraduate men on a composite of psychological, physical, and sexual IPV, Gildner and colleagues found that participants reported more frequent IPV perpetration when they had high levels of impulse control difficulties (2018). This study also found a nuanced association between impulse-control difficulties and IPV perpetration in the context of hostility toward women and trauma exposure. Among men with low hostility toward women and a high number of traumas, IPV perpetration did not differ by the extent of their impulse control difficulties. Among

men with low hostility toward women and low exposure to trauma, high impulse control difficulties were, surprisingly, associated with lower IPV perpetration relative to men with low impulse control difficulties. However, among men with high hostility toward women, impulse control difficulties were associated with IPV perpetration regardless of whether they had low or high levels of trauma exposure. These results suggest that impulse-control difficulties may not pose as a risk factor for IPV perpetration among men with low levels of hostility toward women (and indeed may be protective among such men if they also have low exposure to trauma). However, high levels of hostility toward women may serve as an impelling factor in which impulse control inhibits urges to agree.

In the only study to utilize a dyadic framework with heterosexual couples, a partner's impulse control difficulties, as assessed by the DERS, was positively associated with an actor's perpetration of psychological and physical IPV (Watkins et al., 2014). Men were more likely to report physical IPV occurrence if they reported higher impulse control difficulties, however such an effect was not observed for women. Impulse control difficulties were associated with the severity of physical IPV perpetration and psychological IPV for both men and women. Greater hazardous alcohol use and impulse control difficulties interacted to predict higher levels of physical IPV severity. Notably, hazardous alcohol use was negatively associated with physical IPV perpetration for individuals with more effective impulse control. Finally, there was a partner effect of impulse control difficulties, such that an individual was more likely to perpetrate psychological and physical IPV when their partners had greater impulse control difficulties.

**Longitudinal studies.**—One study used 90 days of survey measures and recruited undergraduate men who reported consuming alcohol in the past month and were currently in a relationship for at least one month with at least biweekly, face-to-face contact with their partner (Shorey et al., 2015). Participants received daily links to surveys and were asked to report on their emotion regulation, daily negative affect, and daily psychological and physical IPV. Similar to Harper and colleagues, ER difficulties did not moderate the association between a composite of negative affect or specific facets of negative affect and psychological IPV, although ER difficulties were directly associated with psychological IPV perpetration. The authors found that general ER difficulties moderated the association between a composite of negative affect and physical IPV perpetration, such that negative affect was proximally associated with increased odds of perpetrating physical IPV when ER difficulties were high but not low. Notably, ER difficulties also moderated the association between specific facets of negative affect and physical IPV perpetration, including anxiety, depression, hostility, irritability, and sadness.

In a two-month longitudinal study in which male and female participants completed four surveys every two weeks assessing the last two weeks of interactions, Caiozzo and colleagues (2016) examined the synergistic effects of ER, narcissism, callous/unemotional aggressive attitudes, and psychological, physical, and sexual IPV perpetration. ER abilities were associated with lower psychological IPV perpetration; however, ER did not moderate the association between aggressive attitudes, narcissism, or callous/unemotional traits and psychological IPV. ER did moderate the association between aggressive attitudes and physical IPV perpetration such that aggressive attitudes were positively associated with

physical IPV perpetration for men with poor ER relative to those with effective ER. A three-month longitudinal study examining the role of alcohol on psychological and physical IPV, as well as cyber dating abuse, found that alcohol problems were positively associated with psychological and physical IPV for men and women with moderate to high levels of ER difficulties (Brem et al., 2019). ER difficulties were associated with cyber dating abuse, however the interaction between alcohol problems and ER difficulties did not interact to predict cyber dating abuse. Notably cyber dating abuse at the first time point predicted psychological and physical IPV at the second time point.

**Alcohol administration studies.**—One study employing an alcohol administration protocol randomized male and female undergraduates to an alcohol, placebo, or no alcohol condition and examined two ER strategies (cognitive reappraisal and suppression), alcohol intoxication, and anger arousal on verbal and physical verbalizations via the Articulated Thoughts in Simulated Scenarios (ATSS; Stappenbeck & Fromme, 2014). Participants listened to an audio recorded scenario depicting a jealous interaction between members of a male-female couple which begins with mild disagreement and leads to mild physical aggression. Participants verbalized their thoughts, feelings, and would they would do if they were in that scenario, and the responses were coded for verbal or physical articulations. Intoxicated male and female students who were less able to engage in cognitive reappraisal (modifying one's interpretation of an event to change one's emotional response [Gross, 1998]) expressed more psychological and physical IPV intentions than those who received no alcohol. Surprisingly, sober individuals who were better able to reappraise reported more aggressive intentions than those in the alcohol or placebo group. Individuals who were less able to suppress emotions and reported greater anger arousal expressed more articulations than those who experienced less arousal, suggesting that emotional arousal may serve as a cue to suppress emotions.

### Experiments with ER Instructional Set

**In-Vivo IPV Analog.**—Two experimental studies examined how ER interventions or instructions to use specific ER strategies (e.g., cognitive reappraisal, suppression, rumination) were associated with laboratory proxies of IPV perpetration. Overall, suppression and rumination emerged as maladaptive ER strategies, while cognitive reappraisal was associated with lower IPV intentions than other strategies. In one study, males and females in heterosexual dating relationships were randomized to an ER training condition of either (a) cognitive reappraisal, or (b) expressive suppression (Maldonado et al., 2015). Utilizing the ATSS, participants' psychological and physical aggressive verbalizations in the context of an anger-arousing scenario were measured in the laboratory. Individuals with a history of physical IPV perpetration who were exposed to cognitive reappraisal strategies demonstrated fewer aggressive verbalizations during the scenario than individuals without a physical IPV history in the same condition. Individuals with a history of physical IPV perpetration trained in expressive suppression demonstrated greater aggressive verbalizations compared to individuals in the same condition without a physical IPV history. In another study, among males and females who reported high levels of trait anger and were instructed to suppress emotions, the association between receiving an instigation and aggressive vocalization was higher than those in other ER conditions

(Birkley & Eckhardt, 2019). Individuals in the cognitive reappraisal condition had fewer aggressive verbalizations than those instructed to suppress, distract, or who received no instructions.

## Discussion

The results of this review indicate that ER is one important predictor and potential intervention target within college populations, particularly when considered in the context of individual- and situation-level risk factors. Although two of the 21 included studies did not find any association between ER and IPV in regression-based analyses (Bliton et al., 2016; Harper et al., 2005), ER appears to play a role in undergraduate men's and women's perpetration of psychological and physical IPV perpetration. The associations between ER and sexual IPV were only observed among men, although few studies examined sexual IPV.

Overall, female perpetrators of psychological IPV reported greater difficulties in emotion regulation across domains relative to non-perpetrators (Bell et al., 2020; Shorey et al., 2011b) and psychological IPV as a means of self-soothing and decreasing emotions (Hughes et al., 2016; Shorey et al., 2012). Indirect associations between overall ER difficulties and psychological IPV via trait anger (Shorey et al., 2011b) and alcohol use (Ortiz et al., 2015) were also observed among female participants. Global difficulties in ER were associated with men's perpetration of psychological IPV (Shorey et al., 2011a), although such difficulties were more consistently observed to be associated with men's physical IPV perpetration (Gratz et al., 2009; Shorey et al., 2015). Notably there was an association between negative affect and physical IPV perpetration when men reported global difficulties in ER (Shorey et al., 2015). Examination of specific facets of ER indicated that impulse-control difficulties, limited access to ER strategies, and difficulties with goal-directed behavior emerged as the most consistent predictors of psychological and physical IPV perpetration, particularly for men's perpetration of physical IPV (Bliton et al., 2016; Gildner et al., 2018; Shorey et al., 2011a; Stappenbeck et al., 2016; Watkins et al., 2014). Lack of emotional awareness may also be an important domain of ER associated with women's perpetration of psychological (Shorey et al., 2011a) and physical IPV (Bliton et al., 2016). Further, cognitive reappraisal may be a particularly helpful ER strategy that may be utilized across contexts. While few studies examined sexual IPV, the above three facets of ER were also associated with sexual IPV perpetration among men. It is notable that no ER factors were associated with sexual IPV within women, and the small number of studies that examined sexual IPV limit our ability to draw conclusions as to the role of ER on sexual IPV within this review. Importantly, ER emerged as a consistent predictor of psychological and physical IPV when examined in the context of other individual- and event-level predictors. That is, different facets of ER may not contribute to psychological and physical IPV perpetration without other I<sup>3</sup> factors, such as impelling factors like trait anger and hostility toward women and instigating factors such as partner ER. Implications for policy, practice, and research are summarized in Table 3.

Within the I<sup>3</sup> model framework, the three facets of ER that were most consistently associated with IPV perpetration (impulse control, goal directed behavior, and access to ER strategies) may be particularly relevant to inhibiting aggressive urges during conflict.

Notably, these three facets were associated with both psychological and physical IPV for men and women, although they may be particularly important when considering men's perpetration of physical and sexual IPV. While impulsivity broadly is characterized as "the tendency to act spontaneously and without deliberation" (Carver, 2005, pg. 313), the ER facet of impulse control refers to one's ability to control one's behavior when emotionally distressed (Gratz & Roemer, 2004). The DERS specifically operationalizes this facet as how 'out of control' an individual feels in response to negative affect (Gratz & Roemer, 2004). Thus, this association between impulse control difficulties and psychological and physical IPV may reflect a breakdown of an inhibition factor, whereby the individual is unable to override their urges for aggression. The association between goal-directed behaviors and psychological and physical IPV perpetration may reflect similar tendencies, whereby an individual's inability to remain focused on a goal in the context of negative emotion may increase their vulnerability to psychological IPV perpetration. While the assessment of goal-directed behavior does not typically inquire about the specifics of one's goals, many partners may have a goal to remain nonviolent or deescalate, and their ability to remain focused on those goals, in spite of distressing emotion, may inhibit IPV urges. Building off of Stairmand and colleagues' conceptualization of psychological and physical IPV, if one is unable to gain access to their goal when emotionally distressed, they may engage in coercive acts in an effort to meet those goals (2020). This was reflected in Hughes and colleagues' finding that female participants indicated negative emotionality as a reason for perpetrating IPV, they described the IPV as occurring as a means to more effectively communicate with their partner or after a partner's perceived transgression (2016).

The association with access to ER strategies and specific facets of ER, such as cognitive reappraisal, is also consistent with the inhibiting facets of the I<sup>3</sup> model. While impulse control and goal-directed behavior when distressed may enable one to override aggressive urges, ER strategies refer to internal (e.g., cognitive restructuring) and external (e.g., leaving the conflict) actions that one can take to modulate their emotions and actions, thus potentially addressing impelling, instigating, and inhibiting factors. That is, the operationalization of access to ER strategies specifically focuses on what actions an individual can take to effectively regulate their emotions and their perceived ability to access those strategies. The current review does not enable us to fully identify how access to ER strategies is impeded, globally or at the event-level, however it is likely that factors associated with the I<sup>3</sup> model, as well as developmental history, affect one's ability to use effective ER strategies in the moment. Other facets of ER related to how accurately one identifies, accepts, and labels emotions, were associated with psychological and physical IPV perpetration among women, which may reflect multiple points of intervention across the ER process for women. However, for both men and women access to ER strategies may be particularly important because it pertains to how one modulates those emotional states and overrides aggressive urges.

### ER in Context

The current review suggests that the role of ER in the perpetration of IPV among college students requires understanding for whom and in what contexts difficulties and deficits in different facets of ER will contribute to IPV perpetration. While ER may be conceptualized



as an inhibiting factor in IPV perpetration (Birkley & Eckhardt, 2019; Stappenbeck & Fromme, 2014), IPV occurs in the context of impelling and instigating factors. Results suggested that the association between general and specific ER abilities and psychological and physical IPV perpetration was influenced by impelling factors, such as trauma exposure and cognitions, trait anger, and attitudes supporting violence (Caiozzo et al., 2016; Marshall et al., 2011; Shorey et al., 2011b). Prior literature suggests that high levels of trait anger and attitudes supporting violence are associated with general aggression as well as psychological and physical IPV, and deficits in ER may leave the individual without abilities to override the aggressive urges resulting from those impelling factors. Importantly, histories of trauma, including experiencing childhood maltreatment and witnessing IPV, may influence psychological and physical IPV through their effects on impelling factors such as cognitive distortions related to trauma (Marshall et al., 2011; Shorey et al., 2012a) and attitudes toward violence, but also on their ER abilities (Gratz et al., 2009; Oliveros & Coleman, 2019). Childhood abuse and witnessing IPV is associated with the development of ER difficulties by exposing children to extreme environmental and emotional demands and failing to validate children's emotions as well as teach children how to regulate, tolerate, and express their emotions adaptively (Linehan, 2015; Thompson & Calkins, 1996). It is thus possible that the downstream effects of trauma on IPV perpetration are the result of the effect of trauma on both inhibition (e.g., ER) and impelling factors (e.g., trauma cognitions).

Studies utilizing experimental paradigms or longitudinal methods to examine instigating factors suggest that in the context of such factors, utilizing ER strategies was associated with fewer instances of IPV than not using an ER strategy (Birkley & Eckhardt, 2019; Maldonado et al., 2015; Shorey et al., 2015; Stappenbeck & Fromme, 2014). Preliminary research suggests that cognitive reappraisal may be an effective strategy to prevent IPV perpetration (Birkley & Eckhardt, 2019; Maldonado et al., 2015; Stappenbeck & Fromme, 2014). Studies comparing the utilization of cognitive reappraisal or suppression and rumination consistently identified suppression to be maladaptive for men and women, particularly in the context of high anger, an instigating factor (Birkley & Eckhardt, 2019; Maldonado et al., 2015). Notably, Stappenbeck and Fromme (2014) found that suppression may in some circumstances be adaptive for individuals experiencing high levels of anger arousal, suggesting that when used briefly, suppression may be more adaptive than no use of ER strategies at all.

It is important to note that instigating factors are often related to interactions with one's partner, and yet only one study examined partner effects (Watkins et al., 2014), although Bell and colleagues (2020) suggested that reliance on one's partner to facilitate emotional functioning may increase risk for physical IPV even when one is able to regulate their own emotions. A recent study that did not exclusively examine undergraduates and thus was not included in this review found the effect of men's ER on their own physical IPV perpetration was significant only when their partners were high in dysregulation (Lee et al., 2020). Consistent with Watkins and colleagues' findings, one's partner's regulation may lessen the risk of physical IPV perpetration associated with their own ER difficulties (Watkins et al., 2014; Lee et al., 2020). Thus, ER difficulties within both partners can predict physical IPV and preliminary findings suggest that men may be more influenced by their partner's

ER than women (Lee et al., 2020), which may explain different findings in the association between ER and IPV across genders.

This review also suggests that deficits in ER or use of maladaptive ER strategies in the context of alcohol intoxication contribute to psychological and physical IPV (Stappenbeck & Fromme, 2014). Alcohol use has consistently been associated with aggression, and state of acute intoxication may be conceptualized from the inhibition process of IPV perpetration within the context of the I<sup>3</sup> model (for review, Finkel & Eckhardt, 2013). This is particularly relevant to college students who regularly consume alcohol and engage in heavy episodic drinking (HED; 4 or 5 drinks in a two-hour period for females and males, respectively; National Institute on Alcohol Abuse and Alcoholism, 2018). Overall, ER deficits, particularly impulse-control difficulties and access to ER strategies, were associated with IPV perpetration among those who drink heavily and when acutely intoxicated. For those who engage in HED, impulse-control difficulties are associated with IPV perpetration (Stappenbeck et al., 2016; Watkins et al., 2014). This is consistent with past research that individuals with difficulties with the impulse control facet of ER experience more alcohol-related consequences, even though they may not engage in more drinking (Dvorak et al., 2014). The myopic effects of alcohol intoxication focus attention on salient, impelling cues (e.g., 'go cues'). Therefore, when intoxicated, individuals with impulse-control difficulties may experience impulsive urges as more salient and thus as propelling them to act on such urges. Further, prior research has posited that alcohol intoxication may interfere with access to higher-order cognitive abilities (Giancola et al., 2000), such as ER; thus, alcohol may impede access to ER abilities requiring more cognitive effort and behavioral control. Rumination and suppression were associated with greater likelihood of perpetrating aggression against a partner while intoxicated than sober (Maldonado et al., 2015). Although cognitive reappraisal was associated with a lower likelihood of perpetrating IPV (Maldonado et al., 2015), only one study found this relation only in the context of acute alcohol intoxication (Stappenbeck & Fromme, 2014). These results suggest that drinking patterns and acute intoxication strengthen the association between ER deficits and IPV perpetration, and that adaptive ER strategies may be harnessed to inhibit IPV even when intoxicated. Additionally, a proximal change trial within an alcohol administration paradigm that a brief, cognitive restructuring intervention was associated with enhanced emotion modulation and subsequently, lower intentions to engage in sexual assault for both sober and intoxicated men (Davis et al., 2020). These studies suggest that the use of cognitive reappraisal may be an effective in-the-moment inhibitory strategy, while deficits in ER and use of ER strategies such as suppression and rumination interfere with one's ability to override aggressive urges.

### **Methodological Strengths, Limitations, and Future Directions**

Several methodological concerns were identified in this literature review. The majority of literature in the current review examined physical and/or psychological IPV, with only three studies examining sexual IPV, and only one study examining cyber dating abuse. Research and interventions examining IPV tend to focus on one to two forms of IPV, with the vast majority of interventions focusing on psychological and physical IPV (Hamby & Grych, 2013). Theoretical and empirical research examining motives and processes of sexual IPV are often distinguished from those examining psychological and physical IPV (Stairmand et

al., 2020), which leads to the unintended interpretation that these are unrelated phenomenon (Grych & Swan, 2012). A large survey of college women reported that 26% of participants reported a forced, unwanted sexual experience by a partner or ex-partner (Sutherland et al., 2016). Global surveillance studies have found almost 50% of those sampled report sexual IPV victimization (for review, Barker et al., 2018). Moreover, a review of sexual IPV found there is a greater risk for homicide and severe physical injuries among those who experience sexual IPV than those who experience IPV with no sexual component (for review, Barker et al., 2018). This finding is not only concerning, but it reflects that IPV acts do not occur in isolation. Gulati and colleagues (2021) also found that more severe physical IPV and psychological IPV interacted with other IPV risk factors (heavy episodic drinking; coercive condom tactics) to predict rape events. Sexual assault perpetration research also does not consistently evaluate the type of relationship in which a sexual assault occurred (Bagwell-Gray et al., 2015). Thus while existing studies reflect lower rates of sexual IPV relative to other forms of IPV, the extant literature suggests that certain profiles of individuals – namely those engaging in sexual IPV – may be at greater risk of perpetrating severe psychological or physical IPV (Barker et al., 2018; Gulati et al., 2021). Far more research is also needed regarding cyber dating abuse, which Brem and colleagues found had been perpetrated by almost half their sample in the last three months (2019). Further, cyber dating abuse may precede psychological or physical IPV and was predicted by difficulties in ER (Brem et al., 2019). We suggest an expansion of the conceptualization of IPV; future IPV research should consider examining IPV as a comprehensive construct, including both cyber and sexual IPV, which will enable a better understanding of the role of ER and all forms of IPV. Future research may consider employing a developmental approach to understanding how IPV may unfold over time and within IPV events, to better understand the links between cyber, psychological, physical, and sexual IPV, and for whom and in what contexts they occur or co-occur.

The utilization of validated measures of IPV (e.g., CTS-2) is a strength of the current literature. It is also notable that these measures typically assess IPV perpetrated in the last 12 months or in the current relationship; thus it is unclear the extent to which these results may be applied to those whose IPV perpetration occurred longer than one year prior and/or toward a former partner, rather than the current partner. Very few studies assessed bidirectional IPV or IPV within dyads, which may provide key data as to how IPV events occur and examining the correspondence within couples about the occurrence of IPV events. There were notable differences in how studies reported the proportion of IPV perpetration within the samples. Approximately 30% of studies indicated the range and mean number of IPV perpetration acts without providing the proportion of the sample that perpetrated IPV. We recommend providing both the proportion of the sample that has perpetrated and the average frequency of perpetration.

A strength of the existing literature is the inclusion of male and female perpetration, as ongoing research continues to find college women's rates of psychological and physical IPV perpetration to be equal if not higher than men's. Future research should continue to ascertain the similarities and differences in motives, precursors, and outcomes of IPV perpetration across genders. For example, women's use of IPV as self-defense has been highlighted as a notable distinction between men's perpetration. However, Shorey and

colleagues have also highlighted that self-defense as a motive or reason for IPV perpetration is multifaceted; it may include protecting oneself from physical harm, a general attempt to defend oneself or to end IPV victimization, or to exact revenge (2010). They also note that the literature contains varying and vague definitions that limit the scientific consensus regarding self-defense and IPV. There is also little consistency in measurement of coercive control (Hamberger et al., 2017). Relying on only the perpetrator's self-report of attributions and motives may yield an incomplete understanding of the function of IPV (Neil & Edwards, 2017). For example, a review regarding control within IPV highlights that "certain behaviors may be coercive without the person's conscious recognition of them as such" (for review, Hamberger et al., 2017, pg. 2). Further, others have argued that while an individual may report motivations that do not include control, the target's perceptions of the IPV behaviors are an important component of control (Hamberger et al., 2017). Future research may consider incorporate dyadic methodologies to ascertain concurrence of partners' reports of IPV events, precursors, and motives.

The vast majority of the studies included in this review were predominantly comprised of White, four year college students within the United States, who were currently or recently in heterosexual relationships. There is a need to examine risk and resilience factors for IPV among students from racial and/or ethnic minoritized communities who face stressors related to racism in interpersonal interactions and the larger campus climate (Campbell et al., 2019). Gender and/or sexual minority (SGM) college students are disproportionately likely to experience IPV victimization (Whitfield et al., 2018). Future research must meaningfully include SGM individuals in IPV research, including research utilizing experimental and actor-partner paradigms. Community college students comprise 45% of college students within the United States (American Association of Community Colleges, 2014), yet no study in the current review recruited community college attendees. Community college students often balance many commitments, such as parenting, education, and work, and research is necessary to identify specific predictors of IPV and needs within this population (Voth Schrag & Edmond, 2018).

It is a strength of the existing literature that experimental and longitudinal designs are building upon the foundational work that have established ER to be associated with IPV perpetration. It is clear that use of longitudinal methodologies to conduct IPV research poses an ethical dilemma wherein researchers may potentially be aware of harmful or illegal behaviors occurring but not reporting it to the authorities. However, understanding the processes contributing to IPV perpetration in college is key to intervention development to change the trajectory of IPV perpetration following college. Future studies should consider examining ER and IPV perpetration as a relational and interactive process (Watkins et al., 2014). Self-regulatory processes such as ER also change moment-to-moment, and self-reports of global ER deficits do not capture the context-dependent nature of ER (Lavender et al., 2017). Moreover, there is a need for researchers to utilize non-self-report indices of ER, such as, psychophysiological measures (Murray-Close et al., 2012). Integration of physiological and additional non-self-report methods would allow for a more comprehensive examination of state ER, as well as provide for multi-trait, multi-method analyses of the ER construct.

## Clinical Implications and Conclusions

As IPV interventions continue to be developed and evaluated, it is vital that they address empirically-identified risk factors (Shorey et al., 2012b). Results support inclusion of ER in prevention and intervention efforts, potentially within a tiered-approach, incorporating universal interventions and targeted interventions for those at risk of perpetration and bystanders. Current approaches to IPV prevention and intervention primarily focus on victim risk reduction and bystander intervention rather than targeting perpetrator behavior (Coker et al., 2017). Given the frequency of perpetration among college students, successful prevention and intervention necessitates a paradigm shift in who is targeted for programming. It should also be noted that whereas this review discussed IPV within college students and implications for intervention, programming for middle and high school students occurs at important developmental and relational time points and may be key to preventing future IPV (Miller et al., 2020).

Consistent with the I<sup>3</sup> theory (Finkel, 2008; Finkel & Eckhardt, 2013), IPV perpetration must be conceptualized as a confluence of dispositional and situational factors, and not solely as a deficit in ER. Given the incidence of all forms of IPV within college populations, the results of the current review suggest integrating interventions for IPV into universal prevention efforts, such as during new student orientation. Interventions may wish to adopt a dual-approach of addressing misconceptions and attitudes toward IPV, including the bidirectional nature of IPV, while also addressing ER. Preliminary results from this review suggest teaching ER skills such as emotion identification and cognitive reappraisal may be beneficial in targeting IPV directly while also targeting risk factors, such as alcohol consumption. College campuses could augment existing interventions for students at-risk for perpetration, such as those who engage in hazardous drinking (Shorey et al., 2012b) and whose norms support an atmosphere of IPV, such as Greek members and athletes (Cantor et al., 2020; Foubert et al., 2007). Brief motivational interviewing interventions are widely utilized to address drinking among college students (Fachini et al., 2012). Colleges may consider incorporating IPV screening in these interventions and incorporate the use and practice of ER skills to reduce both alcohol use and IPV perpetration (Shorey et al., 2012b). Students with past histories of IPV perpetration may benefit from more intensive interventions, such as Dialectical Behavior Therapy (DBT; Linehan, 2015), which, in addition to ER, integrate relevant skills from a variety of domains (e.g., distress tolerance, mindfulness, interpersonal effectiveness). Colleges may also consider interventions tailored to students with developmental histories, such as trauma, that place them at risk for IPV perpetration and victimization. Current estimates suggest that between 20% to 40% of college students have a history of childhood maltreatment (Freyd et al., 2001; Gibb et al., 2009), thus these results highlight an association between ER and IPV that is highly relevant to a substantial portion of college students, particularly those who have witnessed IPV. Finally, ER is not a barrier to bystander intervention (Yule & Grych, 2017), and bystander trainings may benefit from incorporating education regarding emotion dysregulation as a risk factor for IPV.

IPV is a pervasive public health problem for which there are multiple risk factors. By reviewing existing investigations on ER and IPV perpetration within college students,

we sought to consolidate empirical findings, identify methodological limitations, and propose recommendations for future research and intervention. Future studies should remain grounded in empirically supported theories, such as the I<sup>3</sup> model, and examine ER and IPV perpetration throughout the lifespan, across situational contexts, and through a variety of methods.

## References

- Aldao A, Sheppes G, & Gross JJ (2015). Emotion regulation flexibility. *Cognitive Therapy and Research*, 39(3), 263–278. doi:1007/s10608-014-9662
- American Association of Community Colleges. (2014). Fast facts on community colleges. Accessed from <http://www.aacc.nche.edu>
- Archer J (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126(5), 651–680. doi:10.1037/0033-2909.126.5.651 [PubMed: 10989615]
- Babcock JC, Snead AL, Bennett VE, & Armenti NA (2019). Distinguishing subtypes of mutual violence in the context of self-defense: Classifying types of partner violent couples using a modified Conflict Tactics Scale. *Journal of Family Violence*, 34(7), 687–696. doi:10.1007/s10896-018-0012-2 [PubMed: 31708605]
- Bagwell-Gray ME, Messing JT, & Baldwin-White A (2015). Intimate partner sexual violence: A review of terms, definitions, and prevalence. *Trauma, Violence, & Abuse*, 16(3), 316–335. doi:10.1177/1524838014557290
- Banyard VL, Demers JM, Cohn ES, Edwards KM, Moynihan MM, Walsh WA, & Ward SK (2017). Academic correlates of unwanted sexual contact, intercourse, stalking, and intimate partner violence: An understudied but important consequence for college students. *Journal of Interpersonal Violence*. doi:10.1177/0886260517715022
- Basile KC, & Smith SG (2011). Sexual violence victimization of women: Prevalence, characteristics, and the role of public health and prevention. *American Journal of Lifestyle Medicine*, 5(5), 407–417. doi:10.1177/1559827611409512
- Barker L, Stewart DE, & Vigod S (2018). Intimate partner sexual violence: An often overlooked problem. *Journal of Women's Health*, 28, 363–374. doi:10.1089/jwh.2017.6811
- Bell KM, Howard L, & Cornelius TL (2020). Emotion Dysregulation as a Moderator of the Association Between Relationship Dependency and Female-Perpetrated Dating Aggression. *Journal of Interpersonal Violence*, 088626052094567. doi:10.1177/0886260520945678
- Birkley EL, & Eckhardt CI (2019). Effects of instigation, anger, and emotion regulation on intimate partner aggression: Examination of “perfect storm” theory. *Psychology of Violence*, 9(2), 186–195. doi:10.1037/vio0000190
- Brewer N, Thomas KA, & Higdon J (2018). Intimate partner violence, health, sexuality, and academic performance among a national sample of undergraduates. *Journal of American College Health*, 66(7), 683–692. doi:10.1080/07448481.2018.1454929 [PubMed: 29565765]
- Bliton CF, Wolford-Clevenger C, Zapor H, Elmquist J, Brem MJ, Shorey RC, & Stuart GL (2016). Emotion dysregulation, gender, and intimate partner violence perpetration: An exploratory study in college students. *Journal of Family Violence*. doi:10.1007/s10896-015-9772-0
- Breiding MJ, Basile KC, Smith SG, Black MC, & Mahendra RR (2015). Intimate Partner Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0. Atlanta (GA): National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Brem MJ, Stuart GL, Cornelius TL, & Shorey RC (2019). A longitudinal examination of alcohol problems and cyber, psychological, and physical dating abuse: the moderating role of emotion dysregulation. *Journal of Interpersonal Violence*. doi:10.1177/0886260519876029.
- Cafferky BM, Mendez M, Anderson JR, & Stith SM (2018). Substance use and intimate partner violence: A meta-analysis. *Psychology of Violence*, 8, 110–113. doi:10.1037/vio0000074
- Campbell SD, Carter-Sowell AR, & Battle JS (2019). Campus climate comparisons in academic pursuits: How race still matters for African American college students. *Group Processes & Intergroup Relations*, 22(3), 390–402. doi:10.1177/1368430218823065

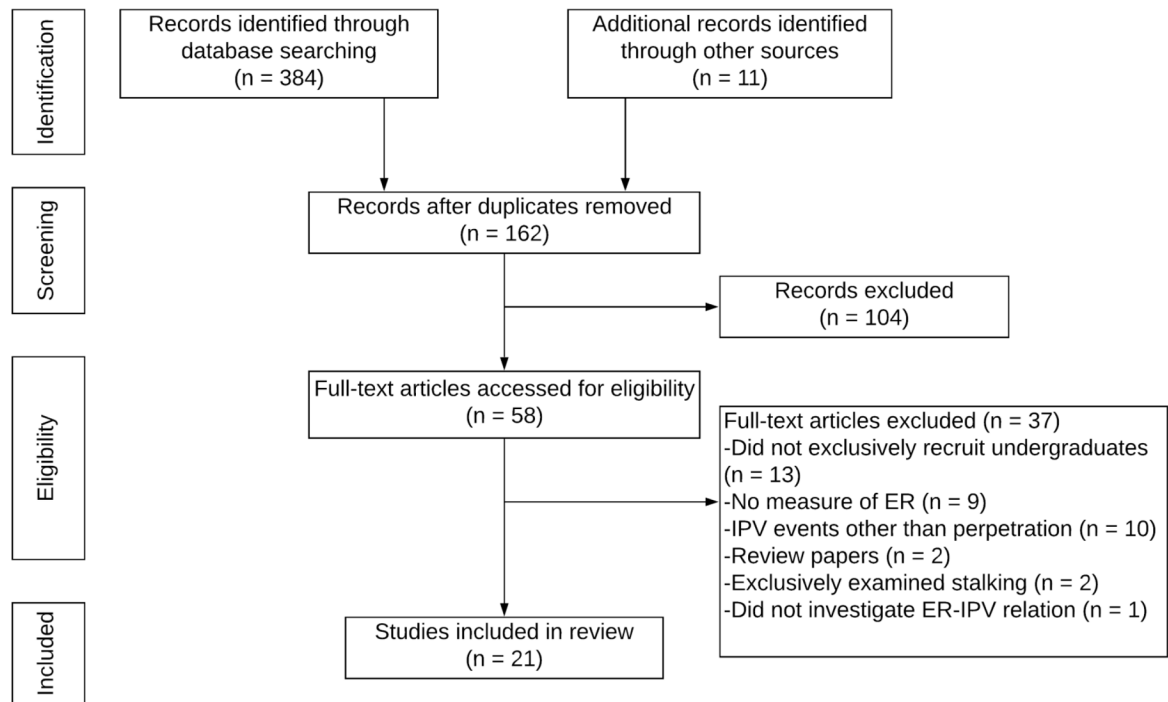


- Cantor N, Joppa M, & Angelone DJ (2020). An examination of dating violence among college student-athletes. *Journal of Interpersonal Violence*, 088626052090554. doi:10.1177/0886260520905545
- Carver CS (2005). Impulse and constraint: Perspectives from personality psychology, convergence with theory in other areas, and potential for integration. *Personality and Social Psychology Review*, 9(4), 312–333. doi:10.1207/s15327957pspr0904\_2 [PubMed: 16223354]
- Catalano S, Smith E, Snyder H, & Rand M (2009). *Female victims of violence*. Washington, D.C.: US Department of Justice, Office of Justice programs, Bureau of Justice Statistics.
- Catanzaro SJ, & Mearns J (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of Personality Assessment*, 54(3–4), 546–563. doi:10.1207/s15327752jpa5403@4\_11 [PubMed: 2348341]
- Caiozzo CN, Houston J, & Grych J (2016). Predicting aggression in late adolescent romantic relationships: A short-term longitudinal study. *Journal of Adolescence*, 53, 237–248. doi:10.1016/j.adolescence.2016.10.012 [PubMed: 27816698]
- Chan KL (2011). Gender differences in self-reports of intimate partner violence: A review. *Aggression and Violent Behavior*, 16(2), 167–175. doi:10.1016/j.avb.2011.02.008
- Coker AL, Banyard VL, & Recktenwald EA (2017). Primary intimate partner violence prevention programs for adolescents and young adults. In Renzetti CM, Follingstad DR, & Coker AL (Eds.), *Preventing intimate partner violence: Interdisciplinary perspectives* (39–70). Bristol University Press.
- Dvorak RD, Sargent EM, Kilwein TM, Stevenson BL, Kuvaas NJ, & Williams TJ (2014). Alcohol use and alcohol-related consequences: Associations with emotion regulation difficulties. *The American Journal of Drug and Alcohol Abuse*, 40(2), 125–130. doi:10.3109/00952990.2013.877920 [PubMed: 24588419]
- Elmqvist J, Wolford-Clevenger C, Zapor H, Febres J, Shorey RC, Hamel J, & Stuart GL (2016). A Gender comparison of motivations for physical dating violence among college students. *Journal of Interpersonal Violence*, 31(1), 186–203. doi:10.1177/0886260514555130 [PubMed: 25392388]
- Erdur-Baker O, Aberson CL, Barrow JC, & Draper MR (2006). Nature and severity of college students' psychological concerns: A comparison of clinical and nonclinical national samples. *Professional Psychology: Research and Practice*, 37(3), 317–323. doi:10.1037/0735-7028.37.3.317
- Fachini A, Aliane PP, Martinez EZ, & Furtado EF (2012). Efficacy of brief alcohol screening intervention for college students (BASICS): a meta-analysis of randomized controlled trials. *Substance Abuse Treatment, Prevention, and Policy*, 7(1), 40–50. doi:10.1186/1747-597x-7-40 [PubMed: 22967716]
- Fielder RL, Carey KB, & Carey MP (2013). Are hookups replacing romantic relationships? A longitudinal study of first-year female college students. *Journal of Adolescent Health*, 52(5), 657–659. doi:10.1016/j.jadohealth.2012.09.001
- Finkel EJ (2007). Impelling and inhibiting forces in the perpetration of intimate partner violence. *Review of General Psychology*, 11(2), 193. doi:10.1037/1089-2680.11.2.193
- Finkel EJ (2008). Intimate partner violence perpetration: Insights from the science of self-regulation. *Social Relationships: Cognitive, Affective, and Motivational Processes*, 271–288. doi:10.1037/1089-2680.11.2.193
- Finkel EJ, & Eckhardt CI (2013). Intimate partner violence. In Simpson JA & Campbell L, *The Oxford Handbook of Close Relationships* (pp. 452–474). New York City, New York: Oxford University Press
- Foubert JD, Newberry JT, & Tatum J (2008). Behavior differences seven months later: Effects of a rape prevention program. *Journal of Student Affairs Research and Practice*, 44(4). doi:10.2202/1949-6605.1866
- Freyd JJ, DePrince AP, & Zurbriggen EL (2001). Self-reported memory for abuse depends on victim-perpetrator relationship. *Journal of Trauma and Dissociation*, 2, 3–15. doi:10.1300/j229v02n03\_02
- Giancola PR (2000). Executive functioning: A conceptual framework for alcohol-related aggression. *Experimental and Clinical Psychopharmacology*, 8(4), 576–597. doi:10.1037//1064-1297.8.4.576 [PubMed: 11127429]

- Gibb BE, Schofield CA, & Coles ME (2009). Reported history of childhood abuse and young adults' information processing biases for facial displays of emotion. *Childhood Maltreatment*, 14, 142–156. doi:10.1177/1077559508326358
- Gildner DJ, Kirwan M, Pickett SM, & Parkhill MR (2018). Impulse control difficulties and hostility toward women as predictors of relationship violence perpetration in an undergraduate male sample. *Journal of Interpersonal Violence*. doi:10.1177/0886260518792972.
- Gratz KL, Paulson A, Jakupcak M, & Tull MT (2009). Exploring the relationship between childhood maltreatment and intimate partner abuse: Gender differences in the mediating role of emotion dysregulation. *Violence and Victims*, 24(1), 68–82. doi:10.1891/0886-6708.24.1.68 [PubMed: 19297886]
- Gratz KL, & Roemer L (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 36, 41–54. doi:10.1023/b:joba.0000007455.08539.94
- Gross JJ (1998). The emerging field of emotion regulation: an integrative review. *Review of general psychology*, 2(3), 271. doi:10.1037/1089-2680.2.3.271
- Gross JJ (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1–26. doi:10.1080/1047840X.2014.940781
- Gross JJ, & John OP (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. doi:10.1037/0022-3514.85.2.348 [PubMed: 12916575]
- Grych J, & Swan S (2012). Toward a more comprehensive understanding of interpersonal violence: Introduction to the special issue on interconnections among different types of violence. *Psychology of Violence*, 2(2), 105–110. doi:10.1037/a0027616
- Gulati NK, Stappenbeck CA, George WH, & Davis KC (2021). Predicting rape events: The influence of intimate partner violence history, condom use resistance, and heavy drinking. *Aggressive Behavior*, 47(1), 69–77. doi:10.1002/ab.21927 [PubMed: 32864752]
- Guzmán-González M, Lafontaine M, & Levesque C (2016). Romantic attachment and physical intimate partner violence perpetration in a Chilean sample: The mediating role of emotion regulation difficulties. *Violence and Victims*, 31, 854–868. doi:10.1819/0866-6708.vv-d-14-00114
- Hamberger LK, Larsen SE, & Lehrner A (2017). Coercive control in intimate partner violence. *Aggression and Violent Behavior*, 37, 1–11. doi:10.1016/j.avb.2017.08.003
- Hamby S, & Grych J (2013). *The web of violence: Exploring connections among different forms of interpersonal violence and abuse*. Springer.
- Harned MS (2001). Abused Women or Abused Men? An Examination of the Context and Outcomes of Dating Violence. *Violence and Victims*, 16(3), 269–285. doi:10.1891/0886-6708.16.3.269 [PubMed: 11437117]
- Harper FW, Austin AG, Cercone JJ, & Arias I (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence*, 20(12), 1648–1662. [PubMed: 16246922]
- Hughes HM, Massura CE, Anukem OV, & Cattage JS (2016). Women college students' reasons for engaging in psychological dating aggression: A qualitative examination. *Journal of Family Violence*, 31(2), 239–249.
- Kennedy AC, Meier E, & Prock KA (2021). A qualitative study of young women's abusive first relationships: What factors shape their process of disclosure?. *Journal of Family Violence*, 1–16.
- Langhinrichsen-Rohling J, Misra TA, Selwyn C, & Rohling ML (2012). Rates of bidirectional versus unidirectional intimate partner violence across samples, sexual orientations, and race/ethnicities: A comprehensive review. *Partner Abuse*, 3(2), 199–230.
- Lavender JM, Tull MT, DiLillo D, Messman-Moore T, & Gratz KL (2017). Development and validation of a state-based measure of emotion dysregulation: The State Difficulties in Emotion Regulation Scale (S-DERS). *Assessment*, 24(2), 197–209. doi:10.1177/1073191115601218 [PubMed: 26297011]

- Lee KDM, Rodriguez LM, Edwards KM, & Neal AM (2020). Emotional dysregulation and intimate partner violence: A dyadic perspective. *Psychology of Violence, 10*(2), 162–171. doi:10.1037/vio0000248
- Linehan MM (2015). *DBT skills training manual: 2nd edition*. New York: Guilford Press.
- Maldonado RC, DiLillo D, & Hoffman L (2015). Can college students use emotion regulation strategies to alter intimate partner aggression-risk behaviors? An examination using I<sup>3</sup> theory. *Psychology of Violence, 5*(1), 46–55. doi:10.1037/a0035454
- Marshall AD, Robinson LR, & Azar ST (2011). Cognitive and emotional contributors to intimate partner violence perpetration following trauma. *Journal of Traumatic Stress, 24*(5), 586–590. doi:10.1002/jts.20681 [PubMed: 22095775]
- Miller E, Jones KA, Ripper L, Paglisotti T, Mulbah P, & Abebe KZ (2020). An athletic coach–delivered middle school gender violence prevention program: A Cluster randomized clinical trial. *JAMA Pediatrics, 174*(3), 241. doi:10.1001/jamapediatrics.2019.5217 [PubMed: 31930358]
- Murray-Close D, Holland AS, & Roisman GI (2012). Autonomic arousal and relational aggression in heterosexual dating couples. *Personal Relationships, 19*(2), 203–218. doi:10.1111/j.1475-6811.2011.01348.x
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2018). NIAAA council approves definition of binge drinking. NIH Newsletter, NIH Publication No. 04–5346(3)
- Neal AM, Dixon KJ, Edwards KM, & Gidycz CA (2015). Why did she do it? College women’s motives for intimate partner violence perpetration. *Partner Abuse, 6*(4), 425–441. doi:10.1891/1946-6560.6.4.425
- Neal AM, & Edwards KM (2017). Perpetrators’ and Victims’ Attributions for IPV: A Critical Review of the Literature. *Trauma, Violence, & Abuse, 18*(3), 239–267. 10.1177/1524838015603551
- O’Leary KD, & Slep AMS (2011). Prevention of partner violence by focusing on behaviors of both young males and females. *Prevention Science, 13*, 329–339. doi:10.1007/s11121-011-0237-2
- Oliveros AD, & Coleman AS (2019). Does emotion regulation mediate the relation between family-of-origin violence and intimate partner violence?. *Journal of Interpersonal Violence. doi:10.1177/0886260519867146*
- Ortiz E, Shorey RC, & Cornelius TL (2015). An examination of emotion regulation and alcohol use as risk factors for female-perpetrated dating violence. *Violence and Victims, 30*(3), 417–431. doi:10.1891/0886-6708.VV-D-13-00173 [PubMed: 26118264]
- Sabina C, & Straus MA (2008). Polyvictimization by dating partners and mental health among US college students. *Violence and victims, 23*(6), 667–682. doi:10.1891/0886-6708.23.6.667 [PubMed: 19069560]
- Sargent KS, Krauss A, Jouriles EN, & McDonald R (2016). Cyber victimization, psychological intimate partner violence, and problematic mental health outcomes among first-year college students. *Cyberpsychology, Behavior, and Social Networking, 19*(9), 545–550. doi:10.1089/cyber.2016.0115 [PubMed: 27548623]
- Shorey RC, Meltzer C, & Cornelius TL (2010). Motivations for self-defensive aggression in dating relationships. *Violence and Victims, 25*(5), 662–676. doi:10.1891/0886-6708.25.5.662 [PubMed: 21061871]
- Shorey RC, Brasfield H, Febres J, & Stuart GL (2011a). An examination of the association between difficulties with emotion regulation and dating violence perpetration. *Journal of Aggression, Maltreatment & Trauma, 20*(8), 870–885. doi:10.1080/10926771.2011.629342
- Shorey RC, Cornelius TL, & Idema C (2011b). Trait anger as a mediator of difficulties with emotion regulation and female-perpetrated psychological aggression. *Violence and Victims, 26*(3), 271–282. doi:10.1891/0886-6708.26.3.271 [PubMed: 21846017]
- Shorey RC, McNulty JK, Moore TM, & Stuart GL (2015). Emotion regulation moderates the association between proximal negative affect and intimate partner violence perpetration. *Prevention Science, 16*(6), 873–880. doi:10.1007/s11121-015-0568-5 [PubMed: 25995047]
- Shorey RC, Temple JR, Febres J, Brasfield H, Sherman AE, & Stuart GL (2012a). The consequences of perpetrating psychological aggression in dating relationships: A descriptive investigation. *Journal of Interpersonal Violence, 27*(15), 2980–2998. doi:10.1177/0886260512441079 [PubMed: 22550148]

- Shorey RC, Zucosky H, Brasfield H, Febres J, Cornelius TL, Sage C, & Stuart GL (2012b). Dating violence prevention programming: Directions for future interventions. *Aggression and Violent Behavior, 17*(4), 289–296. doi:10.1016/j.avb.2012.03.001 [PubMed: 22773916]
- Shulman S, & Connolly J (2013). The challenge of romantic relationships in emerging adulthood: Reconceptualization of the field. *Emerging Adulthood, 1*(1), 27–39. doi:10.1177/2167696812467330
- Stappenbeck CA, Davis KC, Cherf NJ, Gulati NK, & Kajumulo KF (2016). Emotion regulation difficulties moderate the association between heavy episodic drinking and dating violence perpetration among college men. *Journal of Aggression, Maltreatment, and Trauma, 25*, 921–935. doi:10.1080/10926771.2016.1232328
- Stappenbeck CA, & Fromme K (2014). The effects of alcohol, emotion regulation, and emotional arousal on the dating aggression intentions of men and women. *Psychology of Addictive Behaviors, 28*(1), 10–19. doi:10.1037/a0032204 [PubMed: 23586449]
- Stairmand M, Polaschek DLL, & Dixon L (2020). Putting coercive actions in context: Reconceptualizing motives for intimate partner violence perpetration. *Aggression and Violent Behavior, 51*, 101388. doi:10.1016/j.avb.2020.101388
- Straus MA (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review, 30*(3), 252–275. doi:10/1016.j.childyouth.2007.10.004
- Sutherland MA, Fantasia HC, & Hutchinson MK (2016). Screening for intimate partner and sexual violence in college women: Missed opportunities. *Women's Health Issues, 26*(2), 217–224. doi:10.1016/j.whi.2015.07.008 [PubMed: 26329257]
- Thompson RA, & Calkins SD (1996). The double-edged sword: Emotional regulation for children at risk. *Development and Psychopathology, 8*(1), 163–182. doi:10.1017/S0954579400007021
- Voth Schrag RJ, & Edmond TE (2018). Intimate partner violence, trauma, and mental health need among female community college students. *Journal of American College Health, 66*(7), 702–711. doi:10.10180/07448481.2018.1456443 [PubMed: 29672245]
- Watkins LE, Maldonado RC, & DiLillo D (2014). Hazardous alcohol use and intimate partner aggression among dating couples: The role of impulse control difficulties. *Aggressive Behavior, 40*(4), 369–381. doi:10/1002/ab.21528 [PubMed: 24464403]
- Whitfield DL, Coulter RW, Langenderfer-Magruder L, & Jacobson D (2018). Experiences of intimate partner violence among lesbian, gay, bisexual, and transgender college students: the intersection of gender, race, and sexual orientation. *Journal of Interpersonal Violence, 33*(1), 101–117. doi:10.1177/0886260518812071
- Yule K, & Grych J (2017). College students' perceptions of barriers to bystander intervention. *Journal of Interpersonal Violence, 32*(1), 101–117. doi:10.1177/0886260517706764
- Zimmer-Gembeck MJ, & Gallaty KJ (2006). Hanging out or hanging in? Young females' socioemotional functioning and the changing motives for dating and romance. *Advances in Psychology Research, 44*, 1–25. doi:10.1111/j.1745-5871.2006.411\_5.x
- Zweig JM, Dank M, Yahner J, & Lachman P (2013). The rate of cyber dating abuse among teens and how it relates to other forms of teen dating violence. *Journal of Youth and Adolescence, 42*(7), 1063–1077. doi:10.1007/s10964-013-9922-8 [PubMed: 23412689]



**Figure 1:**  
Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart

Table 1

Methodology, Sample Information, and Key Findings of Included Studies

Study Authors (Year)	Design	Study Population (Sample Size, Demographics, Mean Age)	Recruitment Criteria	Operationalization of Emotion Regulation	Operationalization of IPV and IPV Count and/or Prevalence	Key Findings
<b>Direct Associations of ER with IPV Perpetration</b>						
Shorey, Brasfield, Febres, & Stuart (2011a)	Cross-sectional survey	440 males and females (57.3% female) • $M = 19.18$ ( $SD = 1.47$ ) • 85% non-Latinx white	Current dating relationship for 1 month	DERS total score and subscales	CTS-2 in last 6 months • Psychological IPV (count) • Men = 7.86 • Women = 9.79 • Physical IPV (count) • Men = 2.72 • Women = 3.34 • Sexual IPV (count) • Men = 3.67 • Women = 2.15	Men • TDER, GDB, ICD, EmoCI, LAERS → psychological IPV • ICD → physical IPV • GDB, ICD, LAERS → sexual IPV Women • EmoAw → psychological IPV • TDER and all DERS subscales → physical IPV • No association between any DERS scales and sexual IPV
Bliton, Wolford-Clevenger, Zapor, Elmquist, Brem, Shorey, & Stuart (2016)	Cross-sectional survey	598 males and females (64.4% female) • $M = 18.92$ ( $SD = 2.05$ ) • 81.4% non-Latinx white	Current or past dating relationship for 1 month in the last year	DERS total score and subscales	CTS-2 in last 12 months • Psychological IPV (proportion) = 72% • Physical IPV (proportion) = 20%	Men • ICD and EmoCI correlated with psychological IPV Women • ICD, GDB, EmoCI, LAERS correlated with psychological IPV • ICD, EmoAw, LAERS, EmoCI correlated with physical IPV
Shorey, Temple, Febres, Brasfield, Sherman, & Stuart (2012)	Cross-sectional online survey	115 females • $M = 18.60$ ( $SD = 1.00$ ) • 83.5% non-Latinx white	Current dating relationship for 1 month; perpetrated 1 severe psychological IPV act in last 6 months	Consequences of Psychological Aggression Perpetration Scale	CTS-2 in the last 6 months • Psychological IPV (proportion) = 100%	• 42.6% decreased anger • 31.3% decreased frustration • 30.1% increased calm • 25.7% decreased stress • 25.4% decreased irritation
<b>Qualitative Assessment of ER and IPV</b>						
Hughes, Massura, Anukem, & Cattage (2016)	Qualitative survey responses	72 females • 68% between 18 and 19 years old (Mean not reported) • 76% non-Latinx white	Current or previous dating relationship with male partner for 1 month; reported past psychological IPV perpetration only	Open-ended revision of Reasons for Conflict Scale	Open-ended question assessing lifetime psychological IPV adapted from CTS-2 • Psychological IPV (proportion) = 100%	Reason to perpetrate IPV: • 46% negative affect (“out of frustration”) • 4% self-soothing (“to make myself feel better”)
<b>ER within Indirect Effects Models</b>						
Guzmán-González, Lafontaine, & Levesque (2016)	Cross-sectional survey	611 males and females • $M = 21.46$ ( $SD = 2.23$ ) • 100% Chilean	Current dating relationship	Chilean adaptation of the DERS total score	CTS-2 at any point in lifetime • Physical IPV (count) • Men = 3.70 • Women = 4.23	• Romantic attachment → TDER → physical IPV



Study Authors (Year)	Design	Study Population (Sample Size, Demographics, Mean Age)	Recruitment Criteria	Operationalization of Emotion Regulation	Operationalization of IPV and IPV Count and/or Prevalence	Key Findings
Marshall, Robinson, & Azar (2011)	Cross-sectional survey	185 males and females (61% female) • $M = 19.0$ ( $SD = 1.26$ ) • 91% non-Latinx white	Current dating relationship; past perpetration of physical or severe psychological IPV and experiencing a potentially traumatic event	Affect Dysregulation Subscale of the Inventory of Altered Self Capacities	CTS-2 during current relationship (timeframe not specified) • Psychological IPV (count) = 13.92 • Physical IPV (count) = 1.08 100% perpetrated physical or severe psychological IPV	• Trauma cognitions → anger misappraisal and emotion dysregulation → physical IPV and psychological IPV
Gratz, Paulson, Jakupcak, & Tull (2009)	Cross-sectional survey	341 males and females (71.8% female) • $M = 23.04$ ( $SD = 5.60$ ) • 65.8% non-Latinx white	Inclusion criteria not reported	DERS total score	Abuse-Perpetration Inventory in lifetime • Physical IPV (proportion) • Men = 17% • Women = 24%	Men • Childhood maltreatment → TDER → physical IPV
Shorey, Cornelius, & Idema (2011b)	Cross-sectional survey	145 females • $M = 18.6$ ( $SD = 1.67$ ) • 94.5% non-Latinx white	Current or past dating relationship since age 18	DERS total score	CTS-2 in last 12 months • Psychological IPV (count) = 12.14	• Perpetrators of psychological IPV reported greater TDER • TDER → trait anger → psychological IPV
Oliveros & Coleman (2019)	Cross-sectional survey	620 males and females (76.6% female) • $M = 19.50$ ( $SD = 1.59$ ) • 72.3% non-Latinx white	Current dating relationship	Six subscales of the DERS as a latent variable	Abuse Within Intimate Relationships Scales in current relationship (timeframe not provided) • Psychological IPV • Physical IPV Frequency/prevalence rates not reported	Men • Father-perpetrated IPV → ER → IPV perpetration Women • Maternal and paternal parent-child conflict → ER → IPV perpetration
Ortiz, Shorey, & Cornelius (2015)	Cross-sectional survey	379 females • $M = 18.52$ ( $SD = 1.24$ ) • 84.7% non-Latinx white	Current or past dating relationship	DERS total score	CTS2 in last 12 months • Psychological IPV (proportion) = 82.9% • Physical IPV (proportion) = 33.2%	• TDER → alcohol use → psychological IPV • TDER → alcohol use → psychological IPV → physical IPV
<b>ER in Moderation Models</b>						
Harper, Austin, Cercone, & Arias (2005)	Cross-sectional survey	150 males • $M = 19.41$ ( $SD = 1.55$ ) 85% non-Latinx white	Current exclusive dating relationship for 1 month	Negative Mood Regulation Scale	Psychological Maltreatment of Women Inventory in last month <sup>a</sup> Psychological IPV (frequency) = 58.12	• ER did not moderate the association between anger and psychological IPV
Gildner, Kirwan, Pickett, & Parkhill (2018)	Cross-sectional survey	295 males • 59% were 18–20 years old 67.5% non-Latinx white	Fluent in English	Impulse-control difficulties subscale of the DERS	Composite of Relationship Violence Scale (timeframe not provided) • Psychological IPV (count) • Physical IPV (count) • Sexual IPV (count) Mean IPV = 1.09	• Participants reported more frequent IPV when they had high ICD relative to low • ICD and hostility toward women did not interact to predict IPV
Stappenbeck, Davis, Cherf,	Cross-sectional online study	158 males • $M = 20.2$ ( $SD = 18$ ) 42% non-Latinx males	Cisgender men	Six DERS subscales	Dating Relationship Violence Questionnaire in last 12 months • Psychological IPV only	• GDB, EmoCI, EmoAcc → IPV perpetration • The association between heavy

Study Authors (Year)	Design	Study Population (Sample Size, Demographics, Mean Age)	Recruitment Criteria	Operationalization of Emotion Regulation	Operationalization of IPV and IPV Count and/or Prevalence	Key Findings
Gulati, & Kajumulo (2016)					(proportion) = 41% <ul style="list-style-type: none"> <li>Physical IPV only (proportion) = 8%</li> <li>Both psychological and physical IPV (proportion) = 21%</li> </ul>	episodic drinking and IPV perpetration was moderated by ICD and LAERS
Watkins, Maldonado, & DILillo (2014)	Cross-sectional survey with dyadic framework	73 heterosexual couples (N = 146) <ul style="list-style-type: none"> <li>M = 19.7 (SD = 19)</li> <li>89% non-Latinx white</li> </ul>	Attend session as a couple, Current committed relationship for 4 months	Impulse control difficulties subscale of the DERS	CTS-2 in last four to six months <ul style="list-style-type: none"> <li>Psychological IPV (proportion) = 94.5%</li> <li>Men = 95.5%</li> <li>Women = 95.5%</li> <li>Physical IPV (proportion) = 50.7%</li> <li>Men = 50.7%</li> <li>Women = 58.9%</li> </ul>	<ul style="list-style-type: none"> <li>Hazardous alcohol use was negatively → physical IPV severity for those with very low ICD</li> <li>Partner's ICD were positively → actor perpetration of physical and psychological IPV</li> </ul>
Bell et al., 2020	Cross-sectional survey as part of larger, multisite study	119 females <ul style="list-style-type: none"> <li>M = 19.03 (SD = 1.31)</li> <li>69.2% non-Latinx white</li> </ul>	Current dating relationship with male partner; past perpetration of 1 act of physical IPV in last 6 months	DERS total score	CTS-2 in last 12 months <ul style="list-style-type: none"> <li>Psychological IPV (count) = 1.39</li> <li>Physical IPV (count) = 1.87</li> </ul>	<ul style="list-style-type: none"> <li>TDER → psychological IPV</li> <li>The interaction of anxious attachment and TDER on psychological IPV approached significance</li> <li>Anxious attachment → physical IPV at high levels of TDER</li> <li>Emotional dependency → physical IPV at low levels of TDER</li> </ul>
Shorey, McNulty, Moore, & Stuart (2015)	Baseline and daily surveys for 90 consecutive days	67 males <ul style="list-style-type: none"> <li>M = 19.74 (SD = 2.42)</li> <li>86.6% non-Latinx white</li> </ul>	Current dating relationship 1 month and consumed alcohol in past month	DERS total score	CTS-2 in last 90 days <ul style="list-style-type: none"> <li>Psychological IPV (proportion) = 23.8%</li> <li>Physical IPV (proportion) = 11.9%</li> </ul>	<ul style="list-style-type: none"> <li>Negative affect was positively → physical IPV when TDER were high relative to low</li> </ul>
Brem, Stuart, Cornelius, & Shorey (2019)	Longitudinal study with two time points over 3-months	578 males and females (85.1% female) <ul style="list-style-type: none"> <li>M = 19.05 (SD = 1.60)</li> <li>84.6% non-Latinx white</li> </ul>	Current dating relationship for 1 month	DERS total score	CTS-2 in last 12 months <ul style="list-style-type: none"> <li>Psychological IPV (proportion) = 74.6%</li> <li>Physical IPV (proportion) = 26.3%</li> </ul> PATS in last 12 months <ul style="list-style-type: none"> <li>Cyber Aggression (proportion) = 75.3%</li> </ul> CTS-2 in last 3 months <ul style="list-style-type: none"> <li>Psychological IPV (proportion) = 55.3%</li> <li>Physical IPV (proportion) = 14.2%</li> </ul> PATS in last 3 months Cyber Aggression (proportion) = 48.2%	<ul style="list-style-type: none"> <li>TDER difficulties were positively → cyber aggression perpetration</li> <li>Alcohol problems at Time 1 were positively → future psychological and physical IPV for those with average and higher than average TDER</li> <li>The interaction between TDER and alcohol did not predict cyber aggression perpetration</li> </ul>
Catizzo, Houston, & Grych (2016)	8-week longitudinal survey	1180 males and females (68.2% female) <ul style="list-style-type: none"> <li>M = 18.85 (SD = 1.15)</li> <li>77% non-Latinx white</li> </ul>	Inclusion criteria not provided	DERS total score (DERS was reverse coded)	Conflict in Adolescent Dating Relationships Inventory over last 2 months <ul style="list-style-type: none"> <li>Psychological IPV</li> </ul>	Total sample <ul style="list-style-type: none"> <li>TDER was negatively → psychological IPV</li> <li>Aggressive attitudes was</li> </ul>

Study Authors (Year)	Design	Study Population (Sample Size, Demographics, Mean Age)	Recruitment Criteria	Operationalization of Emotion Regulation	Operationalization of IPV and IPV Count and/or Prevalence	Key Findings
Stappenbeck & Fromme (2014)	Alcohol administration paradigm	144 males and females (50% female) • $M = 23.1$ ( $SD = 2.2$ ) • 51.4% non-Latinx white	Current dating relationship for 1 month and identifies as heterosexual	Emotion Regulation Questionnaire • CR ability • SUP ability	<ul style="list-style-type: none"> <li>Men = 37.6%</li> <li>Women = 54.3%</li> <li>Physical IPV</li> <li>Men = 5.9%</li> <li>Women = 12.7%</li> <li>Sexual IPV</li> <li>Men = 4.1%</li> <li>Women = .8%</li> </ul> Articulated Thoughts in Simulated Situations paradigm with jealousy-evoking vs. control (neutral) scenario • Mean aggressive acts (count) = 2.39	positively → physical IPV for those with low TDER Men • At low levels of callous-unemotional traits, TDER was negatively → IPV perpetration • Among those with low CR, intoxication was positively → IPV intentions relative to placebo and control • Among those with high CR, those in the control reported more IPV intentions than alcohol or control • Among those with low SUP, those with high emotional arousal reported more verbal articulations compared to lower arousal
<b>Experiments with ER Instructional Set</b>						
Maldonado, D'Lillo, & Hoffman (2015)	Emotion regulation instruction randomization	236 males and females (58% female) • $M = 18.91$ ( $SD = 21.64$ ) • 88.6% non-Latinx white	Inclusion criteria not reported	Randomized to ER instruction condition • CR • SUP • No instruction	CTS-2 in last 6 months • Physical IPV (proportion) = 28.8% Articulated Thoughts in Simulated Situations with jealousy and anger-evoking vs. control (neutral) scenario	<ul style="list-style-type: none"> <li>Individuals in the CR condition reported fewer verbally aggressive articulations</li> <li>Perpetrators in the CR condition reported fewer verbal articulations during provocation than non-perpetrators in the same condition</li> <li>Perpetrators in SUP condition reported more verbal articulations than individuals using CR</li> </ul>
Birkley & Eckhardt (2019)	Emotion regulation instruction randomization	180 males and female (62% female) • $M = 19.32$ ( $SD = .18$ ) • 83% non-Latinx white	Current or past 6 months heterosexual relationship with history of psychological or physical IPV perpetration within the last 12 months	Instructed to engage in ER strategies • CR • SUP • Distraction • No instruction	CTS-2 in last 12 months • Psychological IPV • Physical IPV 100% of sample had perpetrated psychological or physical IPV in last 12 months Articulated Thoughts in Simulated Situations Aggressive with jealousy-evoking vs. control (neutral) scenario Hostile Automatic Thoughts Scale • Physical Aggression	<ul style="list-style-type: none"> <li>Those in the CR condition had fewer aggressive verbalizations than the other three conditions</li> <li>For those with high levels of trait anger who received the SUP condition, receiving instruction → IPV-related behaviors</li> <li>The association between any ER strategies and IPV-related behaviors was strongest among those with high trait anger</li> </ul>

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Note. CR = Cognitive Reappraisal; CTS-2 = Revised Conflict Tactics Scale; DERS: Difficulties in Emotion Regulation Scale; EmoAcc: Nonacceptance of Emotional Response; EmoAw: Lack of Emotional Awareness; EmoCl: Lack of Emotional Clarity; GDB: Difficulties Engaging in Goal-Directed Behavior; ICD: Impulse-Control Difficulties; LAERS = Limited Access to Emotion Regulation Strategies; PATS = Psychological Aggression Using Technology Scale RUM = Rumination; SUP = Suppression; TDER = Total Difficulties in Emotion Regulation

*ΔIV* was computed by summing responses to a frequency scale (1 = *never* to 5 = *very frequently*)

**Table 2****Critical Findings****Critical Findings**

- Research suggests no gender differences in the perpetration of psychological or physical IPV perpetration
- Certain facets of ER and ER strategies, such as cognitive reappraisal, are associated with lower psychological and physical IPV perpetration, while ER strategies, such as rumination and suppression, appear to increase psychological and physical IPV perpetration for men and women
- ER is most robustly associated with psychological and physical IPV perpetration when examining in the context of other IPV-risk factors, such as attitudes about violence, trauma history, and acute intoxication
- Alcohol administration paradigms and experiments utilizing an ER instruction set show promising findings that college students are able to utilize adaptive ER strategies when acutely intoxicated and in the context of provocation cues
- Our comprehensive understanding of IPV within college samples and our ability to develop culturally-informed, evidence-based interventions is hampered by samples that are overwhelmingly comprised of White students engaged in intimate relationships with other-gender partners

**Table 3**

**Implications for Policy, Practice, and Research**

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- Given the high rates of all three forms of intimate partner violence (IPV) among college students and the resulting short- and long-term negative consequences, colleges and universities should prioritize screening, prevention, and intervention in IPV
- Emotion regulation (ER) regarding impulse-control, goal-directed behavior, and adaptive ER strategies, particularly cognitive reappraisal, show promise as interventions for IPV, particularly for students who engage in hazardous drinking
- Researchers should consider examining sexual assault occurring within intimate relationships (e.g., sexual IPV) to expand the literature based on individual- and event-level predictors of sexual IPV
- Researchers and practitioners should continue developing and evaluating universal and tailored interventions that target ER as an inhibiting factor in IPV perpetration that operates synergistically with impelling and instigating factors
- Comprehensive approaches to preventing and intervening in IPV at the college- and university-level should include IPV screening and a dual-approach to IPV perpetration that incorporates addressing attitudes condoning violence and myths regarding IPV with ER skill-building, particularly for high-risk groups such as students who engage in hazardous drinking or with previous IPV perpetration histories