

DIFFERENCES AMONG PERPETRATORS OF INTIMATE PARTNER VIOLENCE UTILIZING PROACTIVE VERSUS REACTIVE AGGRESSION

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Abstract

This research aimed to categorize perpetrator's aggression as reactive or proactive regarding intimate partner violence and explore the relationship with relevant variables. Victim statements in police reports of 60 predominantly Hispanic male adult perpetrators on probation in South Texas were rated, categorizing statements as reactive or proactive. It was hypothesized that more men would display reactive aggression and it would be associated with severe violence, emotion regulation difficulties, state anger, and impulsivity. The study further suggested that emotion regulation, state anger, and impulsivity would moderate the relationship between severity of violence and reactive/proactive classification, and impulsivity would mediate the relationship between state anger and reactive/proactive classification. Results showed 79% of perpetrators using reactive aggression and 21% using proactive aggression. Men with reactive aggression exhibited more severe violence, emotion regulation difficulties, impulsivity, and state anger. There were no moderation effects of study variables on severity of violence and reactive/proactive classification. Impulsivity fully mediated the relationship between state anger and reactive/proactive classification. Our results support approaches that emphasize reactive aggression in intimate partner violence perpetration due to its frequency and potential recidivism effects.

KEY WORDS: *Hispanic Americans, intimate partner violence, physical perpetration, emotion regulation, impulsivity.*

Resumen

Esta investigación tuvo como objetivo categorizar la agresión del maltratador como reactiva o proactiva en la violencia de pareja y explorar la relación con variables relevantes. Se clasificaron las declaraciones de las víctimas en los informes policiales de 60 hombres adultos agresores predominantemente hispanos en libertad condicional en el sur de Texas, categorizando las declaraciones como reactivas o proactivas. Se hipotetizó que más hombres mostrarían agresión reactiva y que estaría asociada con violencia grave, dificultades en la regulación emocional, ira-estado e impulsividad. El estudio sugirió además que la regulación emocional, la ira-estado y la impulsividad moderarían la relación entre la gravedad de la violencia y la clasificación reactiva/proactiva, y que la impulsividad mediaría la relación entre la ira-estado y la clasificación reactiva/proactiva. Los resultados

mostraron que el 79% de los agresores utilizaban la agresión reactiva y el 21% la proactiva. Los hombres con agresión reactiva mostraban una violencia más grave, dificultades en la regulación emocional, impulsividad e ira-estado. No hubo efectos moderadores de las variables estudiadas sobre la gravedad de la violencia y la clasificación reactiva/proactiva. La impulsividad medió totalmente en la relación entre la ira-estado y la clasificación reactiva/proactiva. Nuestros resultados apoyan las perspectivas que enfatizan la agresión reactiva en la violencia en las relaciones de pareja debido a su frecuencia y potenciales efectos de reincidencia.

PALABRAS CLAVE: Hispanoamericanos, violencia en las relaciones de pareja, agresión física, regulación emocional, impulsividad.

Introduction

When an individual becomes known to authorities as a perpetrator of intimate partner violence (IPV), the criminal justice system demands rehabilitation via batterer intervention programs (BIPs). The need for authorities to adapt such programs to the variety of needs and characteristics of perpetrators in order to optimize treatment has been identified. Thus, experts in the field have argued for more attention in assigning treatment based on the characteristics of the offender as the efficacy of BIPs has been limited. Babcock et al. (2004) evaluated 22 studies that included partner violent males and found the overall effects of the treatment to be small with only minimal impact on reducing recidivism. Treated offenders showed a one-third standard deviation improvement in recidivism compared to non-treated controls, and when only experimental studies were analyzed, the improvement decreased to one-tenth of a standard deviation. Further, based on partner report, offenders in BIPs had a 40% chance of being successfully nonviolent, whereas offenders without treatment had a 35% chance. Whether the 5% increase in success rate attributable to the treatment program is cause for celebration or anguish depends on how the data is being used to bolster a specific argument. In 2013, both Eckhardt et al. and Arias et al. arrived at mixed findings concerning the effectiveness of BIPs and ultimately concluded that such treatments were ineffective. Consequently, despite the potential benefits promised by offender interventions, the empirical status of BIPs remains decidedly uncertain. Irrespective of which review one considers as the most definitive, the efficacy of standard interventions is weak. As a result, it is important to comprehensively examine the effects of such interventions and the nature and heterogeneity of IPV perpetrator characteristics that may enhance treatment effectiveness. The present study focuses on the latter.

Scholars have begun to explore the heterogeneity of IPV perpetrators (Babcock et al., 2023; Chase et al., 2001; Lee et al., 2018; Ross & Babcock, 2009), and the dichotomy between impulsive and premeditated aggression has emerged as one of the most promising categories of this type of behavior. In short, a reactive-proactive typology has been empirically and theoretically supported (Martinez & Blasco-Ros, 2005). Reactive aggression is characterized as responses to (accurately or inaccurately) perceived threats or frustrations in the context of high affective physiological arousal and minimal cognitive processing (Chase et al., 2001). In contrast, proactive aggression is characterized as planned, methodical, and goal-

oriented behavior that is enacted in a context of minimal- emotional and physiological arousal (Chase et al., 2001). While not explicitly labeled as such, this reactive-proactive typology has already been utilized to characterize the violence exhibited by IPV perpetrators. Developing a typology of aggression that qualitatively characterizes perpetrators into distinct categories is necessary if we are to effectively measure and intervene with this behavior (Martinez & Blasco-Ros, 2005). Given the intricate nature of aggression among IPV perpetrators, interventions focused on addressing the underlying mechanisms that drive aggression hold potential to foster favorable treatment outcomes.

In 2011, Chase et al. developed a system for categorizing perpetrators of IPV as either reactive or proactive. Utilizing prior reactive-proactive research, they included two dimensions: impulsivity versus intentionality of violence, and trajectory of affectivity/physiological arousal prior to and during the violence. Their system of categorization was based on a cumulative partner-violence history, rather than a single offense. In the sample that consisted of 60 men from the community, 62% were categorized as reactive and 38% as proactive. Men who were categorized as reactive were more likely to be angry while discussing a conflict with their partner than those categorized as proactive. Further, men categorized as proactive were more likely to have antisocial, aggressive-sadistic, and psychopathic personality traits.

In 2018, Lee et al. utilized the reactive-proactive typology outlined by Chase et al. (2001) to categorize a sample of 299 men placed on probation for IPV. They analyzed clinical records and police reports of perpetrators and found that 74% of the sample utilized reactive aggression and 26% engaged in proactive aggression. Perpetrators who were categorized as utilizing reactive aggression and completed treatment were less likely to recidivate than those categorized as utilizing reactive aggression and not completing treatment. However, treatment completion was not related to recidivism for those perpetrators who were categorized as utilizing proactive aggression.

More recently, Babcock et al. (2023) examined differences between proactive and reactive partner violence by analyzing accounts of previous violent incidents by 137 cohabiting couples. Utilizing the reactive/proactive coding system by Chase et al. (2001), the researchers categorized the descriptions provided by both the male and female participants into three groups: proactive, mixed proactive/reactive, and reactive. The findings indicated that patterns of reactive/proactive violence could be reliably identified through the retrospective reports of IPV using Chase et al.'s (2001) coding system. 65.3% of perpetrators utilized reactive violence, 25.3% mixed proactive/reactive, and 9.3% proactive. Collectively, the studies mentioned underscore the importance of examining the role of partner violence in relation to proactive or reactive aggression, as such an approach can facilitate more effective treatment matching for perpetrators of IPV.

Aggression research within the field has predominantly depended on self-report, observer-report, and interview data to identify risk factors associated with IPV perpetration (Stith et al., 2004). In some IPV studies, the role of anger problems has been particularly significant revealing that subgroups of men who engage in frequent and severe violence against their partners exhibit elevated levels of anger

compared to men who perpetrate less severe and frequent violence (Holtzworth-Munroe et al., 2000; Saunders, 1992). Additionally, findings from meta-analytic research have revealed significant average differences in anger and hostility among men with low to moderate levels of IPV compared to those with moderate to severe levels (Norlander & Eckhardt, 2005). However, high anger levels do not consistently characterize more severely assaultive men. In the study authored by Chase et al. (2001), during observed interactions with their spouses, proactive aggressors, who had more antisocial traits, displayed more dominant behaviors, yet fewer direct verbalizations of anger. However, inconsistencies in the relationship between anger and IPV may be due to problems with the questions asked.

A study by Murphy et al. (2007) utilized subscales from a well-validated and widely studied measure of anger expression, the State-Trait Anger Expression Inventory (Spielberg, 1999), to cluster partner violent men into different groups. The results indicated that some, but not all, partner violent men reported significant generalized anger problems. The findings were consistent with prior research on anger in subtypes of partner violent men (e.g., Chase et al., 2001; Saunders, 1992; Waltz et al., 2000). Notably, Holtzworth-Munroe et al. (2000) found that the two most severe subtypes of partner violent men (i.e., Generally Violent/Antisocial and Borderline/Emotionally Dysregulated) had significantly higher anger levels than less severe subtypes.

In 2015, Birkley and Eckhardt provided an updated meta-analytic review on anger, hostility, internalizing negative emotions and IPV involving both male and female perpetrators. The review encompassed 61 studies, and the analysis revealed moderate effects in the relationships between anger and IPV ($d = .48$), hostility and IPV ($d = .56$), and a small effect for the relation between internalizing negative emotions and IPV ($d = .33$). Overall, the meta-analysis demonstrated a moderate association between IPV and anger, hostility, and internalizing negative emotions ($d = .51$), which aligns with previous quantitative reviews (e.g., Norlander & Eckhardt, 2005).

Despite the seemingly obvious connection between feeling angry and acting aggressively, serious gaps exist regarding our ability to make a confident statement about whether anger matters with regard to IPV. This gap is partly due to the field's limited knowledge about the anger construct in general, problems relating to construct definition and measurement, and resistance from segments of the IPV research and treatment communities about the very notion of anger being related to partner violence (e.g., power and control models of intervention). Norlander and Eckhardt (2005) pose the following question and answer, "If the question is, "Are men with a history of intimate partner violence angrier than relationally nonviolent men?" Then the answer is a firm yes". In their review, high levels of anger and hostility, as measured by a variety of different instruments, reliably differentiated men who physically assaulted their intimate partners from men who reported no such violent history, a differentiation that persisted even after considering the variety of anger/hostility assessment methods used to assess these constructs. The overall effect was a moderate one, suggesting that while anger and hostility may indeed differentiate IPV perpetrators from nonviolent males, there are a variety of other factors, both internal and external, to the perpetrator that collaborate to produce

IPV. Therefore, it is necessary to consider anger as one of several factors associated with IPV.

Impulsivity is often conceptualized as carelessness, a lack of planning, and rapid decision making and action (Magid et al., 2007). Impulsive individuals often have difficulty inhibiting responses despite the potential for punishment (Newman et al., 1987), they are overly sensitive to rewards (Gray, 1987), and they are likely to engage in sensation-seeking experiences (Zuckerman, 1991). Those high on impulsivity appear to use hasty and simple ways of coping with distress (Magid et al., 2007). The literature on IPV perpetration has indicated a robust association between impulsivity and various forms of aggressive behavior (Abbey et al., 2002).

Studies have revealed that men who report perpetrating IPV demonstrate higher levels of impulsivity in comparison to men who do not report IPV (Cohen et al., 2003). Beyond that, although various models of impulsivity have been presented, none have gained widespread acceptance (Leone et al., 2016). In 2001, Whiteside and Lynam identified four distinct facets of personality that reflect the different paths to impulsive behavior. The first, lack of premeditation, refers to an individual's tendency to reflect on outcomes of an action before participating in the act. Individuals high in lack of premeditation act without thinking about future consequences, whereas those low in this construct are considered thoughtful and deliberate. The second, negative urgency, refers to the individual's tendency to act rashly in response to negative affect. Those high in negative urgency act impulsively to relieve negative affect, despite the likelihood that their actions will result in negative consequences. The third facet, sensation seeking, refers to an inclination to pursue activities that are arousing and a willingness to try new, dangerous things. The fourth and last facet, lack of perseverance, refers to an individual's tendency to lose focus and lack persistence through a dull task. In 2003, Miller et al. applied this four-facet model of impulsivity to IPV, and the results of the study indicated that all four factors were related to self-reported IPV aggression measured by the Conflict Tactics Scale (Strauss & Gelles, 1996). However, when all four facets were accounted for simultaneously, negative urgency accounted for significant variance in aggression.

Bresin (2019) conducted a meta-analysis to investigate the association between various facets of impulsivity (i.e., negative urgency, positive urgency, lack of premeditation, lack of perseverance, and sensation seeking) and aggression. The results, based on data from 93 studies, indicated significant and small-to medium correlations between each facet of impulsivity and aggression across several different forms of aggression, with more impulsivity associated with more aggression. All facets of impulsivity were significantly positively correlated with general and physical aggression. Taken together, these findings generally support the notion that impulsivity, as a broader construct, represents another significant factor for IPV.

Given the reactive/proactive typology presented, the primary objective of the present study was to perform initial analyses aimed at categorizing a community sample of 60 predominantly Hispanic men, who were placed on probation for an IPV-related assault charge, into two distinct groups: those who exhibited reactive aggression and those who demonstrated proactive aggression. Additionally, the

study aimed to assess the characteristics associated with each group. Specifically, the present study had three aims: (1) to assess the frequency of IPV perpetrators that engage in reactive versus proactive violence; (2) to analyze group differences in terms of severity of violent acts (minor/moderate versus severe physical assault); and to (3) evaluate potential group differences in terms of emotion regulation, impulsivity, and anger. The hypotheses examined in the study were as follows:

Hypothesis 1. It was anticipated that there will be a higher number of men classified as engaging in reactive aggression than proactive aggression.

Hypothesis 2. Consistent with prior research, it was expected that men classified as displaying reactive aggression will have a higher likelihood of perpetrating severe violence. This can be attributed to their tendency to misinterpret threats within the context of heightened physiological arousal and limited emotion regulation (Chase et al., 2001; Holtzworth-Munroe & Stuart, 1994). In contrast, men employing proactive aggression are anticipated to exhibit a greater frequency of minor/moderate acts of violence, which reflect goal-oriented behavior.

Hypothesis 3. It was expected that men classified as reactive will score higher on the emotion regulation measure, indicating greater emotional volatility and impulsivity compared to those classified as proactive. Furthermore, men categorized as reactive are anticipated to have higher scores on a state anger measure in comparison to men categorized as proactive.

Hypothesis 4. The relationship between the severity of violence and perpetrators classified as either reactive or proactive will be moderated by emotion regulation. Specifically, for perpetrators utilizing reactive violence, the engagement in severe violence will be more likely if they struggle with emotion regulation. Similarly, for perpetrators employing proactive violence, the occurrence of severe violence will be more probable if they also experience challenges in regulating their emotions.

Hypothesis 5. The relationship between the severity of violence and perpetrators classified as reactive will be moderated by state anger, which refers to the intensity of anger experienced as a momentary emotional state. Specifically, perpetrators who employ reactive violence are anticipated to engage in severe violence when they experience higher levels of anger intensity in the moment.

Hypothesis 6. Impulsivity was expected to act as a mediating factor in the relationship between perpetrators classified as reactive and state anger.

Method

Participants

The study sample consisted primarily of 60 Hispanic men who were mandated to the Hidalgo County Probation Department in South Texas, which is situated along the border with Mexico. These individuals had been charged with assault against their intimate partner (e.g., girlfriend, wife), notwithstanding of any other charges. The study included participants who met the following inclusion criteria: (a) on probation for an assault charge against their intimate partner; (b) at least 18 years

of age; and (c) absence of a serious mental illness for which they are taking medication and/or would interfere with their participation (e.g., active psychosis).

Table 1
Demographic characteristics of the total sample (N= 60)

Variable	n (%)
Age	31.1 (8.9) ^a
18-25	16 (26.2)
26-33	27 (44.3)
34-41	10 (16.4)
42-49	4 (6.6)
50-57	2 (3.3)
58-65	1 (1.6)
Race/ethnicity	
Hispanic/Latino	56 (93.3)
African American	3 (5.0)
Native American	1 (1.7)
Highest level of education	12.0 (1.7) ^a
Less than 4th grade	6 (10)
High School Diploma	37 (61.7)
Associate degree	13 (21.7)
Bachelor's degree	3 (5.0)
Master's degree	1 (1.7)
Annual salary	20.98 (12.3) ^b
Less than \$10,000	21 (35.0)
\$11,000-\$20,000	11 (18.3)
\$21,000-\$30,000	8 (13.3)
\$31,000-\$45,000	10 (16.7)
\$45,000 or more	10 (16.7)

Note: ^aMean (SD) provided; ^bMean (SD), gross yearly family income in thousands of dollars.

Instruments

- a) *Sociodemographic Questionnaire*. Demographic characteristics were assessed using single items, and they included age, race/ethnicity, highest level of education, and annual salary. The highest level of education was assessed using five categories: (1) less than 4th grade; (2) high school diploma; (3) associate degree; (4) bachelor's degree; and (5) master's degree. Similarly, annual salary was assessed using five categories (1) less than \$10,000; (2) \$11,000-\$20,000; (3) \$21,000-\$30,000; (4) \$31,000-\$45,000; and (5) \$45,000 or more.
- b) *Revised Conflict Tactics Scale-2 (CTS-2)*; Straus et al., 1996). Given the impact of physical IPV on different strata of society and the previous relationships established between reactive/proactive aggression and physical perpetration (Chase et al., 2001; Lee et al., 2018; Ross & Babcock, 2009), the present study analyzed physical IPV perpetration using the physical assault subscale of the CTS-2. The CTS-2, a 39-item scale (78 questions), is used to assess instances of five types of abusive behavior within the last twelve months: Negotiation,

Psychological Aggression, Physical Assault, Sexual Coercion, and Injury. Items are rated on a seven-point Likert scale system with the following distinctions: 1= Once in the past year, 2= Twice in the past year, 3= 3-5 times in the past year, 4= 6-10 times in the past year, 5= 11-20 times in the past year, 6= More than 20 times in the past year, 7= Not in the past year, but it did happen before, 0= This has never happened. This scale demonstrates sound psychometric properties, with mean internal consistency of the CTS-2 estimated at .77 (Straus, 1996). Lower values have been generally attributed to the low frequency of some of the behaviors listed in the measure. To analyze physical assault in the present study, the 12 items that constitute the physical assault scale were analyzed as outlined by Straus et al., 1996. Three variables were created: (1) the sum of all 12 items loading into the physical assault scale with higher scores indicating a higher frequency of physical IPV; (2) the sum of the 5 items that represent minor/moderate physical assault with higher scores indicating a higher frequency of minor/moderate violence; and (3) the sum of the 7 items that represent severe physical assault with higher scores indicating a higher frequency of severe violence. Internal consistency (Cronbach's alpha) for the present study was .76 for the physical assault scale, .50 for the items representing minor/moderate violence, and .76 for the items representing severe violence.

- c) *Difficulties in Emotion Regulation Scale* (DERS; Medrano & Trógolo, 2016). This 36-item self-report measure examines the six different aspects of emotion regulation: nonacceptance, goals, impulse, awareness, strategies, and clarity. All DERS subscales are moderately to strongly correlated, show good internal consistency (Cronbach's α ranging from 0.80 to 0.89) as well as the total scale ($\alpha = 0.93$) and adequate test-retest reliability for a period of 4-8 weeks. The present study used two scores: (1) the sum score of all DERS items; and (2) the sum score of the impulse subscale. A higher score suggests greater problems with emotion regulation. The present study's internal consistencies (Cronbach's alpha) for the total DERS and impulse subscale scores were .91 and .82, respectively.
- d) *State-Trait Anger Expression Inventory 2* (STAXI-2; Spielberger, 1999). It measures the intensity of anger as an emotional state (State Anger) and the disposition to experience angry feelings as a personality trait (Trait Anger). It consists of 57 items that load into 6 scales and an Anger Expression Index (total anger expression score). This scale is rated on a 4-point Likert scale system that assesses intensity of anger at a particular moment and the frequency of anger experience, expression, and control. A higher score was indicative of higher anger intensity as an emotional state. Alpha coefficients for the normative data, including both the general and psychiatric population, were above .84 for all scales and subscales, except for Trait Anger/Angry Reaction (assesses the respondent's angry reaction to negative situations) which had an alpha coefficient of .76 and .73 for women and men, respectively. The present study used the sum score of the 15 items that load into the state anger subscale ($\alpha = .81$).

- e) *Reactive-Proactive typology.* Police reports for the IPV-related offense were used to determine aggression typology at the time of the arrest. The victim statements within the police report were coded for proactive or reactive aggression (see Appendix for specific categorization system). Official records of participants were obtained from the Hidalgo County Probation Department. To establish interrater reliability of the proactive/reactive criteria, two research assistants were trained on the criteria and coded a series of pilot reports until acceptable levels of interrater reliability were obtained (i.e., $\kappa > .80$). Once acceptable interrater reliability was obtained using pilot reports, research assistants proceeded to rate the police reports of the participants. To maintain interrater reliability, after 30 participant reports the raters coded 10 novel pilot reports. Cohens kappa was used to measure overall level of agreement observed in the report cases and a kappa of .61 to .80 resulted in substantial agreement and anything greater than 0.81 was interpreted as almost perfect agreement (Landis & Koch, 1977). In the present study $\kappa = .82$ ($p < .001$).

Procedure

All procedures for the present study were reviewed and approved by the Institutional Review Board of the University of Texas Rio Grande Valley. Consent forms were available in both English and Spanish and the delivery of information was provided in the participant's preferred language. Participants were seen on two occasions in an office at the Hidalgo County Probation Department specifically used for the research study. On both Session 1 and 2 of data collection, participants engaged in a semi-structured interview format and provided responses to questionnaires.

Session 1. The participant was engaged in a semi-structured interview and completed various questionnaires as part of a larger research study analyzing other variables related to IPV. On this day, the participant was asked sociodemographic questions and the CTS-2 (Straus et al., 1996) and DERS (Medrano & Trógolo, 2016) was administered. Upon completion, the participant signed a form acknowledging the receipt of a \$24.00 gift card incentive.

Session 2. The participant engaged in a semi-structured interview and completed the STAXI-2 (Spielberger, 1999). Upon completion, the participant signed a form acknowledging the receipt of a \$25.00 gift card incentive.

Data analysis

The proposed analytic strategy is described in terms of hypotheses tested. All data analyses were performed using SPSS v. 27 software. First, descriptive statistics were calculated to examine the sociodemographic characteristics of the participants.

Hypothesis 1. To categorize men as either reactive (1) or proactive (0), victim statements from official police reports were reviewed and coded by research assistants for proactive or reactive aggression. Level of agreement between the research assistants was analyzed using Cohen's kappa and acceptable interrater

reliability was to be established when $\kappa > .80$. Data was summarized using frequencies and percentages for each category.

Hypothesis 2. To analyze severity of violence used by men categorized as reactive (1) or proactive (0), severity level was first obtained. As outlined by Straus et al. (1996), the best way to take severity into account using the CTS-2 is to create subscales for minor/moderate and severe physical assault. Chi-Square statistics were then calculated to assess for statistically significant differences in frequency of overall physical assault, minor/moderate physical assault, and severe physical assault categorically within each group (i.e., reactive/proactive). In addition, independent samples t-tests were conducted to analyze physical assault, minor/moderate physical assault, and severe physical assault continuously.

Hypothesis 3. To analyze emotion regulation, impulsivity, and anger in each category, mean comparison statistics were calculated. A single score was used for the dependent variables of emotion regulation (i.e., sum score of DERS), impulsivity (i.e., sum score of impulsivity subscale of the DERS), and state anger expression (i.e., sum score of state anger subscale of the STAXI-2 questionnaire). The independent variable was the dichotomous variable of men categorized as reactive (1) or proactive (0). Multivariate analysis of variance (MANOVA) was used to assess differences between reactive and proactive perpetrators.

Hypothesis 4, 5, and 6. Bivariate correlation analyses were used to evaluate the association between study variables and severity of physical violence perpetration for each category. There were no demographic variables that were significant (i.e., $p < .05$) and thus no covariates were included in the logistic regression analyses. A dichotomous variable for severity was created to be used as the dependent variable where minor/moderate violence was 0 and severe was 1.

To test if emotion regulation moderated the relationship between severity of violence and perpetrators classified as reactive or proactive, emotion regulation (i.e., DERS sum score) was entered into the regression as an interaction. Second, to test if state anger moderated the relationship between severity of violence and perpetrators classified as reactive or proactive, the sum score of the state anger measure (i.e., STAXI) was entered into a regression as an interaction. Third, to analyze if impulsivity mediated the relationship between state anger and perpetrators classified as reactive, Haye's Macro PROCESS v3.5 SPSS extension was used (Hayes, 2022) A series of regression models will be fitted, first predicting the mediator variable using the independent variable, then the dependent variable using both the independent variable and the mediator, and then the dependent variable using the independent variable.

Results

Occurrence of reactive/proactive aggression

Among the participants, 78.8% ($n = 47$) were classified as exhibiting reactive aggression, while 21.2% ($n = 13$) were classified as demonstrating proactive aggression. Table 2 provides group means, standard deviations, percentages, and

comparisons between reactively and proactively categorized men on background variables. All comparisons resulted in nonsignificant differences.

Table 2

Reactively and proactively categorized participant differences on demographic variables ($N=60$)

Variable	Reactive ($n= 47$)			Proactive ($n= 13$)		
	<i>M</i>	<i>n</i>	<i>SD</i>	<i>M</i>	<i>n</i>	<i>SD</i>
Age (years)	31.30	--	8.99	30.23	--	8.73
Education (years)	12.00	--	3.12	11.69	--	2.43
Income ^a	20.81	--	12.25	23.23	--	16.77
Race/Ethnicity						
Hispanic/Latino	--	44	--	--	12	--
African American	--	3	--	--	0	--
Native American	--	0	--	--	1	--

Notes: All comparisons resulted in nonsignificant differences. ^aGross yearly family income in thousands of dollars.

Frequency and severity of physical violence

Table 3 provides the frequency of physical violence endorsed by item of the CTS-2 physical assault subscale and the two categories of severity (minor/moderate and severe) in men categorized as reactive and proactive. Among the 60 partner violent men, 51 reported perpetration of minor/moderate physical assault (85.0%) and 22 reported perpetration of severe physical assault (36.7%). When two mutually exclusive categories were created (minor/moderate versus severe), 63.3% of the total sample reported perpetrating minor/moderate physical assault only and 36.7% reported severe physical assault only.

Of those categorized as reactive ($n= 47$), 80.9% reported perpetration of minor/moderate acts of violence and 40.4% reported perpetration of severe acts of violence. Again, when mutually exclusive categories were created to analyze minor/moderate and severe physical assault, 59.6% of those categorized as reactive endorsed minor/moderate physical assault, while 40.4% endorsed perpetrating severe physical assault.

Of partner-violent men categorized as proactive ($n= 13$), 100% reported perpetration of minor/moderate acts of violence and 23.1% reported perpetration of severe violence. When mutually exclusive categories were created to analyze minor/moderate and severe physical assault, 76.9% of partner-violent men categorized as proactive endorsed minor/moderate physical assault, while 23.1% endorsed severe physical assault perpetration.

When analyzing differences in perpetration of minor/moderate and severe physical assault for each category, there was only a statistically significant difference in severe physical assault (when analyzed continuously) in perpetrators categorized as reactive ($M= 3.51$, $SD= 7.53$) versus perpetrators categorized as proactive ($M= 0.38$, $SD= 0.87$; $t(58)= 1.49$, $p < .01$).

Further, upon analyzing each physical assault item, men categorized as proactive. were positively associated with twisting their partner's arm, $\chi^2(1)= 7.37$, $p < .01$, and grabbing their partner, $\chi^2(1)= 9.33$, $p < .01$, when compared to men categorized as reactive.

Table 3
Frequency of physical violence of each category by severity and item ($N= 60$)

CTS2 Physical Assault Scale items	Type of violence used	
	Reactive ($n= 47$)	Proactive ($n= 13$)
	n (%) ^a	n (%) ^a
Minor/moderate	28 (59.6%)	10 (76.9%)
Threw something at partner that could hurt	14 (29.8)	6 (46.2)
Twisted partner's arm or hair	8 (17.0)	7 (53.8)**
Pushed or shoved partner	29 (61.7)	9 (69.2)
Grabbed partner	21 (44.7)	12 (92.3)**
Slapped partner	10 (21.3)	6 (46.2)
Severe	19 (40.4%)	3 (23.1%)
Used gun or knife on partner	0 (0.0)	0 (0.0)
Punched or hit partner with something that could hurt	6 (12.8)	0 (0.0)
Choked partner	9 (19.1)	2 (15.4)
Slammed partner against the wall	8 (17.0)	0 (0.0)
Beat up partner	5 (10.6)	1 (7.7)
Burned or scalded partner on purpose	0 (0.0)	0 (0.0)
Kicked partner	7 (14.9)	0 (0.0)

Notes: ^aPercentage of sample in each category. * $p < .01$; ** $p < .05$.

Impulsivity, state anger, and emotion regulation difficulties

To examine the impact of impulsivity, state anger, and emotion regulation difficulties on physical assault perpetration within each category, two separate multivariate analyses of variance (MANOVA) were conducted, considering that impulsivity is a subscale derived from the DERS. Results of evaluation assumptions of normality, homogeneity of variance-covariance matrices, linearity, and multicollinearity were satisfactory.

In the first MANOVA, a statistically significant difference was observed between reactive and proactive men in terms of impulsivity and state anger, $F(1,58)= 13.99$, $p < .01$; Wilk's $\Lambda = .67$, $\eta^2_p = .33$. Impulsivity (as measured by the impulsivity DERS subscale) also differed significantly across the two categories, $F(1, 58)= 16.49$, $p < .01$, $\eta^2_p = .22$. Men that were categorized as reactive ($M= 13.55$, $SD= 5.09$) reported impulse difficulties when compared to men categorized as proactive ($M= 7.69$, $SD= 1.84$). State anger (as reported by the STAXI trait anger subscale) also differed significantly across the two groups, $F(1, 58)= 11.26$, $p = .001$, $\eta^2_p = .16$. Men that were categorized as reactive ($M= 27.82$, $SD= 7.87$) reported experiencing more anger intensity as a momentary emotional state when compared to men categorized as proactive ($M= 19.95$, $SD= 6.43$).

In the second MANOVA, a statistically significant difference was found between reactive and proactive men in terms of overall emotion regulation (i.e., total DERS score) and state anger, $F(1,58)= 19.48, p < .01$; Wilk's $\Lambda = .59, \eta^2_p = .41$. Emotion regulation difficulties (as reported by the total DERS score) differed significantly across the two groups, $F(1, 58)= 24.24, p < .01, \eta^2_p = .30$. Men that were categorized as reactive ($M= 87.83, SD= 19.88$) reported experiencing more difficulties regulating their emotions when compared to men categorized as proactive ($M= 59.31, SD= 11.66$).

Table 4

Mean (SD) and statistical comparisons for the reactively and proactively categorized participant groupings on study variables ($N= 60$)

Variables	Reactive	Proactive	<i>F</i>	<i>p</i>
Emotion regulation	87.83 (19.88)	59.31 (11.66)	24.24*	< .001
Impulsivity	13.55 (5.01)	7.69 (1.84)	16.49*	< .001
State anger	27.83 (7.87)	19.85 (6.43)	11.26**	.001

Moderation of emotion regulation on severity of violence and aggression

Tables 5 and 6 display the correlations among study variables and total, minor/moderate, and severe physical assault perpetration in men categorized as reactive or proactive. Because severity of violence was to be analyzed as presence or absence of minor/moderate or severe violence, a dichotomous variable was created to be used as the dependent variable where minor/moderate violence was 0 and severe was 1. An inspection of standardized residual values revealed that there were no outliers. The Hosmer and Lemeshow test was $p = .50 (p > .05)$. The overall binary logistic regression model did not yield statistically significant results ($\chi^2 = 3.55, p = .315 > .05$).

Moderation of state anger on severity of violence and reactive aggression

The independent variable used was the reactive/proactive dichotomy. An inspection of standardized residual values revealed that there were no outliers. Results of the Hosmer and Lemeshow test was not significant, $p = .71 (p > 0.05)$. The binary logistic regression did not yield statistically significant results ($\chi^2 = 1.77, p = .62 > 0.05$).

Mediation of impulsivity on state anger and aggression

The independent variable used was the reactive/proactive dichotomy. Mediation was tested in 4 steps. In step 1 of the mediation model, the regression of state anger on reactive/proactive group membership was significant ($B = -.19, p = .005$). Step 2 showed that the regression of state anger on the mediator, impulsivity, was also significant ($B = -.91, p = .005$). Step 3 of the mediation process indicated that impulsivity, controlling for state anger, was significant ($B = -2.18, p = .04$). Step

Table 5
Bivariate correlations among physical assault perpetration and study variables in men categorized as reactive

Variables	1	2	3	4	5	6	7	8	9	10
1. Physical assault perpetration continuous	--	.22	.44**	-.07	-.29*	-.27	.17	.39**	.16	-.08
2. Minor/moderate physical perpetration dichotomous		--	-.59**	.15	.06	.01	.15	.23	.12	.03
3. Severe physical perpetration dichotomous			--	-.18	-.27	-.13	-.04	-.04	-.18	-.18
4. Age				--	.15	.14	.15	.17	.13	.33
5. Highest level of education					--	.22	-.19	-.18	-.07	-.07
6. Income						--	-.04	-.01	.15	-.02
7. DERS							--	.76**	-.16	.38**
8. DERS Impulse								--	-.07	.34*
9. STAXI State Anger									--	.37*
10. STAXI Trait Anger										--

Notes: DERS= Difficulties in Emotion Regulation Scale; STAXI= State-Trait Anger Expression Inventory. * $p < .05$; ** $p < .01$.

Table 6
Bivariate correlations among physical assault perpetration and study variables in men categorized as proactive

Variables	1	2	3	4	5	6	7	8	9	10
1. Physical assault perpetration continuous	--	^a .22	^a -.32	^a .47	^a .19	^a -.38	^a -.47	^a -.24	^a -.29	^a .07
2. Minor/moderate physical perpetration dichotomous										
3. Severe physical perpetration dichotomous				.12	.30	-.47	.38	.40	.16	.05
4. Age				--	-.01	-.17	-.04	-.26	-.27	.25
5. Highest level of education					--	-.50	.03	.03	.01	-.07
6. Income						--	-.24	-.34	.094	-.17
7. DERS							--	.78**	.29	.20
8. DERS Impulse								--	.47	.06
9. STAXI State Anger									--	-.28
10. STAXI Trait Anger										--

Notes: DERS= Difficulties in Emotion Regulation Scale; STAXI= State-Trait Anger Expression Inventory. * $p < .05$; ** $p < .01$. ^aall perpetrators endorsed minor/moderate perpetration.

4 of the analyses revealed that controlling for impulsivity and state anger was not a significant predictor of reactive/proactive group membership ($B = -.54$, $p = .09$). A Sobel test was conducted and found full mediation in the model ($z = 3.1$, $p < .01$). Thus, it was found that impulsivity fully mediated the relationship between state anger and reactive/proactive categorization.

Discussion

After presenting the results, the author is in a position to evaluate and interpret their implications, especially with respect to the original hypothesis. The author is free to analyze, interpret and qualify the results, as well as to draw inferences from them. The theoretical implications of the results and the validity of the conclusions can be emphasized.

The purpose of the present study was twofold: to conduct a preliminary analysis on the frequency of reactive and proactive aggression among IPV perpetrators, and to examine differences between these categories among a predominantly Hispanic (94%) sample of men placed on probation in the Rio Grande Valley, Texas. Consistent with findings from previous studies, it was hypothesized that a larger proportion of partner-violent men would fall into the category of utilizing reactive aggression rather than proactive aggression. Coding of the cases yielded strong interrater reliability, supporting the reliability of the coding criteria. Findings from the present study revealed that 78.8% of men in the sample placed on probation for intimate partner violence utilized reactive aggression and 21.2% utilized proactive aggression, outcomes that approximated that of the previous literature (Babcock et al., 2023; Chase et al., 2001; Kini, 2015; Lee et al., 2018; Ross & Babcock, 2009). Reactive perpetrators did not differ from proactive perpetrators on demographic variables, such as age, education, or income.

Consistent with research on community-based samples by Holtzworth-Munroe and Stuart (1994) and Chase et al. (2001), a higher percentage of men categorized as aggressing reactively were more likely to perpetrate severe violence when compared to men aggressing proactively (40.4% versus 23.1%, respectively). Further, acting on an impetuous and uncontrolled response style, men categorized as reactive were significantly more likely to grab their partner and slap their partner than those categorized as proactive. Reactive violence is thought to typically occur in the presence of heightened negative affect, whereas proactive violence has been conceptualized as a way to control one's partner (Holtzworth-Munroe & Stuart, 1994). Thus, the findings of the present study suggest that men who aggressed proactively were less likely to perpetrate severe physical assault because the violence was perpetrated in the absence of negative affect and was likely used to ultimately obtain a goal other than harming their partner (Babcock et al., 2000). On the other hand, reactive aggressors were likely to engage in severe violence that was elicited in response to a perceived threat and acted upon impulsivity (Chase et al., 2001).

With regard to differences based on documented factors associated with IPV perpetration including impulsivity, emotion regulation difficulties, and generalized anger problems (Abbey et al., 2002; Chase et al., 2001; Murphy et al., 2007; Schafer et al., 2004; Stith et al., 2004; Waltz et al., 2000), findings from the present study

revealed that men categorized as reactive were significantly more likely to have difficulty remaining in control of their behavior when experiencing negative emotion, they were significantly more likely to experience overall emotion regulation difficulties, and they were significantly more likely to experience higher state anger. In addition, impulsivity was significantly correlated with total physical aggression on the CTS-2 for the reactive perpetrators but not the proactive group. Again, these findings are in line with existing literature that suggests emotionality is a key and important aspect of IPV (Dutton & Corvo, 2006). Rather than suggesting a new typology based on impulsivity, emotion regulation difficulties, and generalized anger problems, however, the present data indicate that IPV programs should consider that a large percentage of clients report significant levels of dysfunctional strategies for expressing emotions. Reactive partner-violent men experience anger more intensely and with greater frequency coupled with weaker self-control skills and on the other hand, proactive partner-violent men are likely calculating with clear goals in mind, particularly those of controlling and terrorizing their intimate partners (Redondo et al., 2019).

Finkel et al. (2009) highlights lapses in self-controlled resolution strategies during conflict as self-regulatory failures, which essentially refer to the tendencies of the individual to act on their impulses rather than preferences more aligned with their long-term goals. Given that perpetrators that utilize reactive aggression are characterized by their perceived threats or frustrations in the context of high affective physiological arousal and minimal cognitive processing and perpetrators that utilize proactive aggression are methodical and goal-oriented, it might be expected that reactive aggressors are more likely to experience self-regulatory failures. It might further be expected that perpetrators with low self-regulation of negative emotions are highly preoccupied with their current emotions and have difficulties with disengagement from this current emotional state (Luszczynska, 2004). Thus, when exposed to negative events (e.g., conflict), they are oriented towards acting out on their current emotional state and not their long-term goal (Luszczynska, 2004). For example, in the context of a contentious interaction between intimate partners, a perpetrator of reactive aggression that feels provoked and becomes angry is more likely to become violent, whereas a proactive aggressor may be more likely to override the violent impulse via self-regulatory processes. Although the proactive aggressor may go on to plan perpetration of physical violence to achieve a goal in the future, they are less likely to succumb to their current emotional state.

For decades, researchers in the field have assumed that the natural impulse of people is to be selfish and that it requires self-control to overcome this natural tendency (Baumeister et al., 1994; Baumeister et al., 2007). For example, interdependence theory suggests that people depart from self-interest only if there has been effort and the process has been deliberate (Baumeister et al., 1994; Baumeister et al., 2007). This transformation of motivation allows individuals to forgo their immediate impulses and instead adopt prosocial responses based on values and consideration for their relationships (Dehue et al., 1993; Kelley & Thibaut, 1978). Given this theory, reactive aggressors may have difficulty exercising self-control and instead rely on the impulsive system. Conversely, proactive aggressors

may have a greater ability to rely on the reflective system, which is responsible for mental operations that are higher-order and provide control over the impulsive system (Hofmann et al., 2009; Strack & Deutsch, 2004).

One possible explanation for the lack of moderation of emotion regulation difficulties and state anger on the relationship between severity of violence and perpetrators classified as proactive versus reactive could be the small sample sizes of men categorized as reactive and proactive. However, through analysis of mediation, the present study found that men high on state anger would be more likely to perpetrate reactive violence only if they were also high on impulsivity. Both affect and impulsivity are important determinants of action, in general, as they are related to the tendency to act (Buchanan et al., 1993). Bleuler (1924) emphasized "affectivity" and posited that affectivity determines our actions. Thus, men vulnerable to impulsive tendencies are at a risk for reactive violence, which is characterized by an impulsive response associated with high emotional arousal (Raine et al., 2006).

The last 40 years of batterer intervention programs and research in the United States has established bases for intervention. The findings of the present study further suggest that this dichotomous typology can be used reliably to distinguish perpetrators classified as reactive and those classified as proactive, as evidenced through different correlates. Thus, assumptions of gendered theories, like the Duluth model, that suggest that IPV offenders are largely proactive in nature are not supported by this study and those that have preceded it (Chase et al., 2001; Kini, 2015; Lee et al., 2018; Ross & Babcock, 2009). Further, the present study has highlighted the role of emotionality (i.e., emotion regulation, impulsivity, anger) on IPV related offenses and the heterogeneity of IPV offenders thus providing even more evidence against the assumption that IPV is a straightforward problem with a straightforward solution (Cantos & O'Leary, 2014).

It is important to note that this sample was primarily composed of Hispanic (94%) male perpetrators on probation in a South Texas border county, which suggests that differences found in other parts of the country (Illinois and New York) with different ethnic representation have been replicated. In all three samples there was a greater frequency of reactive versus proactive perpetrators. Of particular importance is that in comparison with the Illinois sample, preliminary data analysis of this sample of Hispanic men suggests that there is a higher frequency of generally violent versus family only violent perpetrators in the sample herein (68.3 % Generally Violent in Texas and 41 % Generally Violent in Illinois, both samples of men mandated to BIP) which could be due to its border location as well as a greater presence of socioeconomic disparities. These socioeconomic disparities would need to be taken into consideration with respect to interventions targeting differences between reactive and proactive perpetrators.

Based on the findings of this study and those conducted by Chase et al. (2001), Lee et al. (2018), Babcock et al. (2004), and Babcock et al. (2023), categorizing partner-violent perpetrators on the basis of reactive and proactive aggression styles may be an important approach to tailor the intervention and treatment variables that are effective. While this study contributes to a relatively young body of literature, both its results and those of preceding studies strongly advocate for the

tailored treatment of men engaging in partner violence. The robustness of the present study's findings is notable, as they have been replicated by four different investigators across diverse settings, populations, and methodologies, enhancing the overall validity of the results. This suggests that partner-violent men that use reactive aggression may respond best to treatment with an anger management component and interventions targeting social skills deficits (Ross & Babcock, 2009). Such components of treatment could focus on executive cognitive functioning to decrease impulsivity and increase reasoning, problem-solving, planning and self-regulation. They also would presumably profit from intervention programs like Acceptance and Commitment Therapy which has a strong focus on changing one's behavior to meet long term goals. Conversely, men who use proactive aggression may respond best to Duluth type programs that address the use of power and control strategies and contingency planning via a cognitive behavioral approach that teaches skills that include effective responses to learned behavior and understanding belief systems and actions to disrupt the chain of events that lead to physical assault perpetration. Furthermore, as reactive aggression has been found to be more pervasive, it may be important to provide treatment interventions suitable to address this type of partner-violent perpetrator, adding interventions aimed at proactive aggressors as needed.

Further, results from meta-analyses suggest that there is a significant relationship between anger and IPV and this relationship is stronger in those cases involving more severe IPV (Birkley & Eckhardt, 2015; Norlander & Eckhardt, 2005). This suggests a possible linear relationship between anger and the severity of violence perpetrated, with higher levels of anger associated with higher levels of IPV. In the 2019 study by Redondo et al., the authors identify two subtypes of partner-violent men based on differences in anger profiles and describe them as Under controlled and Overcontrolled. The Under controlled subtype perpetrators present like the reactive perpetrators in this study, experiencing anger more frequently and intensely and having weaker self-control skills (Hershorn and Rosenbaum, 1991). Meanwhile, the Overcontrolled men present like the proactive perpetrators, bottling up their feelings and finding the expression of anger intolerable (Hershorn and Rosenbaum, 1991). Redondo et al. (2019) further found a differential effect of intervention on these subtypes with development in the perpetrator's anger control appearing to be the mechanism of change. Perpetrators identified as the Under controlled anger subtype who increased their use of positive anger control strategies and Overcontrolled perpetrators who learned to hold their anger less, showed a reduction in levels of recidivism measured 1, 3 and 5 years after treatment. These results, coupled with the results of the present study that find that reactive perpetrators who are significantly higher in state anger, impulsivity, are more likely to perpetrate severe violence have an important clinical implication. That is, sessions embedded in intervention programs particularly aimed at developing skills to control anger and utilize positive control strategies can have a greater impact on perpetrator recidivism. This recommendation is also consistent with Gondolf's (2000) finding that in the major multi-site study when the perpetrators were asked what helped them desist from further violence perpetration, more than half of the men (53%) reported relying on interruption methods.

The findings of this study should be interpreted in light of several limitations. First, utilizing only the self-reports of one partner as a representation of what is occurring in the relationship can lead to inaccurate results. Thus, only using the self-reports of one partner in the CTS-2 can present methodological issues in which the researcher's understanding of violence perpetration in intimate relationships can become skewed. Second, this study assumes that the contextual variables analyzed here precede the perpetration of partner violence. Given that all the data was collected at the same time, it is important to be cautious about inferring causality. Third, this study only analyzes the victim statement of a single offense from each participant. Analyzing multiple offenses for each participant would more accurately help categorize the type of aggression used. Fourth, the sampling procedure of this study followed non-probability sampling techniques. Specifically, the sample utilized convenience sampling useful for this preliminary analysis study. However, it is important to note the high risk of selection bias and the inherent bias meaning that the sample is unlikely to be representative of the population being studied. Further, although it is common practice in the study of IPV to only include men, results may differ for female IPV perpetrators. The scope of this paper does not address female perpetrators' characteristics, nor can the results be generalized to this population. Fifth, given the difficulty of collecting a community-based sample of men placed on probation for intimate partner violence, the small sample size offers only a glimpse of the underlying variables that suggest group membership utilizing a reactive-proactive typology. However, the sample represents a clinical sample where significant violence has been perpetrated and documented, rather than a sample based on self-reports on the CTS. Our inability to detect group differences between minor/moderate physical assault and moderation of study variables on group membership may reflect a genuine absence of differences between the two types of offenders. However, it is likely that this is attributable to limitations in the low frequency of men categorized as proactive compared to reactive. A larger sample size would provide more statistical power to sufficiently discriminate between the two types of offenders and reduce risk of Type II error. Sixth, the sample's predominantly Hispanic male composition (93.3%) is a strength in that it allows us to understand the characteristics of perpetration in Hispanic men in Hidalgo County, Texas - an area overlooked in previous studies on reactive and proactive intimate partner violence perpetration. However, it is also a limitation in that the results of this study cannot be generalized to non-Hispanic perpetrator samples.

References

- Abbey, A., Clinton, A. M., McAuslan, P., Zawacki, T., & Buck, P. O. (2002). Alcohol-involved rapes: Are they more violent? *Psychology of Women Quarterly, 26*(2), 99-109. doi: 10.1111/1471-6402.00048
- Arias, E., Arce, R., & Vilariño, M. (2013). Batterer intervention programmes: A meta-analytic review of effectiveness. *Psychosocial Intervention, 22*(2), 153-160. doi: 10.5093/in2013a18
- 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*(8), 1023-1053. doi: 10.1016/j.cpr.2002.07.001

- Babcock, J. C., Kini, S., & Pathak, N. (2023). The proactive-reactive classification of intimate partner violence offenders: A multi-method approach to classification. *Criminal Behaviour and Mental Health, 33*(4), 278-288. doi: 10.1002/cbm.2299
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science, 16*, 351-355. doi: 10.1111/j.1467-8721.2007.00534
- Birkley, E. L., & Eckhardt, C. I. (2015). Anger, hostility, internalizing negative emotions, and intimate partner violence perpetration: A meta-analytic review. *Clinical Psychology Review, 37*, 40-56. doi: 10.1016/j.cpr.2015.01.002
- Bleuler, E. (1924). *Textbook of psychiatry*. The Macmillan Company.
- Bresin, K. (2019). Impulsivity and aggression: A meta-analysis using the UPPS model of impulsivity. *Aggression and Violent Behavior, 48*, 124-140. doi: 10.1016/j.avb.2019.08.003
- Buchanan, A., Reed, A., Wessely, S., Garety, P., Taylor, P., Grubin, D., & Dunn, G. (1993). Acting on delusions. II: The phenomenological correlates of acting on delusions. *The British Journal of Psychiatry: The Journal of Mental Science, 163*, 77-81. doi: 10.1192/bjp.163.1.77
- Cantos, A. L., & O'Leary, K. D. (2014). One size does not fit all in treatment of intimate partner violence. *Partner Abuse, 5*(2), 204-236. doi: 10.1891/1946-6560.5.2.204
- Chase, K. A., O'Leary, K. D., & Heyman, R. E. (2001). Categorizing partner-violent men within the reactive-proactive typology model. *Journal of Consulting and Clinical Psychology, 69*(3), 567-572. doi: 10.1037//0022-006x.69.3.567
- Cohen, R., Brumm, V., Zawacki, T., Paul, R., Sweet, L., & Rosenbaum, A. (2003). Impulsivity and verbal deficits associated with domestic violence. *Journal of the International Neuropsychological Society, 9*(5), 760-770. doi: 10.1017/S1355617703950090
- Derefinko, K., DeWall, C. N., Metzke, A. V., Walsh, E. C., & Lyman, D. R. (2011). Do different facets of impulsivity predict different types of aggression? *Aggressive Behavior, 37*, 223-233. doi: 10.1002/ab.20387
- Dehue, F.M.J., McClintock, C. G., & Liebrand, W. B. G. (1993). Social value related response latencies: Unobtrusive evidence for individual differences in information processes. *European Journal of Social Psychology, 23*, 273-294. doi: 10.1002/ejsp.242023030
- 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. doi: 10.1016/j.avb.2006.01.007
- Eckhardt, C. I., Murphy, C. M., Whitaker, D. J., Sprunger, J., Dykstra, R., & Woodard, K. (2013). The effectiveness of intervention programs for perpetrators and victims of intimate partner violence. *Partner Abuse, 4*(2), 196-231. doi: 10.1891/1946-6560.4.2.196
- Finkel, E. J., DeWall, C. N., Slotter, E. B., Oaten, M., & Foshee, V. A. (2009). Self-regulatory failure and intimate partner violence perpetration. *Journal of Personality and Social Psychology, 97*(3), 483-499. doi: 10.1037/a0015433
- Gray, J.A. (1987). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality, 21*, 493-509. doi: 10.1016/0092-6566(87)90036-5
- Gondolf, E. W. (2000). How batterer program participants avoid reassault. *Violence Against Women, 6*(11), 1204-1222. doi: 10.1177/10778010022183604
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd Ed.). Guilford.

- Hershorn, M., & Rosenbaum, A. (1991). Over- vs. undercontrolled hostility: Application of the construct to the classification of maritally violent men. *Violence and Victims, 6*(2), 151-158. doi: 10.1891/0886-6708.6.2.151
- Hofmann, W., Friese, M., & Strack, F. (2009). Impulse and self-control from a dual-systems perspective. *Perspectives on Psychological Science, 4*(2), 162-176. doi: 10.1111/j.1745-6924.2009.01116.x
- 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*(6), 1000-1019. doi: 10.1037/0022006X.68.6.1000
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin, 116*(3), 476-497. doi: 10.1037/0033-2909.116.3.476
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York, NY: Wiley.
- Kini, S. (2015). *Differential utility of skills-based interventions for proactive and reactive batterers*. [Doctoral dissertation, University of Houston]. ProQuest Dissertations and Theses Global.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159-174. doi: 10.2307/2529310
- Lee, H. S., Cantos, A., Mach, J., & Wolff, J. (2018). Proactive versus reactive perpetrators: Aggression and intimate partner violence. *Partner Abuse, 9*(2), 103-117. doi: 10.1891/1946-6560.9.2.103
- Leone, R. M., Crane, C. A., Parrott, D. J., & Eckhardt, C. I. (2016). Problematic drinking, impulsivity, and physical IPV perpetration: A dyadic analysis. *Psychology of Addictive Behaviors, 30*(3), 356-366. doi: 10.1037/adb0000159
- Luszczynska, A., Diehl, M., Gutiérrez-Doña, B., Kuusinen, P., & Schwarzer, R. (2004). Measuring one component of dispositional self-regulation: Attention control in goal pursuit. *Personality and Individual Differences, 37*(3), 555-566. doi: 10.1016/j.paid.2003.09.026
- Magid, V., Maclean, M. G., & Colder, C. R. (2007). Differentiating between sensation seeking and impulsivity through their mediated relations with alcohol use and problems. *Addictive Behaviors, 32*(10), 2046-2061. doi: 10.1016/j.addbeh.2007.01.015
- Martinez, M., & Blasco-Ros, C. (2005). Typology of human aggression and its biological control. *Novartis Foundation Symposium, 268*, 201-253. doi: 10.1002/0470010703.ch14
- Medrano, L. A., & Trógolo M. (2016). Construct validity of the Difficulties in Emotion Regulation Scale: Further evidence using confirmatory factor analytic approach. *Abnormal Behavioral Psychology, 2*, 117. doi: 10.4172/2472-0496.1000117
- Miller, J., Flory, K., Lynam, D., & Leukefeld, C. (2003). A test of the four-factor model of impulsivity-related traits. *Personality and Individual Differences, 34*, 1403-1418. doi: 10.1016/S0191-8869(02)00122-8
- Murphy, C. M., Taft, C. T., & Eckhardt, C. I. (2007). Anger problem profiles among partner violent men: differences in clinical presentation and treatment outcome. *Journal of Counseling Psychology, 54*(2), 189-200. doi: 10.1037/0022-0167.54.2.189
- Newman, J. P., Patterson, C. M., & Kosson, D. S. (1987). Response perseveration in psychopaths. *Journal of Abnormal Psychology, 96*(2), 145-148. doi: 10.1037/0021-843X.96.2.145
- Norlander, B., & Eckhardt, C. (2005). Anger, hostility, and male perpetrators of intimate partner violence: A meta-analytic review. *Clinical Psychology Review, 25*, 119 -152. doi: 10.1016/j.cpr.2004.10.001

- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., Stouthamer-Loeber, M., & Liu, J. (2006). The Reactive-Proactive Aggression Questionnaire: Differential correlates of reactive and proactive aggression in adolescent boys. *Aggressive Behavior, 32*(2), 159-171. doi: 10.1002/ab.20115
- Redondo, N., Cantos, A. L., Graña, J. L., Muñoz-Rivas, M. J., & O'Leary, K. D. (2019). Treatment-induced changes in undercontrolled and overcontrolled anger subtypes of perpetrators of intimate partner violence and 5-year recidivism. *Criminal Justice and Behavior, 46*(12), 1700-1718. doi: 10.1177/0093854819879201
- Ross, J. M., & Babcock, J. C. (2009). Proactive and reactive violence among intimate partner violent men diagnosed with antisocial and borderline personality disorder. *Journal of Family Violence, 24*(8), 607-617. doi: 10.1007/s10896-009-9259-y
- Saunders, D. G. (1992). A typology of men who batter: Three types derived from cluster analysis. *American Journal of Orthopsychiatry, 62*(2), 264-275. doi: 10.1037/h0079333
- Schafer, J., Caetano, R., & Cunradi, C. B. (2004). A path model of risk factors for intimate partner violence among couples in the United States. *Journal of Interpersonal Violence, 19*(2), 127-142. doi: 10.1177/0886260503260244
- Spielberger, C. D. (1999). Manual for the State-Trait Anger Expression Inventory-2. Psychological Assessment Resources.
- Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior, 10*(1), 65-98. doi: 10.1016/j.avb.2003.09.001
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review, 8*(3), 220-247. doi: 10.1207/s15327957pspr0803_1
- Straus, M., Hamby, S., Boney-McCoy, S., & Sugarman, D. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283-316. doi: 10.1177/019251396017003001
- Waltz, J., Babcock, J. C., Jacobson, N. S., & Gottman, J. M. (2000). Testing a typology of batterers. *Journal of Consulting and Clinical Psychology, 68*(4), 658-669. doi: 10.1037/0022-006X.68.4.658
- Whiteside, S. P., & Lynam, D. R. (2001). The five factor model and impulsivity: using a structural model of personality to understand impulsivity. *Personality and Individual Differences, 30*, 669-689. doi: 10.1016/S0191-8869(00)00064-7
- Zuckerman, M. (1991). *Psychobiology of personality*. Cambridge University Press.

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Appendix

Overview of reactive/proactive criteria from Chase, O'Leary, and Heyman (2001)

Reactive

First criterion: An impulsive retaliation or defense to perceived threat, provocation, or frustration. This may be a misperception or exaggerated perception of threat—including jealousy or fear of partner abandonment rejection—or direct partner attack.

Example 1: "Without thinking . . . I simply hit her back after she slapped me."

Example 2: "I just lashed out and slapped her when she said it was all my fault."

Second criterion: Intense anger or other increased negative affectivity and/or physiological arousal due to interpartner conflict and/or perceived aversive partner behavior.

Example 1: "I couldn't see straight. . . I just flew into it [the violence] and didn't stop until I realized that I was doing this to my wife."

Example 2: "I was out-of-control. . . I was so angry!"

Proactive

First criterion: Evidence of effortful cognitive processing prior to and/or during the violence (e.g., mentions that the violence was goal-directed, planned, calculated, or otherwise purposeful). There may also be statements regarding positive outcome expectations for the violence.

Example 1: "I figured I'd do it [violence] to scare her. . . to make her feel threatened enough to stop asking me so many damn questions."

Example 2: "I punched her to stop her from siding with her mother again . . . because it worked in the past for a little while."

Second criterion: Explicitly states that he was not negatively affectively charged (i.e., not angry, no loss of control) or physiologically aroused, or he reports a reduction in affective-physiological activity prior to or during his violence.

Example 1: "I was in control when I hit her—I didn't do it because I was 'out-of-control'."

Example 2: "Actually... everything... my anger, heartbeat. . . sort of settled down when I began thinking about and hitting her."