

## Intimate Partner Violence

Eli J. Finkel *and* Christopher I. Eckhardt**Abstract**

Scholars have identified many dozens of risk factors for intimate partner violence (IPV) perpetration, but they have been less successful at establishing the processes through which these risk factors promote IPV perpetration and at elucidating the interplay among the corpus of established risk factors. The present chapter reviews this sprawling, unruly literature from the perspective of *I<sup>3</sup> theory* (pronounced “I-cubed theory”), a novel framework designed to impose theoretical coherence on IPV risk factors and to stimulate new research. *I<sup>3</sup> theory* identifies three processes through which risk factors promote IPV perpetration: *instigation*, which encompasses discrete situational events that normatively trigger an urge to aggress; *impellance*, which encompasses factors that alter individuals’ “urge-readiness” at the moment they encounter instigation; and *inhibition*, which encompasses the counteraction to the urge to aggress. IPV perpetration is most likely, and most severe, when instigating and impelling forces are strong and inhibiting forces are weak.

**Key Words:** *I<sup>3</sup> theory*, intimate partner violence, domestic violence, aggression, self-regulation

**Introduction**

The 1970s was a watershed decade for research on intimate partner violence (IPV). For the first time, scholars conducted methodologically rigorous research on the prevalence of and risk factors for IPV perpetration and advanced sweeping theoretical analyses of the phenomenon (Dobash & Dobash, 1979; Straus, Gelles, & Steinmetz, 1980). Since that time, dozens of additional risk factors have been identified, but the field lacks a broad, integrative framework for conceptualizing the key processes through which these diverse risk factors drive IPV perpetration. Rather than either adding new risk factors to the large and growing corpus or comprehensively reviewing the established risk factors, our goals in this chapter are (1) to advance a process-oriented meta-theory called *I<sup>3</sup> theory* (Finkel, 2008) to understand the key mechanisms underlying IPV perpetration, and (2) to review the

IPV literature to illustrate how this approach can serve as an organizational framework that develops a novel agenda for future research. We begin by discussing IPV incidence rates and reviewing extant theoretical approaches.

***Intimate Partner Violence***

On the surface, *IPV*, which refers to any behavior enacted with the primary proximal goal of causing physical harm to a romantic partner who is motivated to avoid being harmed (see Baron & Richardson, 1994), is baffling: Why would people deliberately hurt somebody with whom they have chosen to merge their life, frequently somebody whom they have vowed, in front of their closest loved ones, to love and to cherish until death do them part? Indeed, although individuals unacquainted with the IPV literature might assume that such behavior is vanishingly rare, a 5-minute literature review

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would shatter this assumption (e.g., Magdol et al., 1997; McLaughlin, Leonard, & Senchak, 1992; Straus, 2004). In the United States, for example, approximately one in six heterosexual cohabiting or married couples experiences at least one act of IPV *every year* (Schafer, Caetano, & Clark, 1998; Straus & Gelles, 1986),<sup>1</sup> and perpetration rates are considerably higher in younger and dating samples (Archer, 2000).

Also, to almost everybody's surprise, men and women perpetrate IPV at near-equal rates (Archer, 2000; Ehrensaft, Moffitt, & Caspi, 2004).<sup>2</sup> Rather than focusing on sex differences or similarities in IPV perpetration (and on the controversies surrounding such estimates; see Straus, 1999), however, our goal in this chapter is to understand what causes people, in general, to perpetrate IPV. On those rare occasions when the literature reveals reliable sex differences in the association of a given predictor variable with IPV perpetration, we will report these differences. If, however, researchers have only explored a given association among only one sex (typically among men), we will not conclude that the association applies only to members of that sex; after all, sex differences must be demonstrated rather than assumed (Felson, 2002).

### ***Theoretical Models of Intimate Partner Violence***

Many scholars have criticized IPV scholarship for its overemphasis on zero-order associations among largely unmodifiable cultural or individual-difference risk factors, such as patriarchal socialization practices or psychopathic personality characteristics (e.g., Murphy & Eckhardt, 2005; Riggs & O'Leary, 1996). Nonetheless, scholars have advanced a range of theoretical models of IPV perpetration. Before introducing I<sup>3</sup> theory, we briefly review the most influential of these extant theoretical models, categorizing them into sociocultural, intrapersonal, interpersonal, typological, and integrative models.

### ***Sociocultural Models***

Sociocultural models evaluate the community socialization factors, institutional norms, and shared cultural beliefs (e.g., patriarchal ideologies) that may increase the likelihood of, and perhaps even sanction, IPV. This general approach represents the intellectual starting point for research on the etiology of IPV as it was widespread among the community activists and social workers working with IPV victims in battered women's shelters in the

1970s (who exerted strong influence upon scholarly research priorities) and with sociologists investigating the broader causes of intrafamilial aggression (Straus, 1976). Major sociocultural explanations vary in the degree to which they view the mechanisms underlying IPV perpetration as different for men and women (i.e., as gendered)—and even in whether they view it to be possible for women to perpetrate IPV in the first place. For example, some sociocultural explanations for IPV center on the notion that abusive behavior is derived from sociopolitical forces that endorse men's power, control, and domination over women across multiple levels of society (Bograd, 1988; Dobash & Dobash, 1979; Pence, 1983; Walker, 1979). From this perspective, IPV is a form of instrumental aggression employed exclusively by men to induce fear and to enforce a patriarchal social order across important social institutions, including the workplace, health care, the legal system, and the family.

This approach remains influential (e.g., Dobash, Dobash, Wilson, & Daly, 1992; Shepard & Pence, 1999), especially among grassroots organizations that work with IPV victims and scholars advocating a strongly gendered approach to understanding IPV (Yllö, 1988). Indeed, even beyond these groups, certain aspects of this approach enjoy empirical validation. For example, cross-cultural analyses demonstrate (1) that the relative perpetration rate of men against female partners versus women against male partners is stronger in nations with greater gender inequality favoring men, and (2) that female victimization rates are higher in nations characterized by stronger sexist attitudes (Archer, 2006). Despite this support, however, other scholars whose work is framed by the sociocultural approach have deemphasized the notion of IPV as a form of gender politics and instead have focused on the national, racial/ethnic, community, and familial socialization factors that increase the risk for partner violence, regardless of the sex of the perpetrator (e.g., Stets & Straus, 1990; Straus, 2008). In short, although sociocultural models vary considerably, they concur in the view that people perpetrate IPV because society socializes them to do so, training them that such actions are "perfectly appropriate" (Gelles & Straus, 1988, p. 26).

Many scholars have offered vigorous criticisms of sociocultural models of IPV, especially the most gendered versions. These scholars have argued that such models lack empirical support and attend insufficiently to female-to-male IPV, and that certain advocates of such models seek to

suppress alternate approaches to understanding IPV (Dutton & Corvo, 2006; Dutton & Nicholls, 2005; Felson, 2002; Straus, 2009). In addition, meta-analytic reviews of IPV risk factors (Stith, Smith, Penn, Ward, & Tritt, 2004) indicate that effect sizes are smaller (and often nonsignificant) for factors more distal to IPV that also tend to be common among sociocultural models (e.g., perpetrator sociodemographic characteristics), and larger for risk factors more proximal to abusive behavior (e.g., anger/hostility, substance use). Our own critique of sociocultural models sidesteps the contentious issues related to the role of gender in IPV perpetration, focusing instead on the broader issue of the degree to which society actually socializes people that IPV perpetration is acceptable or even appropriate. When we introduce I<sup>3</sup> theory below, we suggest that many acts of IPV occur in spite of, not as a result of, perpetrators' views about the acceptability versus unacceptability of violent behavior.

### *Intrapersonal Models*

Intrapersonal models focus on factors internal to the perpetrator that increase the likelihood of IPV perpetration. In contrast to sociocultural models, intrapersonal models allow scholars to examine why two people socialized into comparable sociocultural contexts can differ markedly in their tendencies toward IPV perpetration. A diverse range of theories illustrates this intrapersonal approach. We discuss four general iterations: (1) social learning/family-of-origin approaches, (2) cognitive-behavioral approaches, (3) personality approaches, and (4) clinical approaches.

*Social learning theory* was the key starting point to the intrapersonal approach to studying IPV. This theory suggests that people acquire tendencies toward aggression, including IPV perpetration, through basic principles of learning—classical conditioning, operant conditioning, and observational learning—which shape them to act aggressively (Bandura, 1973). Consistent with this approach, IPV perpetrators are more likely than nonperpetrators to report witnessing IPV in the family of origin and to have been physically abused as children (e.g., Barnett & Fagan, 1993; Dutton, van Ginkel, & Landolt, 1996; Howell & Pugliesi, 1988; Kwong, Bartholomew, Henderson, & Trinke, 2003), although recent syntheses of this literature report only a small to moderate effect of family-of-origin violence on subsequent IPV (Delsol & Margolin, 2004; Stith et al., 2000).

Complementing this family-of-origin approach, scholars have also adopted *cognitive-behavioral approaches* to investigate specific cognitive and affective factors emerging from adverse childhood environments that predicted subsequent IPV perpetration (e.g., O'Leary, 1988). This approach emerged simultaneous to developments in cognitive-behavioral therapy, as clinicians and researchers interested in IPV began to examine whether perpetrators also showed disturbances in specific cognitive and affective variables and whether modifying such variables led to reductions in IPV perpetration (Hamberger, 1997; Saunders, 1984; Sonkin, Martin, & Walker, 1985; Stosny, 1995; Wexler, 2006). Currently, the cognitive-behavioral approach incorporates many social-cognitive processes, including constructs like social information processing (Crick & Dodge, 1994), script models of youth violence (Huesmann, 1988), and the automaticity of aggression-related cognitive processes (Berkowitz, 1993, 2008). Relative to their non-violent counterparts, IPV perpetrators exhibit (1) decoding, interpretation, and hostile attribution biases; (2) less competent decision making (i.e., greater generation of aggressive response options); and (3) more positive and less negative evaluations of violence in close relationships (for reviews, see Eckhardt & Dye, 2000; Holtzworth-Munroe, 2000; Murphy & Eckhardt, 2005; Stith et al., 2004). Perhaps as a result of these cognitive biases and limitations, perpetrators are also especially likely to experience anger, contempt, disgust, and other forms of intense negative affect during relationship conflict (Eckhardt, 2007; Eckhardt, Barbour, & Stuart, 1997; Gottman et al., 1995; Jacobson et al., 1994; Norlander & Eckhardt, 2005; O'Leary, 1988).

*Personality approaches* explain IPV perpetration by identifying stable individual differences that differentiate perpetrators from nonperpetrators. For example, prospective longitudinal studies have demonstrated that individuals who are high (vs. low) in neuroticism (who exhibit a dispositional propensity toward negative and labile affect) and negative emotionality (who are nervous, hostile, vengeful, and have a low threshold for feeling angry or fearful) perpetrate greater levels of IPV (Hellmuth & McNulty, 2008; Moffitt, Krueger, Caspi, & Fagan, 2000).

Finally, *clinical approaches* explain IPV perpetration by identifying psychological disorders associated with increased risk of IPV perpetration. Individuals are especially likely to perpetrate IPV,

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and to perpetrate more severe IPV, if they have higher levels of psychopathology. For example, relative to nonviolent controls, IPV perpetrators exhibit higher rates of alcohol abuse diagnoses (Leonard & Quigley, 1999), higher scores on measures of depressive affect (Maiuro et al., 1988; Pan, Neidig, & O'Leary, 1994), and higher rates of depressive disorders (Kessler, Molnar, Feurer, & Appelbaum, 2001), with dispositional anger apparently mediating the association of a diagnosis of depression with the presence of IPV (Feldbau-Kohn, Heyman, & O'Leary, 1998). Perpetrators of severe IPV exhibit higher rates of a broad range of clinical psychiatric disorders, especially anxiety-related or nonaffective psychosis disorders (Danielson, Moffitt, Caspi, & Silva, 1998; Kessler et al., 2001). Indeed, the presence of certain mental disorders at age 18 (major depression episode and cannabis dependence for both sexes; alcohol dependence anxiety disorder for men only) predict greater odds of being involved at age 26 in a relationship in which IPV caused injury or required official intervention (Ehrensaft, Moffitt, & Caspi, 2006). In addition, people with a post-traumatic stress disorder (PTSD) diagnosis exhibit elevated rates of IPV perpetration (Carroll, Rueger, Foy, & Donahoe, 1989; Kulka et al., 1990). For example, approximately one-third of male combat veterans with PTSD are identified as partner violent during any given year, which is two to three times higher than men without PTSD (Jordan et al., 1992) and men in representative civilian samples (Straus & Gelles, 1990).

These various intrapersonal approaches are among the most widely researched and influential models of IPV perpetration. They are limited, however, in their meager emphasis on instigating triggers that render perpetration more likely in some situations than in others, and they frequently neglect to explore *why* and *when* certain intrapersonal characteristics lead to IPV perpetration. For example, they tend to underemphasize the importance of interpersonal processes in triggering violent episodes, a topic we address now.

### ***Interpersonal Models***

Deviating in emphasis from sociocultural and intrapersonal perspectives, close relationships and marital therapy researchers emphasize that relationship conflict emerges from a frequently reciprocal exchange of behaviors and negative affective expressions that occurs between partners (e.g., Gottman, 1998; Gottman et al., 1976; Gurman & Jacobson, 2002), and that violent couples tend to be

distressed and unhappy (Dobash & Dobash, 1979; Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001). Scholars have identified relationship conflict and low marital satisfaction as crucial predictors of IPV (Jacobson et al., 1994; Murphy & Eckhardt, 2005; Stith et al., 2004). Indeed, problematic couple communication patterns strongly predict verbal arguments and relationship distress, which in turn predict IPV perpetration (Babcock, Waltz, Jacobson, & Gottman, 1993; O'Leary, 1999; O'Leary et al., 1989; Rogge & Bradbury, 1999).

Research on the mutual nature of IPV further illustrates the importance of conceptualizing IPV from an interpersonal perspective. When one partner has been physically aggressive in a relationship, it is likely that the other partner has also been physically aggressive (Archer, 2000). Indeed, some evidence suggests that the extent to which one is a target of IPV is the single strongest predictor of IPV perpetration (O'Leary, Slep, & O'Leary, 2007). Therefore, it becomes crucial to understand the ways that couples with at least one violent partner interact, and to incorporate this information into effective clinical interventions. For example, relative to nonviolent couples, violent couples exhibit more offensive negative behaviors during conflict discussions and more reciprocal patterns of negative communication (Berns, Jacobson, & Gottman, 1999; Burman, Margolin, & John, 1993; Cordova, Jacobson, Gottman, Rushe, & Cox, 1993; Gottman, 1998; Hellmuth & McNulty, 2008; Jacobson et al., 1994; Margolin, John, & Gleberman, 1988). In particular, violent couples seem to be absorbed in a pattern of reciprocated belligerence, contempt, disgust, and overt hostility, with each partner reciprocating the other's negative behavior (Gottman, 1994). Furthermore, husbands and wives within violent couples exhibit few behavioral differences on these variables, which dovetails with clinical observations that both partners in violent couples tend to behave in negative, reactive, and competitive ways (Jacobson et al., 1994; Murphy & Eckhardt, 2005).

These interpersonal models, with their emphasis on relationship processes, represent a significant advance beyond models that predominantly attribute IPV perpetration to sociocultural or intrapersonal factors, especially insofar as they have begun to unravel the specific relationship dynamics that precede or predict IPV perpetration. However, such models sometimes go too far in their neglect of sociocultural and intrapersonal factors and, of particular relevance to the present chapter, fail to

distinguish relationship dynamics that promote an urge to aggress from relationship dynamics that undermine the inhibition of that urge.

### *Typological Models*

As illustrated by the preceding review, the factors that distinguish IPV perpetrators from nonperpetrators are numerous and defy simple organization. In this section (typological models) and the next one (integrative models), we discuss two types of models that seek to incorporate risk factors emerging from diverse theoretical models. In the first type, scholars have constructed “batterer subtypes” to cluster the collection of factors as they relate to the frequency and severity of IPV. (These typological models are frequently limited to male perpetrators.) Although quantitative studies have identified two (e.g., Chase, O’Leary, & Heyman, 2001; Hershorn & Rosenbaum, 1991), three (Eckhardt, Holtzworth-Munroe, Norlander, Sibley, & Cahill, 2008; Hamberger, Lohr, Bonge, & Tolin, 1996; Saunders, 1992; Holtzworth-Munroe & Stuart, 1994; Waltz, Babcock, Jacobson, & Gottman, 2000), or four (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000a) different subtypes of IPV perpetrators, the evidence suggests that, at minimum, IPV perpetrators can be separated into two general categories.

Perpetrators in the first group, which we call *nonpathological perpetrators*, tend to be aggressive within the family or primary relationship only, typically showing signs of relationship discord and psychosocial stress, but normative levels of psychopathology and other problem behaviors (e.g., substance use). Perpetrators in the second group, which we call *pathological perpetrators*, perpetrate more frequent and severe IPV; exhibit greater impulsivity (Stuart & Holtzworth-Munroe, 2005), more anger disturbances (Holtzworth-Munroe et al., 2000b), and higher levels of antisocial, psychopathic, and borderline traits (Dutton, 2007; Eckhardt, Samper, & Murphy, 2008; Murphy, Taft, & Eckhardt, 2007; Tweed & Dutton, 1998; Waltz et al., 2000); and have more associated issues such as substance abuse and childhood histories of violence exposure (Holtzworth-Munroe et al., 2000a; Saunders, 1992; Waltz et al., 2000). Although some researchers have further subdivided the pathological cluster into subgroups (e.g., Holtzworth-Munroe & Stuart, 1994), empirical studies have revealed few robust differences between these subgroups (Holtzworth-Munroe et al., 2000a; 2000b; Waltz et al., 2000).

### *Integrative Models*

Although there has been surprisingly little emphasis on constructing broad, dynamic models of IPV, scholars have developed a few general models toward the goal of integrating the disparate literature within a coherent framework. A major early example is Dutton’s (1985) ecologically nested model, which posits that IPV risk factors can be conceptualized across four levels of analysis. At the broadest level, the *macrosystem* includes general cultural values and beliefs, such as societal and systemic norms regarding gender and power. The *exosystem* level of analysis includes the perpetrator’s links to social structures, such as friends, social networks, workplace norms, and legal institutions that link individuals and their families to their communities and broader culture. The *microsystem* level involves aspects of the situation or circumstance in which IPV occurs (e.g., relationship dynamics, family structure, immediate antecedents and consequences of abusive behavior). At the final *ontogenic* level of analysis, the focus shifts to the abuser’s individual differences and developmental history. Thus, ontogenic risk factors include more generalized personal characteristics—such as cognitive distortions, emotion regulation strategies, and learning histories—all of which determine how the individual reacts to exosystem and microsystem situations.

A more recent integrative theoretical model emphasizes the importance of contextual factors that are relevant to the immediate IPV episode (Bell & Naugle, 2008). This model posits that IPV risk factors can be conceptualized across five categories. *Antecedents* encompass stimuli or events that precede IPV perpetration and influence the likelihood of it occurring (e.g., distal or static risk factors like childhood abuse and proximal risk factors like interpersonal conflict). *Discriminative stimuli* encompass a class of antecedents whose presence preceding IPV perpetration signals that such behavior is likely to be reinforced (e.g., the presence of family members, the availability of weapons). *Motivating factors* encompass antecedent factors that can temporarily change the potency of reinforcers or punishers and, consequently, can change the likelihood of IPV perpetration (e.g., jealousy, alcohol intoxication). *Behavioral repertoire* encompasses conflict-relevant cognitive and social skills (e.g., anger management, problem solving). Finally, *verbal rules* encompass beliefs about the propriety of perpetrating IPV (e.g., that it is acceptable to be violent toward a romantic partner, that a man has to control his wife).

These and other integrative models make important strides toward theoretical coherence, providing structure to the sprawling IPV literature and influencing subsequent scholarship (e.g., O’Leary et al., 2007; Stith et al., 2004). However, the frameworks emphasize levels of analysis or classes of variable rather than processes (e.g., the contextual model categorizes jealousy and alcohol intoxication as motivating factors, even though, as discussed below, these two variables likely influence IPV through distinct processes), which means that they do not elucidate the mechanisms through which particular risk factors promote IPV perpetration.

In the remainder of this chapter, we introduce I<sup>3</sup> theory and use it as an organizing framework for reviewing the IPV literature. In contrast to the models reviewed above, I<sup>3</sup> theory is a meta-theory rather than a theory. Rather than emphasizing a crucial risk factor (or set of risk factors) or a crucial level of analysis (e.g., sociocultural vs. intrapersonal vs. interpersonal), it seeks to establish theoretical coherence by identifying the fundamental *processes* involved in IPV perpetration. It suggests that scholars can predict whether a given interaction between intimate partners will be violent versus nonviolent if they can discern the strength of instigation, impellance, and inhibition. In other words, given that all risk factors promote IPV through one or more of the three processes, comprehensive knowledge of these three processes, and of the interplay among them, is both *necessary and sufficient* for predicting IPV perpetration. Although all of the models reviewed above have limitations, all of them can contribute to an I<sup>3</sup> theory analysis of IPV perpetration—as long as the scholars advocating for the importance of a given model can discern the process or processes through which their crucial risk factors (e.g., patriarchal ideology, neuroticism) promote IPV perpetration. In the next section, we elaborate on these points and suggest that conceptualizing the IPV literature through the lens of I<sup>3</sup> theory has the potential not only to bolster this literature’s theoretical coherence but also to identify a broad range of novel and readily testable hypotheses.

### I<sup>3</sup> Theory

Scholars have identified dozens of risk factors for IPV perpetration. One early review summarized the literature as follows (Straus & Gelles, 1988, p. 159):

No single factor such as male dominance or growing up in a violent family has been shown to account

for more than a small percentage of the incidence of . . . spousal abuse. However, a study of the potential effect of 25 such “risk factors” (Straus, Gelles, & Steinmetz, 1980) indicated that in families where only one or two of the factors existed there were no incidents of wife beating during the year studied. On the other hand, wife beating occurred in 70 percent of the families with 12 or more of the factors. . . . Thus, the key to unraveling the paradox of wife beating appears to lie in understanding the interplay of the numerous causal factors.

Many additional risk factors have been identified subsequently (see Schumacher et al., 2001), but little consensus has emerged to explain the interplay among them, an issue I<sup>3</sup> theory seeks to address.

I<sup>3</sup> theory starts with the basic assumption that people are more likely to perpetrate IPV when the strength of the urge to aggress exceeds the strength of the inhibitory forces counteracting this urge. Although this assumption will appear uncontroversial to many social psychologists, the idea that inhibiting forces, particularly self-regulatory forces, are crucial to understanding the perpetration of IPV is largely absent from (and sometimes even inimical to) major sociocultural explanations for IPV perpetration (Bograd, 1988; Dobash & Dobash, 1979; Pence & Paymar, 1993; Straus et al., 1980). According to such explanations, it is not obvious why potential perpetrators would seek to override the urge to aggress (especially if they are physically stronger than their partner and if they do not fear reprisal or other punishment following their perpetration). After all, such explanations suggest that people perpetrate IPV because they have been socialized to believe that doing so is appropriate.

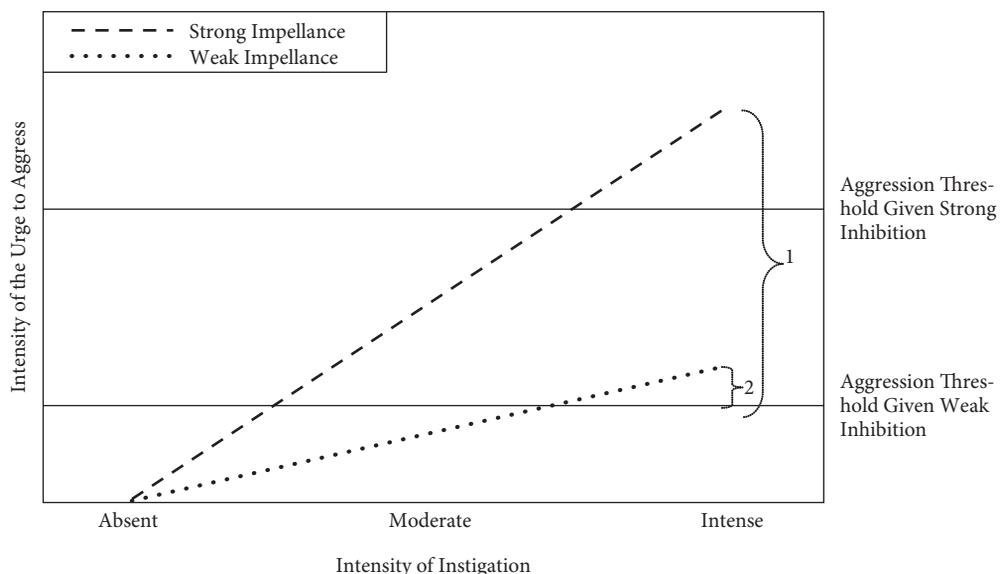
Although I<sup>3</sup> theory recognizes that individuals who have been socialized to believe IPV is acceptable are more likely to perpetrate it than are individuals who have been socialized to believe that it is unacceptable, it conceptualizes IPV from a fundamentally different perspective. According to I<sup>3</sup> theory—which suggests that inhibitory processes in general, and self-regulation in particular, play a crucial role in IPV perpetration—it is not pathological or even atypical for people (both men and women) to experience an *urge to aggress* during intense conflict with a romantic partner. A major question is whether people succumb to this urge or override it. Consistent with this view that inhibitory processes are frequently crucial in restraining aggressive urges, university students were almost 2.5 times more likely to experience an urge to aggress (e.g., to

slap, to shove, to kick) than to enact an aggressive behavior in a major fight with a romantic partner (51 vs. 21 percent; Finkel, DeWall, Slotter, Oaten, & Foshee, 2009). Indeed, even those students who experienced an urge to aggress were approximately 50 percent more likely *not* to act upon this urge than to act upon it.

These results are consistent with the view that many acts of IPV are caused in large part by *self-regulatory failures*, which refer to individuals' tendencies to act in accord with their momentary urges rather than with the more deliberative and self-controlled preferences that are better aligned with their long-term goals (Baumeister, Heatherton, & Tice, 1994). Although it seems that most people who experience an urge to perpetrate IPV are able to override this urge most of the time, some may succumb to it when their self-regulation fails (Finkel et al., 2009).

I<sup>3</sup> theory builds such inhibitory processes (including self-regulation) into its core structure, suggesting that three key processes underlie IPV perpetration: *instigation*, *impellance*, and *inhibition* (with the italicized vowels representing the three *I*s in I<sup>3</sup> theory). We illustrate the interplay among these three processes in Figure 20.1. *Instigation* refers to the exposure to discrete social dynamics with the potential victim that normatively trigger

an urge to aggress (e.g., provocation, rejection); we use the term “normative” to refer the experience of the typical person confronting this particular instigator under the typical circumstances. Such social dynamics can trigger hostile cognitive, affective, physiological, and even (preliminary) behavioral tendencies (Berkowitz, 1993). *Impellance* refers to dispositional or situational factors that psychologically prepare the individual to experience a strong urge to aggress when encountering this instigator in this context (e.g., dispositional aggressiveness, acute physiological arousal from a source other than the present conflict); these factors collectively determine the potential perpetrator's “urge readiness”—the readiness to respond with aggression to this particular instigator in this particular situation. As a result of variation in impellance, people may sometimes shrug off an instigator (or perhaps not even notice it; see Crick & Dodge, 1994), experiencing virtually no urge to aggress, or they may react strongly to a trigger, experiencing a powerful urge to aggress. The most powerful urges arise when both instigation and impellance are strong. Finally, *inhibition* refers to dispositional or situational factors that increase the likelihood that people will override this urge to aggress (e.g., dispositional self-control, the presence of one's mother-in-law). As noted previously, when the strength of inhibition exceeds the strength of the



**Figure 20.1** The interplay among instigation, impellance, and inhibition in the perpetration of intimate partner violence (IPV).

*Note:* When the dashed or dotted line falls above the relevant horizontal threshold line, the individual will enact IPV; when it falls below, he or she will not. The degree to which the dashed or dotted line exceeds the relevant horizontal threshold line is related to the severity of the aggressive act; for example, the circumstances underlying “1” will likely yield more severe IPV perpetration than the circumstances underlying “2.”

urge to aggress, people behave nonviolently; when the reverse is true, they behave violently. In other words, inhibition determines the threshold above which the urge to aggress will manifest itself in IPV perpetration. If inhibition is strong, then the urge to aggress must be strong to yield aggressive behavior; if it is weak, the urge to aggress need not be especially strong to yield aggressive behavior. Furthermore, when instigation is absent, impellance and inhibition are irrelevant (see left side of Figure 20.1). Even the angriest, least controlled person in the world is nonviolent sometimes; a situational instigator is required before the person perpetrates.

One crucial feature of I<sup>3</sup> theory is that instigation, impellance, and inhibition are conceptually orthogonal. To illustrate with the concrete examples introduced in the preceding paragraph, provocation, dispositional aggressiveness, and dispositional self-control can all vary independently. To be sure, there will be instances in which such constructs will be correlated, but they are not necessarily so—for example, Person A might be characterized by high dispositional aggressiveness and high self-control and encounter strong provocation in the present instance, whereas Person B might be characterized by low dispositional aggressiveness and high dispositional self-control and encounter weak provocation in the present instance. All eight combinations formed by the conceptual 2 (instigation) × 2 (impellance) × 2 (inhibition) interaction effect are plausible, with perpetration most likely, and strongest, in the “cell” where instigation and impellance are strong and inhibition is weak.

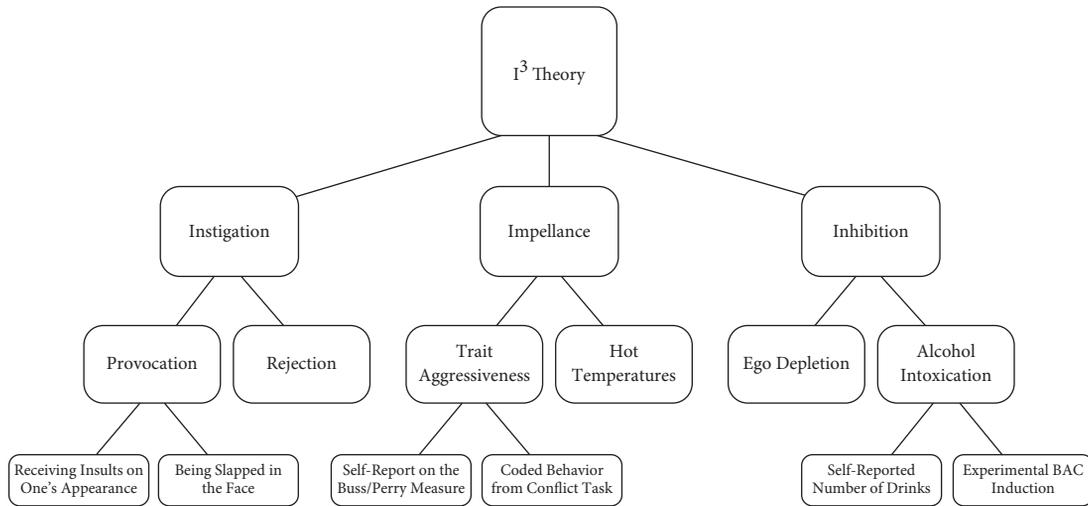
A definitional feature of I<sup>3</sup> theory that helps to maintain the orthogonality among the three processes is the *normative* definition of instigation. To be sure, different people will interpret a given partner behavior in different ways—and the same person will interpret the same behavior differently from one instance to the next—but these sources of variability, which are crucial to impellance, are irrelevant to instigation. Social psychologists emphasize subjective construal (Ross & Nisbett, 1991), but sometimes they do so to the extent that they forget that there is an objective reality to social situations (see Kelley et al., 2003). Having your enraged partner call you a pathetic, fat loser is *objectively* a stronger instigator than having your grateful partner tell you what a wonderful person you are. To be sure, people vary in how they interpret others’ behavior (and, indeed, there could be a person whose urge to aggress is stronger in response to the latter partner behavior than in response to the former), but

instigation focuses on the response of the typical person confronting this partner behavior. Individual differences and within-person fluctuations in the interpretation of the objective partner behavior represent a key component of impellance. Also, just as instigation is distinct from impellance, impellance is also distinct from inhibition. One might initially assume that strong impellance (e.g., strong dispositional aggressiveness) promotes IPV perpetration through the same process as weak inhibition (e.g., weak dispositional self-control); after all, the end result of both factors is an increased likelihood of IPV perpetration. However, upon reflection, one recognizes that aggressiveness most likely promotes IPV perpetration predominantly by making people more likely to experience a strong urge to aggress when confronting instigation, whereas low self-control most likely promotes IPV perpetration predominantly by making people less able to inhibit the urge to aggress (Finkel et al., 2011). The inverse is much less plausible.

When developing empirically testable hypotheses from an I<sup>3</sup> theory framework, scholars must conceptualize the predictors at three different levels of analysis (see Figure 20.2): (1) instigation, impellance, and inhibition form the *process level*; (2) risk factors like provocation (instigator), dispositional aggressiveness (impellor), and alcohol intoxication (disinhibitor) form the *construct level*; and (3) specific operationalizations form the *operation level*. For example, in a given study, a scholar might conceptualize impellance (process level) in terms of dispositional aggressiveness (construct level) and assess it with Buss and Perry’s (1992) self-report measure (operation level). I<sup>3</sup> theory establishes a general framework for conceptualizing the processes involved in IPV perpetration and the interplay among these processes. The framework is broad enough to be useful to scholars from a broad range of theoretical and methodological orientations, as long as they can (1) use data or strong theory to establish the processes through which their constructs promote IPV perpetration, and (2) develop compelling operationalizations of these constructs.

### Reviewing the Intimate Partner Violence Literature from the Perspective of I<sup>3</sup> Theory

One purpose of I<sup>3</sup> theory is to provide a coherent framework for categorizing IPV risk factors and examining the interplay among them. In this section, we selectively review key findings in the IPV literature through the lens of I<sup>3</sup> theory, with a particular emphasis on the incipient literature



**Figure 20.2** The hierarchical structure of I<sup>3</sup> theory.

*Note:* The first row below “I<sup>3</sup> Theory” represents the process level, which encompasses the fundamental processes underlying I<sup>3</sup> theory. The next row down represents the construct level, which encompasses specific variables or risk factors that promote IPV perpetration predominantly through a given process. Finally, the bottom row represents the operation level, which encompasses the specific operationalizations of the variables or risk factors assessed identified at the construct level. BAC = blood alcohol concentration.

investigating interprocess interaction effects. Before doing so, however, we raise a caveat: The current state of the IPV literature does not allow for definitive placement of a given risk factor into a particular I<sup>3</sup> theory process category (e.g., dispositional aggressiveness into impellance or dispositional self-control into inhibition). That the current literature is process underinformed is surely a limitation, but it is a limitation of the literature, not of I<sup>3</sup> theory; it is a limitation of *theory*, not of *this meta-theory*. I<sup>3</sup> theory provides a useful framework for reviewing the extant literature insofar as empirical evidence or strong theory allows for reasonably confident placement of particular risk factors into particular process categories—and, indeed, the extant literature does allow for such placement regarding many risk factors. The theory has a harder time incorporating constructs that are highly process ambiguous, so our review will largely neglect such constructs. Fortunately, a strength of I<sup>3</sup> theory is that it forces theorists to think about their constructs in more precise process terms, which will likely promote a stronger emphasis on process-oriented clarity than has existed heretofore.

In this chapter, we rely on theory to place variables into particular process categories, recognizing that these placement decisions will remain tentative until scholars conduct the process-dissociation studies required for more definitive placement decisions. Furthermore, risk factors will vary in the degree to which they promote IPV perpetration

primarily through one versus multiple processes. For example, once scholars have conducted the requisite process-dissociation research, they might conclude that the effect of dispositional anger on IPV perpetration is driven 88 percent by impellance and 12 percent by disinhibition (and perhaps that these proportions vary as a function of the instigator in question). To date, the extant literature does not approximate this level of precision. Future research may well establish that one or more of the categorizations in this review were incorrect; we will be delighted to see the field reach a level of process-oriented sophistication that such conclusions can be based upon empirical evidence.

We now turn to the literature review, which we divide into seven sections to align with I<sup>3</sup> theory’s seven key effects, as implied by: three main effects (instigation, impellance, and disinhibition), three two-way interaction effects (instigation × impellance, instigation × disinhibition, and impellance × disinhibition), and one three-way interaction effect (instigation × impellance × disinhibition). Table 20.1 lists these seven effects and provides an example of each. Even as we review these seven effects separately, it is important to bear in mind the I<sup>3</sup> theory view that, although it is reasonable to think it terms of main effects and in terms of two-way interaction effects, these effects are frequently moderated by variables tapping the neglected process or processes (e.g., that an established dispositional aggressiveness × alcohol intoxication interaction

**Table 20.1 Applying I<sup>3</sup> Theory to Intimate Partner Violence (IPV): The Seven Effects, with Examples and Citations**

I <sup>3</sup> Effect (Number)	I <sup>3</sup> Effect (Process)	I <sup>3</sup> Effect (Description)	Example	Citation for Example
1	Process 1	Instigator main effect	The partner's insulting behavior	Babcock et al., 2004
2	Process 2	Impellor main effect	Dissatisfaction with power	Ronfeldt et al., 1998
3	Process 3	Inhibitor main effect	Alcohol intoxication	Eckhardt, 2007
4	Process 1 × process 2	Instigator × impellor int.	Provocation × disp. aggressiveness	DeWall et al., 2011
5	Process 1 × process 3	Instigator × inhibitor int.	Provocation × commitment	Slotter et al., 2012
6	Process 2 × process 3	Impellor × inhibitor int.	Dispositional anger × alcohol intox.	Eckhardt, 2007
7	Process 1 × process 2 × process 3	Instigator × impellor × inhibitor int.	Provocation × disp. aggressiveness × executive control	Finkel et al., 2011

Note: disp. = dispositional; int. = interaction effect; intox. = intoxication.

effect is moderated by unassessed variables tapping instigation).

### ***Instigating Risk Factors (Effect 1)***

Many risk factors promote IPV perpetration through instigation, with some situational factors normatively triggering a stronger urge to aggress than others. As an obvious example, people experience stronger instigation when their partner has insulted them than when their partner has not done so. Certain animal species seem to exhibit innate, relatively automatic, aggressive behavior in response to certain situational triggers (e.g., Lorenz, 1966). For example, as reported by Bushman and Bartholow (2010), exposure to a red object triggers attack behavior in male Stickleback fish 100 percent of the time (Tinbergen, 1952). Although no parallel innate aggressive response has been demonstrated for humans (Hinde, 1970), instigation of the urge to aggress is normatively stronger in response to some situational triggers than others.

To be sure, there is considerable variability—both across people and within a given person over time—in the degree to which a given instigator triggers the urge to aggress and in the degree to which one instigator triggers this urge more strongly than another (e.g., ego threat versus physical aggression from an interaction partner; see Jones & Paulhus, 2010). These differences are crucial, but we postpone discussion of them until the section on impellance. Regarding instigation, we limit ourselves to

partner behaviors that *normatively* instigate an urge to aggress (as noted above). Although the instigators we discuss below vary on many dimensions, they all function primarily by normatively triggering an urge to aggress rather than by preparing people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation or by disinhibiting an extant urge.

IPV scholars have conducted little empirical work to map the domain of instigating triggers, largely because they “rarely examine domestic violence events per se” (Wilkinson & Hamerschlag, 2005), instead emphasizing dispositional or socio-cultural factors. Although the suggestion that the victim plays any role in increasing or decreasing the likelihood of violence is anathema to some socio-cultural perspectives and certainly delicate from any perspective, empirical evidence leaves little doubt that victim characteristics (e.g., hostility) and behaviors (e.g., initiating violence) are crucial predictors of the likelihood of IPV victimization (e.g., Leonard & Senchak, 1996; Murphy & Eckhardt, 2005; Straus, 1993). Indeed, arguments precede approximately 80 percent of IPV incidents (Eisikovits & Buchbinder, 1996; Greenfield et al., 1998), leading scholars to suggest that IPV may be “a conflict negotiation strategy that is enacted when other strategies have failed and the conflict has escalated out of control” (Lloyd & Emery, 2000, p. 56). Important instigating triggers include the partner threatening the potential aggressor's identity or

self-esteem, enacting aggressive behavior against the potential aggressor, and being argumentative toward the potential aggressor (Wilkinson & Hamerschlag, 2005).

Perhaps the most systematic effort to map the domain of instigating triggers was reported in an article establishing the reliability and validity of the Proximal Antecedents to Violent Episodes (PAVE) Scale (Babcock, Costa, Green, & Eckhardt, 2004). This scale, which we reproduce in Table 20.2, contains twenty items, each asking participants to report how likely they would be to respond with physical aggression if their partner enacted the behavior described in that item. Babcock and colleagues (2004) suggest that these behaviors fall into one of three categories (see Table 20.2): (1) *violence to control*, or the urge to aggress following their partner's attempts to exert autonomy or to control them; (2) *violence out of jealousy*, or the urge to aggress as a jealous response to the perception that their partner has been romantically unfaithful; and (3) *violence following verbal abuse*, or the instigation urge to aggress in response to their partner's verbal

abuse, including their partner's threats of divorce. The exploratory and confirmatory factor analyses reported by Babcock and colleagues (2004) yielded less than ideal model fit, however, and the theoretical coherence of the three factors is imperfect. As such, although the research developing the PAVE Scale represents an important contribution to the understanding of instigators relevant to IPV, additional research is required before definitive conclusions can be drawn about the partner behaviors that function as instigators and about the factor structure underlying these behaviors.

### ***Impelling Risk Factors (Effect 2)***

Many risk factors promote IPV perpetration through impellance, with some dispositions and circumstances preparing people to experience a powerful urge to aggress upon confronting an instigator and with others preparing them to experience a weak or nonexistent urge. Although impelling risk factors vary on many dimensions, they all function primarily by predisposing people to experience a powerful urge to aggress when confronting a

**Table 20.2 Proximal Antecedents of Violent Episodes (PAVE) Scale**

*Instructions to participants:* Sometimes there are situations when people are more likely to become PHYSICALLY aggressive than other times. Sometimes people feel that violence is justified, given the situation. Please indicate how likely it is that *you* would be physically aggressive in each of the following types of situations, if they were to arise. Items were rated on a scale ranging from 1 (*not at all likely*) to 6 (*extremely likely*).

1. My partner does something to offend or "disrespect" me.<sup>3</sup>
2. My partner threatens to leave me.<sup>3</sup>
3. My partner just won't stop talking or nagging.<sup>3</sup>
4. I walk in and catch my partner having sex with someone.<sup>2</sup>
5. My partner says, "I wish I never married you."<sup>3</sup>
6. My partner spends a lot of time with close friends of the opposite sex.<sup>2</sup>
7. I find out that my partner has been flirting with someone.<sup>2</sup>
8. My partner comes home late.<sup>2</sup>
9. My partner spends money without consulting me.<sup>1</sup>
10. When my partner and I argue about sex.<sup>3</sup>
11. My partner threatens to divorce me.<sup>3</sup>
12. My partner ridicules or makes fun of me.<sup>1</sup>
13. My partner tells me not to do something that I want to do.<sup>1</sup>
14. My partner tries to control me.<sup>1</sup>
15. My partner interrupts me when I'm talking.<sup>1</sup>
16. My partner does not include me in important decisions.<sup>1</sup>
17. My partner ignores me.<sup>1</sup>
18. My partner is physically aggressive toward me first.<sup>1</sup>
19. My partner tries to leave during an argument.<sup>1</sup>
20. My partner blames me for something I didn't do.<sup>1</sup>

<sup>1</sup>Violence to control subscale.

<sup>2</sup>Violence out of jealousy subscale.

<sup>3</sup>Violence following verbal abuse subscale.

*Note:* From Babcock et al., 2004.

particular instigator in a particular situation rather than by normatively triggering the urge to aggress or by disinhibiting an extant urge. Impelling forces fall into one of four categories: distal (evolutionary or cultural), dispositional, relational, and situational.

*Distal impellers* refer to aspects of potential perpetrators' evolutionary or cultural heritage that prepare people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation, including adaptations that yielded survival or reproductive advantages for ancestral men and women who experienced violent urges in certain situations relative to those who did not (Lorenz, 1966) and social norms delineating the extent to which a given instigator provokes a strong aggressive urge (Nisbett & Cohen, 1996). One well-researched example is the *culture of honor* characterizing southern white males in the United States. According to Nisbett and Cohen (1996), the herding culture of the South led to a norm of violent self-protection against theft, a norm that persisted even after the decline of herding as a major component of the South's economy. A well-known series of studies demonstrated that white males who had grown up in the South exhibited a substantially stronger urge to aggress in response to an insult than did white males who had grown up in the North (Cohen, Nisbett, Bowdle, & Schwarz, 1996). They exhibited stronger activation of aggression-relevant cognitions, greater increases in testosterone, and more antagonistic, fight-promoting behavior toward the person who had insulted them.

*Dispositional impellers* refer to relatively stable individual differences that prepare people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation, including dispositional hostility (Norlander & Eckhardt, 2005), narcissism (Bushman & Baumeister, 1998; Twenge & Campbell, 2003), and testosterone (Dabbs, Frady, Carr, & Besch, 1987; Van Goozen, Frijda, & Van de Poll, 1994). One well-researched example is *dispositional anger*. Dispositional anger is a strong predictor of interpersonal aggression in general (Anderson & Bushman, 2002; Beck, 1999; Berkowitz, 1993, 2008) and IPV in particular (for reviews, see Eckhardt et al., 1997; Holtzworth-Munroe et al., 2000b; Norlander & Eckhardt, 2005). Among IPV perpetrators, more severe perpetrators tend to be higher in dispositional anger than less severe perpetrators (Chase et al., 2001; Holtzworth-Munroe et al., 2000b; Saunders, 1992; Waltz et al., 2000). In addition, offenders on probation for misdemeanor assault against a female

partner judicially mandated to attend IPV intervention programs are more likely to reassault their partner to the degree that they have elevated levels of dispositional anger (Murphy et al., 2007).

*Relational impellers* refer to characteristics of the relationship between the two partners in a potentially violent couple that prepare people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation, including target-specific jealousy (Dutton et al., 1996; Holtzworth-Munroe, Stuart, & Hutchinson, 1997) and feelings of vulnerability or insecurity in the relationship (Carney & Buttell, 2005; Holtzworth-Munroe et al., 1997). One example is *dissatisfaction with power*. Although the evidence is contradictory regarding the association of *possessing* power in the relationship and IPV perpetration (e.g., Hotaling & Sugarman, 1986; Straus et al., 1980), *dissatisfaction* with one's level of power appears to be a robust predictor of the presence and the severity of IPV perpetration (Ronfeldt, Kimerling, & Arias, 1998). In one study, for example, in marriages in which husbands tend to press their wife to discuss something that is bothering them while she withdraws rather than engaging in the discussion (the "husband demand/wife withdraw" interaction pattern), husbands are significantly more likely (relative to couples who do not exhibit this interaction pattern) to perpetrate IPV (Babcock et al., 1993). This study also demonstrated that, among the maritally violent couples, stronger husband demand/wife withdraw tendencies predicted more severe husband-to-wife IPV perpetration.

*Situational impellers* refer to momentarily activated cognitive, affective, or physiological factors that prepare people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation, including physical pain (Berkowitz, 1998) and exposure to violent media (Anderson & Bushman, 2001; Anderson, Carnagey, & Eubanks, 2003). Because IPV researchers generally pay little attention to features of the immediate situation (Wilkinson & Hamerschlag, 2005), there is, to our knowledge, no research examining situational impellers. As such, we discuss *hot temperatures*, which is an established predictor of aggressive behavior in the broader aggression literature. Indeed, hotter temperatures predict elevated levels of laboratory-based aggression (Anderson, Anderson, Dorr, DeNeve, & Flanagan, 2000) and violent crime (Anderson, 1989). In baseball, pitchers even hit opposing batters, a behavior that frequently represents a deliberate attempt to cause the

batter physical pain (Timmerman, 2007; Turbow & Duca, 2010), more frequently when the weather is hot versus cold (Reifman, Larrick, & Fein, 1991). That this link between temperature and likelihood of hitting an opposing batter is strong when the opposing team's pitching staff previously has hit the pitcher's teammates (a potential instigation against the pitcher's ingroup) but weak when the opposing team's pitching staff previously has not done so (Larrick, Timmerman, Carton, & Abrevaya, 2012) is especially consistent with I<sup>3</sup> theory; it provides evidence for the sort of instigator  $\times$  impellor interaction effect described below (Effect 4).

### ***Disinhibiting Risk Factors (Effect 3)***

Many risk factors promote IPV perpetration through disinhibition, decreasing the likelihood that people will override the urge to aggress or, stated otherwise, increasing the likelihood that they will act upon this urge. People perpetrate IPV when the strength of the urge to aggress is greater than the strength of the inhibition of this urge. Although disinhibitors vary on many dimensions, they all function primarily by decreasing the likelihood that people will override the urge to aggress rather than by normatively triggering such an urge or by preparing people to experience a powerful urge to aggress when confronting a particular instigator in a particular situation. As with impelling forces, inhibiting forces fall into one of four categories: distal (evolutionary or cultural), dispositional, relational, and situational.

*Distal disinhibitors* refer to aspects of potential perpetrators' evolutionary or cultural heritage that that weaken the tendency to override an aggressive urge, including adaptations resulting from evolutionary pressures that provided ancestral men and women with a survival advantage for overriding aggressive urges in certain situations (Baumeister, 2005) and social norms or institutions that decrease the likelihood that individuals will act upon aggressive impulses (Guerra, Huesmann, & Spindler, 2002; Sampson, Raudenbush, & Earls, 1997). One major disinhibitor is *cultural approval* of IPV perpetration. In a study of Hispanic Americans, for example, such approval predicted elevated rates of IPV perpetration (Kaufman Kantor, Jasinski, & Aldarondo, 1994). Puerto Ricans were both the most likely to approve of IPV (18.8 percent) and the most likely to perpetrate it (20.4 percent), whereas Cubans were the least likely to approve of IPV (2.1 percent) and the least likely to perpetrate it (2.5 percent); Mexicans and Mexican Americans

were intermediate on both dimensions. This study aligns with a broader international trend suggesting that nations characterized by stronger (vs. weaker) approval of male-to-female IPV perpetration also exhibited greater prevalence of such perpetration (Archer, 2006).

*Dispositional disinhibitors* refer to relatively stable individual differences that weaken the tendency to override an aggressive urge, including poor dispositional executive functioning (Giancola, 2000) and beliefs that enacting aggressive behavior will lead to good outcomes for the self (Slaby & Guerra, 1988). Perhaps the most straightforward dispositional disinhibitor is *low dispositional self-control* (see Baumeister et al., 1994; Gottfredson & Hirschi, 1990). Once one experiences an urge to aggress, acting on that urge typically requires less self-control than overriding it. When facing conflictual circumstances, high dispositional self-control can help individuals "step back cognitively and achieve a broader, more positive perspective on localized events, to effectively overcome the myopia resulting from the heat of the moment" (Holmes & Murray, 1996, p. 624). Low dispositional self-control is a major risk factor for both nonviolent (Finkel & Campbell, 2001) and violent (Finkel et al., 2009) relationship-destructive behavior during conflict. In one study (Finkel et al., 2009), teenagers characterized by low dispositional self-control ( $-1$  standard deviation from the mean, or SD) reported perpetrating approximately 7.52 times more acts of IPV (mean = 9.25 vs. 1.23) over the previous year than did teenagers characterized by high dispositional self-control (+1 SD). More strikingly, residualized-lagged analyses predicting IPV perpetration over the subsequent year revealed a robust effect of dispositional self-control, controlling for level of perpetration over the previous year. Indeed, even after controlling for that huge cross-sectional effect, the teenagers characterized by low dispositional self-control reported perpetrating approximately 2.89 times more acts of IPV (mean = 3.12 vs. 1.08) over the subsequent year than did the teenagers characterized by high dispositional self-control.

*Relational disinhibitors* refer to characteristics of the relationship between the two partners in a potentially violent couple that weaken the tendency to override an aggressive urge, including low partner empathy or perspective taking (Richardson, Green, & Lago, 1998; Van Baardewijk, Stegge, Bushman, & Vermeiren, in press) and large relative physical size (Archer & Benson, 2008; Felson,

1996; Sell, 2011). One major relationship-level inhibitor is *relationship commitment* (Slotter et al., 2012), which is a crucial predictor of a broad range of pro-relationship behaviors—such as accommodation (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), forgiveness (Finkel, Rusbult, Kumashiro, & Hannon, 2002), and willingness to make sacrifices (Van Lange et al., 1997)—including lack of IPV perpetration. In one study, adolescents who were more committed to their romantic partner were significantly less likely to perpetrate IPV against him or her (Gaertner & Foshee, 1999).

*Situational disinhibitors* refer to momentarily activated cognitive, affective, or physiological experiences that weaken the tendency to override an aggressive urge, including limited processing time (Finkel et al., 2009) and depleted self-regulatory resources (DeWall, Baumeister, Stillman, & Gailliot, 2007; Finkel et al., 2009). One situational disinhibitor is *alcohol intoxication* (Giancola, Josephs, Parrott, & Duke, 2010; Leonard, 2005). Survey data reveal a robust positive association of alcohol consumption with IPV perpetration (Chermack, Fuller, & Blow, 2000; Kaufman Kantor & Straus, 1990; Leonard & Blane, 1992; Leonard & Quigley, 1999; Leonard & Senchak, 1996), even after controlling for perpetrator demographics, hostility, and relationship distress (Leonard & Senchak, 1993; Pan et al., 1994). Studies of violent couples indicate not only that IPV episodes tend to be more frequent when the husband has been drinking than when he has not but also that the aggression tends to be more severe and to involve a greater likelihood of mutual violence (Murphy, Winters, O'Farrell, Fals-Stewart, & Murphy, 2005; Testa, Quigley, & Leonard, 2003). Consistent with the idea that alcohol intoxication is a situational disinhibitor, these findings are frequently interpreted from the perspective of the alcohol myopia model (Steele & Josephs, 1990) and its descendants, which predict that alcohol intoxication impairs controlled, effortful cognitive processing, especially attentional processes. Alcohol consumption restricts the range of stimuli to which the inebriated mind can attend, resulting in a myopic effect whereby only the most immediate, salient, and easy-to-perceive information is kept in working memory long enough for further cognitive processing (Giancola et al., 2010). In the context of IPV, the intoxicated perpetrator will typically attend to highly salient stimuli associated with an immediate provocation or threat from a partner (e.g., a verbal insult), while failing to perceive cues that might otherwise inhibit violence (e.g., the subsequent

emotional, interpersonal, and legal consequences of enacting aggressive behavior).

### ***Instigator × Impellor Interaction Effects (Effect 4)***

In our review thus far, we have emphasized the power of I<sup>3</sup> theory to provide a process-oriented integration of the established IPV risk factors, focusing on main effects. A crucial feature of I<sup>3</sup> theory, however, is its emphasis on the interaction of variables tapping one process with variables tapping one or both of the other processes. We illustrate I<sup>3</sup> theory's two-way interaction effects (instigator × impellor, instigator × inhibitor, and impellor × inhibitor) before turning to the theory's crucial three-way interaction effect. When illustrating these I<sup>3</sup> theory interaction effects, we frequently review studies from the emerging program of research by Finkel and colleagues because those studies are the only ones to date that were designed a priori to test the theory, and as such, they provide the cleanest tests. We start by reviewing a recent instigator × impellor interaction effect.

#### **PROVOCATION × DISPOSITIONAL PHYSICAL AGGRESSIVENESS**

Two recent studies examined the interactive effect of provocation (instigator) and dispositional physical aggressiveness (impellor). The provocation × dispositional physical aggressiveness interaction effect was significant: Whether provocation was assessed with a self-report measure or manipulated experimentally in the laboratory, provocation reliably predicted IPV perpetration among participants characterized by strong dispositional physical aggressiveness, but this link was weaker and sporadic among participants characterized by weak dispositional physical aggressiveness (DeWall et al., 2011).

### ***Instigator × Inhibitor Interaction Effects (Effect 5)***

#### **PROVOCATION × SELF-REGULATORY DEPLETION**

Complementing the research reviewed above demonstrating that low dispositional self-control functions as a person-level disinhibitor is research demonstrating that state-level reductions in self-control (or self-regulation) strength function as a state-level disinhibitor. According to the strength model of self-regulation, a unitary resource underlies all acts of deliberate self-regulation, and self-regulation functions like a muscle; exerting self-regulation depletes self-regulatory strength, thereby undermining subsequent acts

of self-regulation performed shortly thereafter (Baumeister, Vohs, Tice, & 2007; Hagger, Wood, Stiff, & Chatzisarantis, 2010; Muraven & Baumeister, 2000).

One recent study examined whether self-regulatory depletion causes people to have stronger tendencies toward IPV perpetration and whether these tendencies are limited to situations in which the individual experiences an urge to aggress in the first place (Finkel et al., 2009). Participants were either depleted or not (disinhibitor) before their partner either provoked or did not (with nasty or supportive false feedback written by the research team but presented as if it came from the partner) (instigator). As part of an ostensibly unrelated study moments later, participants determined the duration for which their partner would have to maintain painful body poses, which participants believed were painful but would not cause any long-term tissue damage. (The study ended before their partner actually assumed these body poses). The provocation  $\times$  self-regulatory depletion interaction effect was significant: Participants forced their partner to maintain the painful body poses for substantially longer when they were depleted than when they were not, but only if the partner had provoked them (Finkel et al., 2009).

#### PROVOCATION $\times$ COMMITMENT

A separate program of research examined the interactive effect of provocation (instigator) and relationship commitment (inhibitor), complementing the depletion research, which used a situational disinhibitor, with research using commitment as a relational inhibitor. The provocation  $\times$  commitment interaction effect was significant: Across four studies using several operationalizations of IPV perpetration, partner provocation reliably predicted IPV perpetration among participants who were not strongly committed to their relationship, but this link was weaker and sporadic among participants who were strongly committed (Slotter et al., 2012). This interaction effect was robust across measures of commitment that employed self-reports, coder ratings, and an implicit reaction-time task.

#### PROVOCATION $\times$ ALCOHOL INTOXICATION

A third line of research examined the disinhibiting effects of alcohol intoxication. In one study, maritally violent participants immersed themselves in two simulated situations: a neutral situation and a situation in which the spouse provoked them (Eckhardt, 2007). They verbalized their thoughts

in real time, and objective raters coded the degree to which these thoughts were aggressive. Before encountering these situations, participants were assigned to an alcohol consumption condition, a placebo condition, or an alcohol-irrelevant control condition. The provocation  $\times$  alcohol intoxication interaction effect was significant: Participants exhibited significantly stronger aggressive tendencies in response to the provoking situation when they were intoxicated than when they were not (i.e., than when they were in one of the control conditions), but this alcohol effect was absent in the neutral condition.

#### *Impellor $\times$ Inhibitor Interaction Effects (Effect 6)*

##### INTERMITTENT EXPLOSIVE DISORDER $\times$ SELF-REGULATORY DEPLETION

Shifting to impellor  $\times$  inhibitor effects, one line of research examined intermittent explosive disorder (IED), a clinical disorder tapping strong aggressive tendencies disproportionate to the level of provocation (American Psychiatric Association, 2000), as the impellor and self-regulatory depletion as the disinhibitor (Finkel et al., 2011). Employing this nationally representative sample from the National Comorbidity Survey–Replication study allowed us to compare Americans with versus those without a lifetime clinical diagnosis of IED. Although the link between IED and violent behavior likely involves both impellance and disinhibition, evidence to date suggests that the link through impellance is far more robust. For example, people with (vs. without) IED tendencies tend to be angrier (McCloskey, Berman, Noblett, & Coccaro, 2006), to make more hostile attributions when confronted with socially ambiguous cues (Coccaro, Noblett, & McCloskey, 2009), and to exhibit stronger amygdala activation in response to provocation (McCloskey, Phan, Angstadt, & Coccaro, 2011)—all factors that are hypothesized to increase the urge to aggress when facing instigation. [In terms of inhibition, support for the view that people with (vs. without) IED have poorer executive control is mixed (Best, Williams, & Coccaro, 2002; McCloskey, Phan, Angstadt, & Coccaro, 2011).]

The IED  $\times$  depletion interaction effect was significant: The link between IED diagnosis and frequency of IPV perpetration was stronger among participants with high (vs. low) scores on a self-report measure of depletion (Finkel et al., 2011). In a separate study, university students who were high (vs. low) in dispositional tendencies toward physical aggression (Buss & Perry, 1992)

were especially likely to exhibit violent tendencies toward their romantic partner if they had been randomly assigned to a depletion condition as opposed to a control condition (Finkel et al., 2011).

#### **DISPOSITIONAL ANGER × ALCOHOL INTOXICATION**

The Eckhardt (2007) study of alcohol intoxication introduced in the previous section is also relevant to this impellor × inhibitor section. Participants varied in their levels of dispositional anger. The dispositional anger × alcohol intoxication interaction effect was significant: Dispositionally angry participants exhibited significantly stronger aggressive tendencies than did dispositionally nonangry participants, but only when they were assigned to the alcohol condition rather than to one of the control conditions. Eckhardt and Crane (2008) replicated this general pattern of results in a new sample of participants, this time replacing the measure of dispositional anger with a measure of dispositional aggressiveness (i.e., replacing one impellor with another).

#### **PHYSICAL PROCLIVITY × NEGATIVE OUTCOME EXPECTANCIES**

Another recent study demonstrates the breadth of I<sup>3</sup> theory by operationalizing impellance and inhibition with entirely new risk factors (Finkel & Foshee, 2011). In contrast to anger-related impellers like IED and dispositional anger/aggressiveness, the impellor in this study was physical proclivity, which refers to the dispositional tendency to enjoy physical activities more than cognitive activities, a key component of criminality (see Gottfredson & Hirschi, 1990). It was assessed with self-report items such as, “If I had a choice, I would almost always rather do something physical than something mental” (Grasmick, Tittle, Bursik, & Arneklev, 1993). The inhibitor in this study was negative outcome expectancies, which refer to beliefs that committing violence leads to negative consequences for the perpetrator (Slaby & Guerra, 1988). In contrast to self-regulatory depletion or alcohol intoxication, which most likely weaken inhibition predominantly by undermining individuals’ *ability* to override their aggressive urges, negative outcome expectancies most likely strengthen inhibition predominantly by bolster individuals’ *motivation* to override their aggressive urges, presumably because the negative impact of enacting aggression will redound back upon them (e.g., “If I hit a dating partner, they would break up with me”; Foshee, Bauman, & Linder, 1999). As predicted, the physical

proclivity × negative outcome expectancies interaction effect was significant: The positive association of physical proclivity with the number of violent acts participants perpetrated against their romantic partner over the previous year was robust when negative outcomes expectancies were weak, but it disappeared when these expectancies were strong (Finkel & Foshee, 2011).

#### ***Three-Way Instigator × Impellor × Inhibitor Interaction Effects (Effect 7)***

A recent literature review (Slotter & Finkel, 2011) found no published studies that provided a clear test of I<sup>3</sup> theory—that is, that included three variables, each predominantly assessing one (and only one) of the three processes. To address this gap, Finkel and his collaborators have recently conducted a number of such studies, and we describe two of them here. Both assessed provocation as the instigator, but they differed in terms of impellers and inhibitors.

#### **PROVOCATION × DISPOSITIONAL PHYSICAL AGGRESSIVENESS × EXECUTIVE CONTROL**

One study assessed dispositional physical aggressiveness as the impellor and executive control as the inhibitor (Finkel et al., 2011). As in the studies reviewed above, this study assessed dispositional physical aggressiveness with Buss and Perry’s (1992) measure. It assessed executive control with the widely used Stroop task, which employs computerized procedures to measure individual differences in the ability to override dominant (gut-level) responses. Consistent with I<sup>3</sup> theory, the provocation × dispositional physical aggressiveness × executive control three-way interaction effect was significant (Finkel et al., 2011). This interaction effect was driven by the crucial cell: high instigation (provocation), high impellance (dispositional physical aggressiveness), and low inhibition (poor executive control). Participants in that cell were substantially more likely to enact physically aggressive behavior toward their partner when compared not only with the mean of the other seven cells but also with the mean of the three cells with two risk factors but not the third: (1) high instigation and high impellance, but high inhibition; (2) high instigation and low inhibition, but low impellance; and (3) high impellance and low inhibition, but low instigation.

#### **PROVOCATION × DISPOSITIONAL RETALIATORY TENDENCIES × RELATIONSHIP COMMITMENT.**

The second study assessed dispositional retaliatory tendencies as the impellor and relationship

commitment as the inhibitor (Slotter et al., 2012). This study assessed dispositional retaliatory tendencies with a measure created by Fincham and Beach (2002); a sample item was, “I think about how to even the score when my partner wrongs me.” It assessed relationship commitment with a three-item measure assessing the degree to which participants felt committed, dedicated, and loyal to their partner. Consistent with  $I^3$  theory, the provocation  $\times$  dispositional retaliatory tendencies  $\times$  relationship commitment three-way interaction effect was significant (Slotter et al., 2012). As in the previous study, this interaction effect was driven by the crucial cell: high instigation (provocation), high impellance (dispositional retaliatory tendencies), and low inhibition (low relationship commitment). Participants in that cell were substantially more likely to enact physically aggressive behavior toward their partner when compared not only with the mean of the other seven cells but also with the mean of the three cells with two risk factors but not the third.

### Conclusion

Scholars have learned a great deal about IPV perpetration in recent decades, but “theory and research on relationship violence remain uncohesive” (Berscheid & Regan, 2005, p. 52). In this chapter, we presented  $I^3$  theory as a broad, integrative, and generative meta-theoretical framework (1) to identify the process or processes (instigation, impellance, and/or inhibition) through which a given risk factor promotes IPV perpetration, and (2) to clarify the manner in which a risk factor tapping one of these processes interacts with one or more risk factors tapping one or both of the other processes. A review of the IPV literature structured around the seven key effects derived from  $I^3$  theory—the three main effects, the three two-way interaction effects, and the one three-way interaction effect—provided strong preliminary evidence that this framework can organize the extant literature and suggest an immediate and expansive agenda for future research. As long as scholars can identify (by using either empirical process-dissociation procedures or strong theory) multiple process-pure risk factors, each cleanly tapping one of the three processes, they can use  $I^3$  theory as a meta-theoretical framework for advancing specific hypotheses about the likelihood and the intensity of IPV perpetration in the setting they are investigating. Doing so represents an important step toward bolstering the effectiveness of clinical and legal interventions designed to reduce the frequency and severity of IPV perpetration.

### Future Directions

1. What process-dissociation research methods can scholars use to determine the degree to which a given risk factor promotes IPV perpetration through a given process? For example, if scholars want to discern the degree to which self-regulatory strength depletion promotes IPV perpetration (or self-regulatory failure more generally) by increasing impellance versus by decreasing inhibition, what empirical procedures can they use to do so? How readily can the recent process-dissociation paradigms developed in cognitive and social psychology (e.g., Jacoby, 1991; Payne, 2001; Sherman et al., 2008) be adapted to answer such questions?

2. Can scholars develop theoretical models sophisticated enough to recognize that a given risk factor can promote IPV perpetration through multiple processes, depending upon the situation? For example, when (and to what extent) does a history of witnessing parental violence in the family of origin promote perpetration by bolstering impellance (e.g., by inculcating the belief that violence gets one’s needs met) versus by reducing inhibition (e.g., by undermining the belief that violence is morally unacceptable)?

3. How can social psychologists increase the influence of social psychological principles both within the scholarly literature on IPV and within the associated clinical and policy circles? Since the 1970s, principles from sociology (e.g., socialization practices) and clinical psychology (e.g., psychopathology) have dominated IPV scholarship, interventions, and policy. How can scholars increase the centrality of explanatory constructs emerging from social psychological research on self-regulation, relationship science, aggression, and so forth?

4. How can clinicians and policymakers capitalize upon the process-oriented clarity provided by  $I^3$  theory to improve clinical and legal interventions for people at risk for, or guilty of, IPV perpetration? Would it be better to invest limited clinical resources in trying to tackle one of the three processes—instigation, impellance, or inhibition—comprehensively or in trying to tackle all of them less partially? Will the answer to this question depend upon the specific circumstances surrounding a given case? For example, when intervening with a man prone toward violent outbursts when he and his wife have an argument, should treatment emphasize

instigation (e.g., working with the couple to reduce conflictual interaction), impellence (e.g., working with the man to identify his anger triggers early and to employ meditation immediately upon encountering them), or inhibition (e.g., working with the man to focus on long-term consequences of his violent behavior, including negative effects on his children)? With limited resources, to what extent can interventions effectively target all three processes at once?

5. Given the important role of instigation in IPV perpetration, to what degree could incorporating conflict management skills into standard educational curricula reduce the frequency and severity of IPV perpetration? In other words, rather than waiting until after couples have already experienced IPV before intervening, might training, say, all ninth graders on conflict management skills (empathy, communication, and so forth) as part of the standard educational curriculum be especially effective at reducing the prevalence and severity of IPV?

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### Notes

1. In this chapter, we do not focus on IPV perpetrated in self-defense, nor do we review the literatures on psychological, relational, or sexual aggression. In addition, because most IPV studies do not allow for precise conclusions about the perpetration severity, we use the words *violence* and *aggression* interchangeably.

2. Johnson (1995, 2008) distinguishes between two distinct forms of IPV. *Situational couple violence* (formerly “common couple violence”), the much more frequent of the two, can arise when conflict situations get out of hand. In contrast, *intimate terrorism* (formerly “patriarchal terrorism”), which is rare but especially devastating to victims, is perpetrated to assert dominance and control. Whereas situational couple violence is perpetrated at slightly higher rates by women, intimate terrorism is perpetrated predominantly by men (Archer, 2000; Johnson, 1995, 2008; Straus, 1999; but see Ehrensaft et al., 2004). Although we find the distinction between these two forms of IPV largely compelling, we do not delve deeply into it in this chapter because I<sup>3</sup> theory applies equally well to both forms of IPV, although, to be sure, the specific risk factors at play vary between the two forms. For example, if dispositional anger is a crucial factor bolstering the urge to aggress in

situational couple violence and desire to control the partner is a crucial factor bolstering the urge to aggress in intimate terrorism, I<sup>3</sup> theory can readily incorporate these different risk factors into its meta-theoretical framework. In addition, although one might assume that conflict is largely irrelevant in intimate terrorism, our intuition is that objective features of the victim's behavior represent an important determinant of why the perpetrator enacts violence in some interactions but not in others, although additional research is required before we can draw firm conclusions on this point.

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