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**Intimate Partner Violence Perpetration:
Insights from the Science of Self-Regulation**

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**Intimate Partner Violence Perpetration:
Insights from the Science of Self-Regulation**

Intimate partner violence (IPV) refers to any behavior carried out with the primary proximal intent to cause physical harm to a romantic partner who is motivated to avoid being harmed. Research on IPV rose to prominence in the 1970s and has flourished ever since. As I reviewed this body of research recently (Finkel, 2007, in press), one aspect of it that struck me is the meagerness of the social psychological contributions relative to the contributions from other disciplines.¹ After all, social psychologists generally pride ourselves on our talents in studying interpersonal processes, and hundreds of us have devoted large swaths of our careers to investigating such processes as they pertain to conflictual or otherwise aversive interpersonal processes. For example, other chapters in this volume investigate the expression of negative emotion in romantic relationships (Simpson, Collins, Tran, & Haydon, Chapter X), attention to desired-sex partners outside of one's committed romantic relationship (Miller, Chapter X), punishment and forgiveness in romantic relationships (Fitness & Peterson, Chapter X), relational ostracism (Williams, Zadro, & Arriaga, Chapter X), competition among siblings (Noller, Conway, & Blakeley, Chapter X), the negative evaluations individuals form about their relationships when in a bad mood (Forgas, Chapter X), and even the potentially destructive consequences (at least for men) of talking about one's romantic relationship (Acitelli, Chapter X).

Despite this emphasis on studying such aversive interpersonal processes, however, we as a field have ventured only rarely into the domain of IPV, leaving this topic primarily to sociologists, clinical psychologists, and scholars from other disciplines. In this chapter, I begin integrating the largely independent research literatures on social psychology and IPV toward the goal of building a more psychologically informed process model of IPV than those that currently exist. Rather than

¹ I use the term "social psychology" and its variants to refer to the subdiscipline within psychology commonly referred to with that label. I do not intend to refer to the smaller subdiscipline within sociology that also uses that label.

reviewing all social psychological research domains that could possibly be relevant to IPV, I focus in particular on social psychology's self-regulation literature.

I begin by reviewing the IPV literature as it pertains to incidence rates, gender differences, and a distinction between two different forms of IPV. Next, I selectively review the dominant theoretical paradigms employed by scholars to understand IPV. I then introduce a process-oriented model of IPV that strives to impose theoretical coherence on the identified IPV risk factors (see also Finkel, in press, 2007); this model breaks from extant perspectives by emphasizing the central importance of self-regulation in helping individuals refrain from enacting violent behaviors even when they experience violent impulses. Finally, I (a) describe five recent empirical investigations that systematically test the importance of the self-regulation component of this process-oriented model, and (b) conclude with a brief discussion of the implications of the self-regulation literature for IPV-relevant clinical interventions. Throughout this chapter, I focus exclusively on the *initiation* of violence in a specific social interaction between heterosexual partners that had theretofore been nonviolent; I do not examine IPV as self-defense, nor do I examine psychological or sexual aggression.

Incidence Rates, Gender, and Two Forms of Intimate Partner Violence

Individuals enact violent behaviors against marital and dating partners with disturbing frequency (e.g., Magdol et al., 1997; McLaughlin, Leonard, & Senchak, 1992; Straus, 2004). Large-sample, representative surveys in the United States, for example, suggest that approximately 1 out of every 6 couples every year experiences at least one act of IPV (Schafer, Caetano, & Clark, 1998; Straus & Gelles, 1986). And, counter to many early IPV scholars' intuition, the literature reveals that men and women perpetrate acts of IPV at near-equal rates (Archer, 2000; Ehrensaft, Moffitt, & Caspi, 2004).

These incidence estimates, however, oversimplify the story. A review of this sometimes contradictory literature suggests that women are slightly more likely than men to perpetrate acts of IPV, although there is a rare, severe form of IPV that is perpetrated predominantly by men (Straus, 1999). For example, studies of crime (e.g., Bureau of Justice Statistics, 1997) and those that frame the research to participants as an investigation of “personal safety” (e.g., Tjaden & Thoennes, 2000) reveal both substantially lower overall levels of IPV and a large gender asymmetry (with greater male perpetration) than do studies that frame the study as an investigation of conflict in relationships (see Straus, 1999).

Johnson (1995, in press; Johnson & Ferraro, 2000) integrates this literature by suggesting that there are two qualitatively distinct forms of IPV: *situational couple violence* and *intimate terrorism* (formerly labeled “common couple violence” and “patriarchal terrorism,” respectively). The critical difference between these two forms is that situational couple violence emerges sometimes when conflict situations get out of hand, whereas intimate terrorism is perpetrated toward the goal of asserting dominance and control in the relationship. In extreme cases, both forms can lead to injury or even death, although such outcomes are more likely for any given act of intimate terrorism than for any given act of situation couple violence. Intimate terrorism is perpetrated predominantly by men (Johnson, in press), whereas situational couple violence is perpetrated at slightly higher rates by women (Archer, 2000; Johnson, 1995; Straus, 1999). The present chapter addresses situational couple violence, *not* intimate terrorism. I argue that (a) even “normal” individuals (i.e., those who are neither dominance-oriented nor pathological) sometimes experience violent impulses during conflict, and (b) a psychologically plausible model of IPV perpetration will remain elusive until scholars explicitly incorporate the distinction between violent impulses and violent behaviors.

One serious limitation of the existing literature is relevant to the gender issues discussed above: Many scholars' a priori assumptions of gender differences have caused them to collect data on and build theoretical models of only male-to-female IPV, generally neglecting female-to-male IPV. Working from the assumption that gender differences must be demonstrated rather than assumed (see Felson, 2002), the model of IPV advanced in this chapter is gender neutral but sufficiently flexible to accommodate scholars' gender-related predictions.

Prominent Theoretical Perspectives on Intimate Partner Violence

Over the past several decades, social scientists have presented at least two separate (and largely incompatible) arguments to make the case that the high rates of IPV are perhaps less surprising than they initially appear.² The first argument is that individuals learn, via socialization practices, that it is acceptable to engage in violent behavior toward a romantic partner. One variant of this argument, best summarized by the perspective that "the marriage license [is] a hitting license" (Gelles & Straus, 1988), suggests that both men and women are socialized to believe that violence is acceptable in romantic relationships. A second variant suggests that only men are socialized to believe that perpetrating violent behavior is acceptable in romantic relationships (e.g., Dobash & Dobash, 1979). This latter variant asserts that socialization practices teach men that they are entitled to exert power over women, and that violence is an acceptable means for doing so. From this perspective, IPV is primarily a strategic behavior perpetrated almost exclusively by men and oriented toward the long-term goal of establishing and maintaining dominance and control. Men are socialized to believe that dominating and controlling women with violence (and in other ways) is their right; female violence, in contrast, is used almost exclusively for self-protection

² A third argument, albeit a less mainstream one, suggests that evolutionary pressures have provided a survival advantage to men who were violent toward their mating partners because this violence helped to provide them with exclusive control over their partners' reproductive capacity, a survival advantage that has left present-day men with a genetic proclivity toward IPV (Daly & Wilson, 1988). A fourth argument, espoused largely by clinical psychologists (e.g., Holtzworth-Munroe & Stuart, 1994) and potentially related to the two arguments discussed in the text, suggests that certain individuals are characterized by clinical disorders (e.g., borderline or antisocial personality disorder), and that these disorders make them more likely to perpetrate IPV.

(Bograd, 1988, Dobash & Dobash, 1979; Dobash, Dobash, Wilson, & Daly, 1992; Pence & Paymar, 1993). Although patriarchal beliefs may well be a risk factor for male IPV, the view that patriarchal socialization is the primary cause of virtually all acts of IPV has begun to crumble under the weight of extensive contradictory evidence (see Dutton & Corvo, 2006; Dutton & Nicholls, 2005; George, 2003).

The second argument to make the case that the high rates of IPV are perhaps less surprising than they initially appear is that the high levels of emotional and behavioral interdependence that characterize most intimate relationships invite unusually high levels of nonviolent conflict, which can on occasion serve as a precursor to violent behavior. In other words, violence is primarily an impulsive behavior that emerges when individuals (either males or females) feel angered or threatened in their relationship. From this perspective, some degree of nonviolent conflict (and the anger and insecurity that can arise from it) is virtually certain to emerge in close, interdependent relationships (Holmes & Murray, 1996), and this nonviolent conflict can sometimes boil over into violent conflict (Felson, 1984; Murphy & O'Leary, 1989; Stets, 1990; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Interdependence, which refers to having one's life circumstances intertwined with another person, can lead to nonviolent conflict in intimate relationships because it increases the likelihood that (a) the partner's behavior will adversely affect the individual's well-being (Thibaut & Kelley, 1959), (b) the individual will be vulnerable to emotional pain at the hands of the partner (Holmes, 2002), and (c) individuals will be especially motivated to influence their partner's behavior (Felson, 2002). The extant corpus of empirical evidence suggests that this interdependence, conflict-based perspective on IPV accurately describes at least a large proportion of violent acts that men and women commit in their intimate relationships (e.g., Felson, 2002).

The I³ Model of Intimate Partner Violence Perpetration

Although experiencing violent impulses certainly increases the probability that individuals will perpetrate IPV, this association of violent impulses with violent behaviors is far from absolute. Under many—likely most—circumstances, violent impulses do not result in violent behaviors. Recent evidence suggests that individuals may be much more likely to override violent impulses in their intimate relationships than in their nonintimate relationships (e.g., Felson, Ackerman, & Yeon, 2003). This evidence contradicts the view that individuals believe that violent behavior is acceptable in such relationships. In short, the same interdependence that may make individuals especially likely to experience strong violent impulses also seems to function on many occasions to strengthen behavioral restraint processes.

How does the preceding analysis dovetail with the extant IPV literature? Researchers have identified dozens of risk factors for, or correlates of, IPV (see Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001), but very little conceptual work has been dedicated to understanding the interplay among them (for an exception, see Dutton, 1988), and “theory and research on relationship violence remain uncohesive” (Berscheid & Regan, 2005, p. 52). In an effort to impose enhanced theoretical coherence on the huge number of identified IPV risk factors and to merge together insights from social psychological aggression research and from the IPV literature, I propose in Figure 1 the I^3 [*I-Cubed*] *Model of IPV Perpetration*, which identifies three central questions researchers must ask regarding a given interaction between romantic partners to determine whether IPV is likely to transpire (see Finkel, in press, 2007). First, does at least one partner experience strong instigating triggers? Second, does that partner experience strong violence-impelling forces? And third, is that partner characterized at that time by weak violence-inhibiting forces? If the answer to all three questions is yes, then the individual is likely to perpetrate IPV. The strength of violence-impelling forces is determined by the collective power of the variables that cause the individual to experience action tendencies toward IPV, and the strength of violence-inhibiting

forces is determined by the collective power of the variables that cause the individual to override these violence-impelling forces. (The literature on IPV has generally neglected this distinction between risk factors that impel violence and those that disinhibit it.) In addition, violence-impelling and violence-inhibiting forces are only relevant in situations that include an instigating trigger, which refers to a discrete event that prompts rudimentary action tendencies toward IPV.

The structural part of the I³ Model is depicted inside the horizontal rectangle at the bottom of Figure 1, whereas illustrative risk factors for strong instigating triggers, strong impelling factors, and weak inhibiting factors (or “disinhibiting risk factors”) are depicted inside the dotted boxes at the top of the figure. The placement of a given risk factor into one category does not necessarily preclude its inclusion in a second category (or even in all three categories). The structural part of the I³ Model will remain constant across all theories of IPV, whereas the risk factors part will vary considerably depending upon the specific research questions under investigation. (Although the arrows go from left to right in the structural part of Figure 1, no strict temporal order is intended.)

Instigating triggers. The I³ Model applies to a given social interaction between romantic partners and begins at the left of Figure 1 with the question of whether at least one partner experiences one or more *instigating triggers*. Berkowitz’s (1993) *cognitive neoassociationistic model* of aggressive behavior has explored the role of risk factors for the “instigation to aggress” (Berkowitz, 2003, p. 806) and suggests that a broad range of aversive events can immediately trigger, potentially via either appraisal or associative processes,³ aggression-linked cognitive, physiological, and even motor tendencies (a syndrome of affect-related processes that Berkowitz calls “rudimentary anger”). The notion that affective experience can be associated with motor tendencies is consistent with mainstream perspectives on emotion (e.g., Frijda, Kuipers, & ter

³ There is a substantial and nuanced controversy in the literatures on emotion and aggression pertaining to whether (and the degree to which) affective and aggressive processes can occur associatively (i.e., without requiring cognitive appraisal processes). Addressing this controversy is beyond the scope of the present chapter.

Schure, 1989); for example, Izard (1991) observes that anger is associated with “an impulse to strike out, to attack the source of the anger” (p. 241). As depicted in Figure 1, the I³ Model categorizes predictors of strong instigating triggers into relational, displaced, and situational risk factors. All of these instigating trigger risk factors include circumstances that the potential perpetrator perceives as provoking and/or goal-obstructing. Those instigating trigger risk factors that are uniquely “relational” include perceived rejection by the partner (e.g., Finkel & Slotter, in press; Holtzworth-Munroe & Hutchinson, 1993), and those that are uniquely “situational” include aggression-related cues in the immediate environment (e.g., Berkowitz & LePage, 1967).

Violence-impelling forces. Moving to the right in Figure 1, I argue that many of the variables predicting IPV function as risk factors because they amplify the violent tendencies emerging from the instigating trigger(s) into full-fledged violent impulses; that is, these variables serve to moderate the association of the instigating trigger with violent impulses. Sometimes, the violence-related associations emerging in the wake of an instigating trigger will dissipate almost instantaneously. At other times, however, these associations become exacerbated, potentially leading to an intense, full-fledged violent impulse. The middle of the three rectangular boxes at the top of Figure 1 presents an illustrative series of risk factors that I hypothesize function by increasing the strength of impelling forces. I divide these risk factors into distal, dispositional, relational, and situational categories (Finkel, in press). The *distal* category encompasses ontogenic factors, cultural and subcultural norms, and socioeconomic and demographic factors. The *dispositional* category encompasses personal and interpersonal dispositions, biological factors, and attitudes and beliefs that are relatively stable over time. The *relational* category encompasses characteristics of the romantic relationship that are distinct from each partner’s distal or dispositional characteristics. Finally, the *situational* category encompasses temporary cognitive, affective, and physiological experiences triggered by aspects of the current situation.

Although Figure 1 lists examples of violence-impelling risk factors, I do not provide a detailed overview of them because such treatment is beyond the scope of this chapter and because I provide a more detailed analysis elsewhere (Finkel, in press). One violence-impelling risk factor of relevance to the present volume, however, involves the obsessiveness and fear of rejection associated with elevated dispositional attachment anxiety, dispositionally low self-esteem, or experiencing unrequited romantic love (for discussions of these constructs, see Clark, Chapter X; Finkel & Slotter, in press; Hatfield & Rapson, Chapter X; Murray, Chapter X; Schmitt, Chapter X; Shaver & Mikulincer, Chapter X). This obsessiveness and fear of rejection can render individuals vigilant for, and emotionally volatile (e.g., anger, jealousy) in response to, cues that the partner's dedication to the relationship is less than absolute.

Violence-inhibiting forces. Moving farther to the right in Figure 1, the I³ Model suggests that some of the variables predicting IPV function as risk factors because they weaken the restraining power of violence-inhibiting forces. Weakened violence-inhibiting forces decrease the individual's likelihood of overriding violent impulses in favor of nonviolent behavior. The right-most of the three rectangular boxes at the top of Figure 1 presents an illustrative series of risk factors that I hypothesize function by weakening the strength of violence-inhibiting forces. I once again divide these risk factors into distal, dispositional, relational, and situational categories (Finkel, in press). I suggest that these violence-inhibiting forces function as thresholds (see Fals-Stewart, Leonard, & Birchler, 2005). If the violent impulses formed by the interaction of the instigating trigger with the violence-impelling factors exceed the relevant threshold, the individual will perpetrate IPV; if they do not, the individual will override the violent impulses in favor of nonviolent behavior. As with violence-impelling risk factors, although Figure 1 lists examples of violence-impelling risk factors, I do not provide a detailed overview of them (see Finkel, in press). One set of violence-impelling risk factors of relevance to the present chapter, however, involves low dispositional self-control

and current self-regulatory strength. Below, I present results from a study exploring the association of low self-control with IPV perpetration.

The preceding discussion was intended to introduce the I³ Model and to provide a brief illustration of its potential power to impose theoretical coherence on established risk factors for aggression in general and for IPV in particular. Before concluding this discussion of the I³ Model, I emphasize that one of its strengths is that it facilitates the cross-fertilization of ideas between the IPV literature and the flourishing literature on self-regulation (see Baumeister & Vohs, 2004). Any time individuals want to override an impulse, they invoke self-regulatory processes. Such processes are frequently relevant in those moments leading up to acts of IPV, but have been largely neglected by IPV researchers.

Self-Regulation and Intimate Partner Violence

That partners sometimes experience violent impulses toward one another without these impulses resulting in violent behaviors is, I suggest, a common phenomenon that has been largely neglected in the IPV literature. The occasional violent impulse toward a romantic partner may not be experienced exclusively by patriarchal or pathologically deviant men (Finkel, DeWall, Oaten, Slotter, & Foshee, 2007). I suggest that many individuals, both men and women, experience violent impulses toward their partner on occasion. Fortunately, these individuals are frequently able to manage such impulses without them leading to violent behaviors. A more complete understanding of IPV will likely emerge if scientists devote greater attention to understanding the mechanisms by which individuals refrain from perpetrating IPV when such impulses arise.

Although the I³ Model immediately presents a slew of testable hypotheses, perhaps its most novel feature is the claim that violence-inhibiting forces are crucial in determining whether a given instigating trigger leads an individual to perpetrate IPV. This claim may seem relatively straightforward to social psychologists steeped in the self-regulation literature, but I emphasize

again that it has been largely ignored in the IPV literature. Scholars have on occasion recognized that “impulsivity” is an important correlate of IPV perpetration (e.g., Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000), but these impulsivity measures do not establish whether the impulsive tendencies are caused by (a) the inability to restrain impulses of a given strength or (b) the presence of extremely powerful impulses that would be difficult for anybody to restrain. In contrast, this distinction is essential to the I³ Model. And I underscore that even those individuals who generally believe (especially when queried in a cool cognitive state) that perpetrating IPV is unacceptable are susceptible to experiencing violent impulses toward their partner on occasion.

A Review of the Emerging Evidence Linking Self-Regulation to Reduced IPV Tendencies

I hypothesize that diverse self-regulatory factors function by modulating the strength of violence-inhibiting forces. As such, these factors are crucial in determining whether individuals experiencing violent impulses toward their partner will follow through with violent behaviors. A series of five recent studies has investigated the role of several of these factors in strengthening violence-inhibiting forces (Finkel et al., 2007). This research builds on programs of research demonstrating that low self-control predicts (a) diminished tendencies toward prorelationship behavior in response to potentially destructive partner behavior (Finkel & Campbell, 2001), and (b) aggressive behavior toward strangers (DeWall, Baumeister, Stillwell, & Gailliot, 2007). Although these previous studies did not examine IPV, they indicate the self-regulation is relevant for predicting how individuals behave during romantic relationship conflict and in response to provocation by strangers.

Study 1: Low Dispositional Self-Control. One factor that we hypothesized would influence self-regulatory restraints on violent impulses is whether potential perpetrators are characterized by weak versus strong dispositional self-control. In Study 1 (Finkel et al., 2007), we predicted IPV

perpetration from male and female adolescents' ($N = 813$) dispositional self-control. An initial analysis revealed a strong correlation between current reports of participants' dispositional self-control (e.g., "I often act on the spur of the moment without stopping to think") and their reports of perpetrating violent behaviors against romantic partners (e.g., "scratch him/her," "hit him/her with my fist") over the preceding 12 months: Low self-control predicted greater IPV. More importantly, an additional analysis revealed that low self-control predicted greater tendencies toward IPV over the ensuing year, controlling for IPV tendencies over the previous year.

Study 2: Impulses Versus Behaviors. Although the Study 1 findings indicate the low self-control predicts elevated tendencies toward IPV perpetration—and toward increases in such behavior over time—it does not provide especially compelling evidence for the importance of violence-inhibiting forces. After all, it is possible that low self-control predicts IPV because it leads people to experience especially strong violent impulses (rather than especially weak tendencies to override these impulses). In Studies 2 through 5, we strived acquire more direct evidence for the importance of violence-inhibiting factors per se.

The goal of Study 2 was simply to establish empirically that individuals involved in a serious fight with a romantic partner tend to experience violent impulses that are stronger than their violent behaviors manifest. Such results would provide compelling initial support for the notion that IPV would be much more common in the absence of self-regulatory processes. In Study 2 (Finkel et al., 2007), male and female participants ($N = 81$) brought to mind as vividly as they could "the most serious argument or fight" they had ever experienced with their current romantic partner. After writing about the incident, participants reported on 9-point scales (anchored at *not at all* and *extremely*) both (a) the extent to which they were *tempted* to enact a series of violent behaviors toward their partner, and (b) the extent to which they *actually* perpetrated these behaviors. These behaviors were the same ones employed in Study 1. A repeated-measures *t*-test

revealed that participants experienced significantly stronger IPV *impulses* than IPV *behaviors*, suggesting that impulse-override processes are indeed important in helping individuals avoid acting upon their impulses toward IPV.

Study 3: The Importance of Cognitive Processing Time. A second factor that we hypothesized would influence self-regulatory restraints on violent impulses is whether potential perpetrators respond to provocation immediately or after a brief delay. In Study 3 (Finkel et al., 2007), we employed a sophisticated and well-validated procedure (the “articulated thoughts in simulated situations,” or ATSS, procedure) that in an ethical manner enables researchers to expose participants to well-controlled but experientially impactful partner provocations (Eckhardt, Barbour, & Davison, 1998; see Davison, Vogel, & Coffman, 1997). Although the ATSS uses hypothetical situations, its lengthy and personally involving scenarios, which are interspersed with think-aloud procedures, allow for far greater ecological validity than do most scenario procedures. In this study, male and female participants ($N = 46$) who were involved in dating relationships of at least four months in duration listened to (and were instructed to immerse themselves psychologically in) provocative simulated situations in which their partner engaged in behavior that was likely to be jealousy-provoking and even disrespectful to the participant. In one scenario, participants overheard their partner having a flirtatious conversation at a bar. In another, participants overheard their partner sitting on a couch with an opposite-sex stranger and exchanging erotic-sounding backrubs; it also involved the partner criticizing the participant to the stranger. By random assignment, half of the participants provided a 30s verbal response to each segment of each scenario immediately after the tape stopped; the other half did so after a 10s delay.

Adapting procedures from Eckhardt and colleagues (1998), we trained coders to rate, among other constructs, the degree to which participants articulated physically and psychologically

aggressive thoughts toward their partner. Results revealed that participants who were assigned to the condition in which they began verbalizing their thoughts immediately after the end of each segment were significantly more likely to verbalize aggressive tendencies than were those assigned to the condition in which they waited for 10s before verbalizing their thoughts. In conjunction with the evidence that (a) adolescents characterized by low levels of dispositional self-control became more violent over time relative to those characterized by high self-control (Study 1), and (b) participants experience stronger *impulses* toward violence during relationship conflict than their *behavior* manifests (Study 2), the Study 3 results provide good support for the notion that immediate responses to provocative partner behavior are much more likely to be violent than are delayed responses, even if the delay is only 10 seconds.

Study 4: Ego Depletion. A third factor that we hypothesized would influence self-regulatory restraints on violent impulses is whether potential perpetrators have had their self-control strength temporarily depleted. Scholars in the self-regulation tradition have distinguished between two forms of self-control: (a) dispositional self-control, and (b) in-the-moment ego strength (Muraven & Baumeister, 2000). *Dispositional self-control* (see Study 2) is a stable personality trait assessing the degree to which individuals are able to control their impulses across time and situations (Caspi, 2000, Tangney, Baumeister, & Boone, 2004). *Ego strength* (also called “self-regulatory strength”) represents an individual’s ability to control impulses at a particular time and in a particular situation. Ego strength is a limited, depletable, and renewable resource; it is influenced by situational factors such as stress, exhaustion, or overexertion of willpower, which can leave the individual in a state of *ego depletion*. Baumeister and his colleagues have advanced a “strength model” of self-regulation, proposing that “a person can become exhausted from many simultaneous demands and so will sometimes fail at self-control even regarding things at which he or she would otherwise succeed” (Muraven & Baumeister, 2000, p. 3; see also Baumeister,

Bratslavsky, Muraven, & Tice, 1998; Finkel & Campbell, 2001; Finkel et al., 2006; Vohs & Schmeichel, 2003). As such, when their ego strength is depleted, it should be more difficult for individuals to move beyond their violent impulses during conflictual interaction with their partner because they possess fewer resources to inhibit them.

In Study 4 (Finkel et al., 2007), we extended the previous studies by (a) providing an experimental test of the hypothesis that low self-control (operationalized in terms of depleted self-regulatory resources) *causes* IPV following provocation, and (b) employing a behavioral, laboratory-analog measure of IPV. Male and female participants ($N = 33$ heterosexual couples) who were involved in dating relationships of at least four months in duration went through all laboratory procedures in a room by themselves. In a 2×2 design, they were first assigned either to a depleting or a nondepleting attention control task (e.g., Schmeichel, Vohs, & Baumeister, 2003) before their partner (ostensibly) either provoked them by evaluating them negatively and being potentially selfish or did not provoke them.

The analog IPV measure—a new measure developed for this study—was the duration for which participants assigned their partner to maintain physically uncomfortable bodily poses. The experimenter informed participants that they would complete a two-person task with their partner in which one person (the “actor”) would maintain a series of uncomfortable poses and the other (the “director”) would determine how many poses their partner must complete and for how long s/he must hold them. A rigged drawing “randomly” assigned all participants to the director role. The experimenter informed participants that the poses tend to be physically uncomfortable, but that they do not cause long-term physical damage. This procedure, therefore, allowed participants to inflict physical pain on their partner.

Results revealed a significant interaction effect, such that participants who previously had been provoked by their partner assigned him or her to maintain the painful body positions for longer

durations than did those who had not been provoked previously—but only if they were depleted. Nondepleted participants who had been provoked assigned durations that were comparable to those who had not been provoked. In short, it was the combination of being depleted *and* being provoked that caused participants to inflict more intense physical pain on their partners.

Study 5: Ego Bolstering. A fourth factor that we hypothesized would influence self-regulatory restraints on violent impulses, one that is in many ways a complement to the ego depletion factor we investigated in Study 4, is whether potential perpetrators have recently had their self-control strength *bolstered*. The susceptibility to ego depletion is but one of the implications of the strength model of self-regulation (Muraven & Baumeister, 2000). A second implication is that reliably exerting self-regulation can over time increase one's self-regulatory strength. As with a muscle, intensive exertion (e.g., adhering to a new resolution to skip dessert) depletes self-regulatory resources in the short-run, but a regimen of consistent use over time (e.g., waking up daily at 5:30AM to take advantage of early-morning writing time) ultimately bolsters self-regulatory strength. Adhering to such a regimen should result in superior behavioral restraint and enhanced likelihood of avoiding violent behavior when one experiences violent impulses. Compelling studies by Oaten and Cheng (2005a; 2006a, b; in press; also see Muraven, Baumeister, & Tice, 1999) suggest that bolstering ego strength may indeed be possible. These authors have repeatedly demonstrated that assigning people to a 2-month self-control strengthening “regimen” causes them to gain better control over diverse aspects of their lives (e.g., impulsive spending, healthier eating habits) and to become resilient to laboratory-based ego depletion. Their studies suggest that self-regulation functions like a muscle that can be strengthened through sustained self-regulatory exertion over time. We applied this approach to the study of IPV.

In Study 5 (Finkel et al., 2007), we investigated the effects on IPV tendencies of assigning participants to experiencing an ego strengthening manipulation. We ran this study for both

theoretical and practical reasons. For example, it is worth noting that although the findings from Study 4 are certainly intriguing, their practical value are somewhat limited; after all, who wants to develop manipulations that make people *more* violent toward their partner? To be sure, training individuals to recognize that they are experiencing depletion could help them become vigilant at those times to avoid heated arguments. But what if it were possible to employ an experimental manipulation not to deplete ego strength—but to bolster it?

Male and female participants ($N = 40$) who were involved in dating relationships of at least four months in duration participated in two laboratory sessions two weeks apart. At each session, all participants first experienced an ego depleting attention control task (the same one employed in Study 4) before completing a self-report measure of IPV propensity toward one's partner. At the end of the first laboratory session, participants were randomly assigned to one of three conditions relevant to the two-week period between the laboratory sessions. Two of these conditions involved interventions previously demonstrated to bolster ego strength over time, whereas the third served as a no-intervention control condition. In the first ego strengthening manipulation, participants exerted themselves daily to use their nondominant hand in everyday tasks (e.g., eating). In the second, they exerted themselves daily to regulate certain aspects of their habitual speech processes (e.g., not saying the word “yeah”).

The IPV propensity measure participants completed after the attention-control depletion task at each laboratory session was a modified version of the Proximal Antecedents to Violent Episodes (PAVE) scale (Babcock, Costa, Green, & Eckhardt, 2004). Participants indicated on a 9-point scale how likely it is that they would become “*physically aggressive*” in response to each of 20 situations (e.g., “My partner ridicules or makes fun of me”). To make these scenarios as impactful as possible, the experimenter encouraged participants to get a vivid mental image of each situation. The results came out as predicted: A significant Time \times Condition interaction effect revealed that

participants assigned to each of the ego strengthening conditions exhibited a significant decline in their IPV tendencies from the Time 1 to the Time 2 session, whereas those assigned to the no-intervention control condition exhibited no change over time (with virtually identical means at both sessions).

Concluding Comments

IPV can lead to a whole host of negative outcomes, ranging from injury or even death at the individual level to relationship breakup at the relationship level (for a detailed discussion of relationship redefinition, see Agnew, Arriaga, & Wilson, Chapter X). More generally, it can result in considerable adverse consequences for individuals, couples, families, and societies. I have proposed the I³ Model to (a) impose enhanced theoretical coherence on the IPV literature and (b) emphasize the importance of self-regulatory processes in helping potential perpetrators refrain from engaging in violent behaviors, even when they are experiencing violent impulses during relationship conflict. I summarized results from five studies intended to put claims from the I³ Model about the importance of self-regulatory processes in IPV perpetration on more solid empirical footing.

It may be time to incorporate self-regulation training as a central aspect of clinical interventions for IPV. Extant interventions for IPV perpetrators, which are notoriously ineffective (for reviews, see Babcock, Green, & Robie, 2004; Dutton & Corvo, 2006), generally do not emphasize self-regulation or violence-inhibiting processes. Fortunately, training people to restrain their impulses is more likely to be successful than training them not to experience those impulses in the first place (Baumeister, 2005), and findings from the proposed research could ultimately promote restraint-oriented interventions to decrease the prevalence and severity of IPV.

References

- Anderson, C. A. (1989). Temperature and aggression: Ubiquitous effects of heat on occurrence of human violence. *Psychological Bulletin*, *106*, 74-96.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, *126*, 651-680.
- Archer, J. (2006). Cross-cultural differences in physical aggression between partners: A social role analysis. *Personality and Social Psychology Review*, *10*, 133-153.
- Babcock, J. C., Costa, D. M., Green, C. E., Eckhardt, C. I. (2004). What Situations Induce Intimate Partner Violence? A Reliability and Validity Study of the Proximal Antecedents to Violent Episodes (PAVE) Scale. *Journal of Family Psychology*, *18*, 433-442.
- Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review*, *23*, 1023-1053.
- Babcock, J. C., Waltz, J., Jacobson, N. S., & Gottman, J. M. (1993). Power and violence: The relation between communication patterns, power discrepancies, and domestic violence. *Journal of Consulting and Clinical Psychology*, *61*, 40-50.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Baumeister, R. F. (2005). *The cultural animal: Human nature, meaning, and social life*. New York: Oxford.
- Baumeister, R. F., Bratslavsky, E., Muraven, M. & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, *74*, 1252-1265.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. New York: Academic Press.
- Baumeister, R. F., & Vohs, K. D. (2004). *Handbook of self-regulation: Research, theory, and applications*. New York: Guilford.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York, NY: McGraw-Hill.
- Berkowitz, L., LePage, A. (1967). Weapons as aggression-eliciting stimuli. *Journal of Personality and Social Psychology*, *7*, 202-207.
- Berkowitz, L. (2003). Affect, aggression, and antisocial behavior. In R. J. Davidson, K. R. Scherer & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 804-823). New York: Oxford.
- Berscheid, E., & Regan, P. (2005). *The psychology of interpersonal relationships*. New York, NY: Prentice-Hall.

- Bograd, M. (1988). Feminist perspectives on wife abuse: An introduction. In M. Bograd, & K. Yllo (Eds.), *Feminist perspectives of wife abuse* (pp. 11-26). Beverly Hills, CA: Sage.
- Bureau of Justice Statistics. (1997). *Sex differences in violent victimization, 1994*. Washington, DC: U.S. Government Printing Office.
- Caspi, A. (2000). The child is the father of the man: Personality continuities from childhood to adulthood. *Journal of Personality and Social Psychology, 78*, 158-172.
- Davison, G. C., Vogel, R. S., & Coffman, S. G. (1997). Think-aloud approaches to cognitive assessment and the Articulated Thoughts in Simulated Situations paradigm. *Journal of Consulting and Clinical Psychology, 65*, 950-958.
- DeWall, C. N., Baumeister, R. F., Stillwell, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. *Journal of Experimental Social Psychology, 43*, 62-76.
- Dobash, R. E., & Dobash, R. P. (1979). *Violence against wives: A case against the patriarchy*. New York: Free Press.
- Dobash, R. P., Dobash, R. E., Wilson, M., & Daly, M. (1992). The myth of sexual symmetry in marital violence. *Social Problems, 39*, 71-91.
- Dutton, D. G. (1988). *The domestic assault of women: Psychological and criminal justice perspectives*. Boston: Allyn & Bacon.
- Dutton, D. G., & Corvo, K. (2006). Transforming a flawed policy: A call to revive psychology and science in domestic violence research and practice. *Aggression and Violent Behavior, 11*, 457-483.
- Dutton, D. G., & Nicholls, T. L. (2005). The gender paradigm in domestic violence research and theory: Part 1—The conflict of theory and data. *Aggression and Violent Behavior, 10*, 680-714.
- Eckhardt, C. I., Barbour, K. A., & Davison, G. C. (1998). Articulated thoughts of martially violence and nonviolent men during anger arousal. *Journal of Consulting and Clinical Psychology, 66*, 259-269.
- Ehrensaft, M. K., Moffitt, T. E., & Caspi, A. (2004). Clinically abusive relationships in an unselected birth cohort: Men's and women's participation and developmental antecedents. *Journal of Abnormal Psychology, 113*, 258-271.
- Fals-Stewart, W. (2003). The occurrence of partner physical aggression on days of alcohol consumption: A longitudinal diary study. *Journal of Consulting and Clinical Psychology, 71*, 41-52.
- Fals-Stewart, W., Leonard, K. E., & Birchler, G. R. (2005). The Occurrence of Male-to-Female Intimate Partner Violence on Days of Men's Drinking: The Moderating Effects of Antisocial Personality Disorder. *Journal of Consulting and Clinical Psychology, 73*, 239-248.

- Felson, R. B. (1984). Patterns of aggressive social interaction. In A. Mummendey (Ed.), *Social psychology of aggression: From individual behavior to social interaction* (pp. 107-126). New York: Springer-Verlag.
- Felson, R. B., Ackerman, J., and Yeon, S. (2003). The infrequency of family violence. *Journal of Marriage and the Family*, 65, 622-634.
- Felson, R. B. (2002). *Violence and gender reexamined*. Washington, DC: American Psychological Association.
- Finkel, E. J. (in press). Impelling and inhibiting forces in intimate partner violence. *Review of General Psychology*.
- Finkel, E. J. (2007). *The F³ model of aggression*. Unpublished manuscript, Northwestern University, IL.
- Finkel, E. J., & Campbell, W. K. (2001). Self-control and accommodation in close relationships: An interdependence analysis. *Journal of Personality and Social Psychology*, 81, 263-277.
- Finkel, E. J., Campbell, W. K., Brunell, A. B., Dalton, A. N., & Scarbeck, S. J., & Chartrand, T. L. (2006). High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology*, 91, 456-475.
- Finkel, E. J., DeWall, C. N., Oaten, M., Slotter, E. B., & Foshee, V. A. (2007). *Self-regulatory failure and intimate partner violence*. Unpublished manuscript, Northwestern University, IL.
- Finkel, E. J., & Slotter, E. B. (in press). *An attachment theory perspective on the perpetration of intimate partner violence*. Unpublished manuscript, Northwestern University, IL.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57, 212-228.
- Gaertner, L., Foshee, V. (1999). Commitment and the perpetration of relationship violence. *Personal Relationships*, 6, 227-239.
- Gelles, R. J., & Straus, M. A. (1988). *Intimate violence*. New York: Simon & Schuster.
- George, M. J. (2003). Invisible touch. *Aggression and Violent Behavior*, 8, 23-60.
- Gottfredson, M. R., & Hirschi, T. (1990). *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Holmes, J. G. (2002). Interpersonal expectations as the building blocks of social cognition: An interdependence theory perspective. *Personal Relationships*, 9, 1-26.
- Holmes, J. G., & Murray, S. L. (1996). Conflict in close relationships. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic mechanisms and processes* (pp. 622-654). New York: Guilford.

- Holtzworth-Munroe, A., & Meehan, J. C., Herron, K., Rehman, U., Stuart, G. L. (2000). Testing the Holtzworth-Munroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology, 68*, 1000-1019.
- Izard, C. E. (1991). *The psychology of emotions*. New York: Plenum.
- Johnson, M. P. (1995). Patriarchal terrorism and situational couple violence: Two forms of violence against women. *Journal of Marriage and the Family, 57*, 283-294.
- Johnson, M. P. (in press). *Violence and Control in Intimate Relationships: Intimate Terrorism and Other Types of Domestic Violence*. Unpublished manuscript, Penn State University.
- Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and the Family, 62*, 948-963.
- Kaufman Kantor, G., Jasinski, J. L., & Aldarondo, E. (1994). Sociocultural status and incidence of marital violence in Hispanic families. *Violence and Victims, 9*, 207-222.
- Kwong, M. J., Bartholomew, K., Henderson, A. J. Z., & Trinke, S. J. (2003). The intergenerational transmission of relationship violence. *Journal of Family Psychology, 17*, 288-301.
- Magdol, L., Moffitt, T. E., Caspi, A., Newman, D. L., Fagan, J., & Silva, P. A. (1997). Gender differences in partner violence in a birth cohort of 21-year-olds: Bridging the gap between clinical and epidemiological approaches. *Journal of Consulting and Clinical Psychology, 65*, 68-78.
- McLaughlin, I. G., Leonard, K. E., & Senchak, M. (1992). Prevalence and distribution of premarital aggression among couples applying for a marriage license. *Journal of Family Violence, 7*, 309-319.
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin, 126*, 247-259.
- Muraven, M., Baumeister, R. F., & Tice, D. M. (1999). Longitudinal improvement of self-regulation through practice: Building self-control strength through repeated exercise. *Journal of Social Psychology, 139*, 446-457.
- Murphy, C. M., & O'Leary, K. D. (1989). Psychological aggression predicts physical aggression in early marriage. *Journal of Consulting and Clinical Psychology, 57*, 579-582.
- Norlander, B., Eckhardt, C. (2005). Anger, hostility, and male perpetrators of intimate partner violence: A meta-analytic review. *Clinical Psychology Review, 25*, 119-152.
- Oaten, M. & Cheng, K. (2005). Academic Examination Stress Impairs Self-Control. *Journal of Social and Clinical Psychology, 24*, (2), 254-279.
- Oaten, M., & Cheng, K. (2006). Longitudinal Gains in Self-Control from Regular Physical Exercise. *British Journal of Health Psychology, 11*, 717 -733.

- Oaten, M., & Cheng, K. (2006). Improved Self-Control: The Benefits of a Regular Program of Academic Study. *Basic and Applied Social Psychology*, 28, (1), 1-16.
- Oaten, M., & Cheng, K. (in press). Improvements in Self-Control from Financial Monitoring. *Journal of Economic Psychology*.
- Pence, E., & Paymar, M. (1993). *Education groups for men who batter: The Duluth model*. New York, NY: Springer.
- Ronfeldt, H. M., Kimerling, R., & Arias, I. (1998). Satisfaction with relationship power and the perpetration of dating violence. *Journal of Marriage and the Family*, 60, 70-78.
- Schafer, J., Caetano, R., Clark C. L. (1998). Rates of intimate partner violence among U.S. couples. *American Journal of Public Health*, 88, 1702-1704.
- Schumacher, J. A., Feldbau-Kohn, S., Slep, A. M. S., & Heyman, R. E. (2001). Risk factors for male-to-female partner physical abuse. *Aggression and Violent Behavior*, 6, 281-352.
- Schmeichel, B. J., Vohs, K. D., & Baumeister, R. F. (2003). Intellectual performance and ego depletion: Role of the self in logical reasoning and other information processing. *Journal of Personality and Social Psychology*, 85, 33-46.
- Stets, J. E. (1990). Verbal and physical aggression in marriage. *Journal of Marriage and the Family*, 52, 501-514.
- Stets, J. E., & Pirog-Good, M. A. (1987). Violence in dating relationships. *Social Psychology Quarterly*, 50, 237-246.
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family*, 62, 640-654.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics Scales. *Journal of Marriage and the Family*, 41, 75-88.
- Straus, M. A. (1999). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arriaga, & S. Oskamp (Eds.), *Violence in intimate relationships* (pp. 17-44). Thousand Oaks, CA: Sage.
- Straus, M. A. (2004). Cross-cultural reliability and validity of the revised conflict tactics scales: A study of university student dating couples in 17 nations. *Cross-Cultural Research: The Journal of Comparative Social Science*, 38, 407-432.
- Straus, M. A., & Gelles, R. J. (1986). Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *Journal of Marriage and the Family*, 48, 465-479.
- Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1980). *Behind closed doors*. Newbury Park, CA: Sage.

- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283-316.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. *Journal of Personality, 72*, 271-322.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- Tjaden, P., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey*. Washington, DC: National Institute of Justice.
- Vohs, K. D., & Schmeichel (2003). Self-regulation and the extended now: Controlling the self alters the subjective experience of time. *Journal of Personality & Social Psychology, 85*, 217-230.

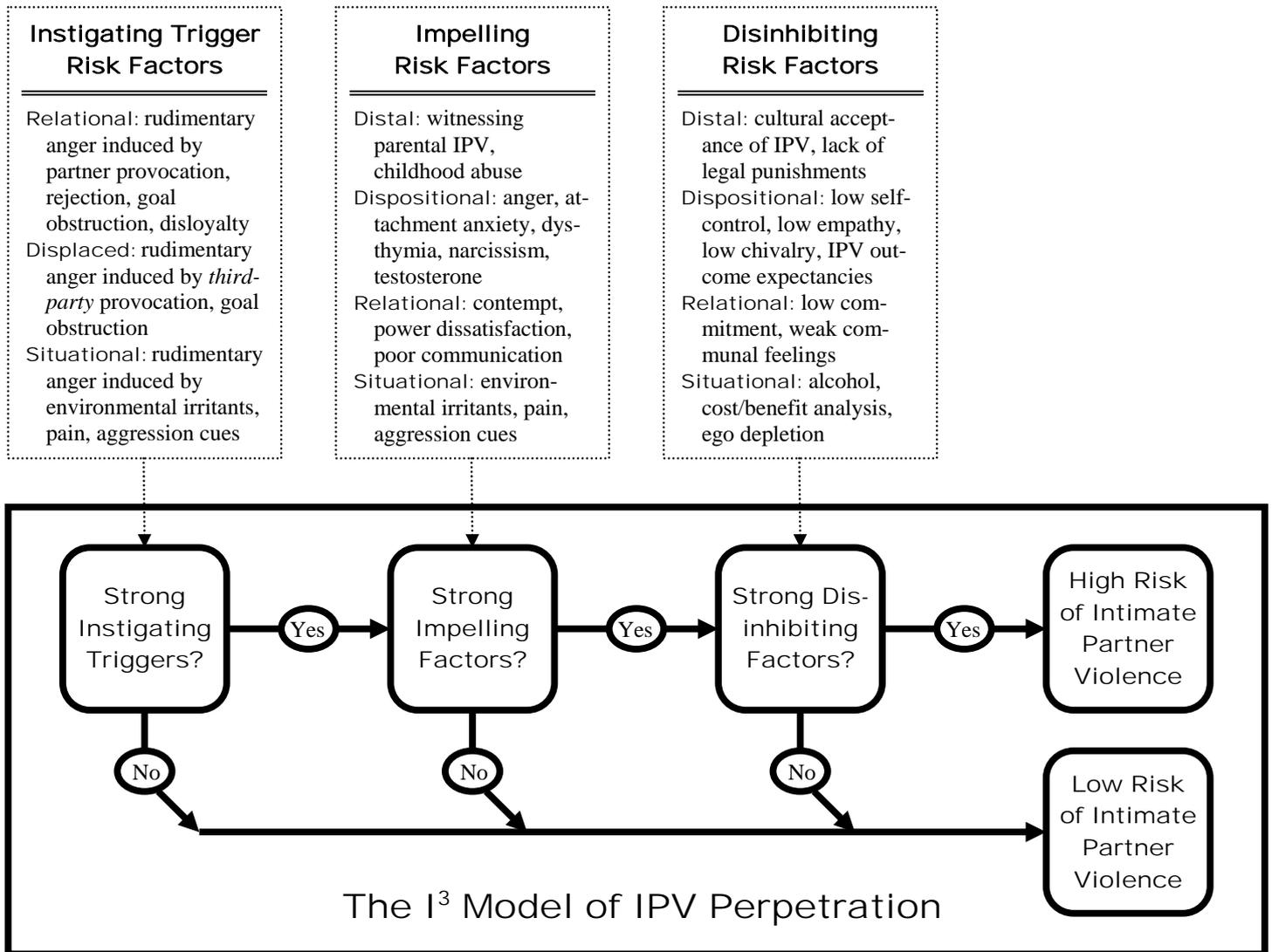


Figure 1. *The I³ Model of Intimate Partner Violence (IPV) Perpetration, and Risk Factors that Trigger, Impel, or Inhibit IPV*

Note: The I³ model is depicted inside the large, horizontal rectangle; for simplicity, arrows are drawn in only one direction, but no lack of alternative paths is implied. The vertical, rectangular boxes at the top of the figure identify risk factors for strong instigating triggers, strong violence-impelling forces, and weak inhibiting forces (the last of which is referred to as “strong disinhibiting” forces). These risk factors are illustrative rather than exhaustive. In addition, the categories are not mutually exclusive. For example, environmental irritants can serve either as an instigating trigger or as an impelling force.