Examining Social-Emotional Processes Among People with Histories of Aggression Toward Others Versus Toward Themselves

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Disclaimer

The views expressed in this clinical dissertation manuscript are those of the student and do not necessarily express the views of the Wheaton College Graduate School.

To my grandmother, Sun Fung Lee,

for your unconditional love and support

To my late grandfather, Kwun Wan Leung,

for remembrance of your love and accompany

Abstract

The social-emotional information processing model is an integrated model of social-cognition and emotional processes used to conceptualize aggression directed toward others (other-directed aggression, e.g., intermittent explosive disorder [IED]). However, research comparing social-emotional processes of other-directed aggression and aggression directed toward oneself (self-directed aggression, e.g., nonsuicidal self-injury [NSSI] and suicide attempts [SA]) is lacking. To address this, the mean differences in hostile attribution, negative affect, response evaluation, outcome expectancies, self-efficacy evaluation, and behavior enactment were assessed among people with other- and/or self-directed aggression. This study employed a descriptive survey-based comparison groups design using archival data. The four groups are: 140 adults with IED; 28 adults with NSSI and/or SA; 61 adults with both IED and NSSI and/or SA; and 140 control adults without IED, NSSI, or SA. Participants completed the Social-Emotional Information Processing Questionnaire. One-way ANOVA was used to compare mean differences. People with both other- and self-directed aggression, those with only other-directed aggression, and those with only self-directed aggression reported higher hostile attribution and negative affect than control participants. People with both other- and self-directed aggression and those with only other-directed aggression reported higher response evaluation than control participants. People with both other- and self-directed aggression and those with only other-directed aggression reported higher outcome expectancies and behavior enactment and lower self-efficacy evaluation than control participants and people with only self-directed aggression. Individuals with IED, NSSI, and/or SA may benefit from cognitive restructuring, schema therapy, psychological defusion, emotion regulation, and emotional transformation interventions in psychotherapy.

Keywords: aggression, intermittent explosive disorder, nonsuicidal self-injury, suicide attempts, social-emotional information processing model

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Throughout recorded history, human aggression has resulted in incalculable interpersonal and intrapersonal injuries. On the one hand, *other-directed aggression* has caused property damage, verbal arguments, and physical fights, particularly for individuals who meet the criteria for mental disorders such as conduct disorder, antisocial personality disorder, or intermittent explosive disorder (IED). On the other hand, neurobiological research (Siever, 2008) has suggested that aggression may also be self-directed. Individuals can exhibit such *self-directed aggression* through self-harming behaviors that include nonsuicidal self-injury (NSSI) and suicide attempts (SA). These maladaptive forms of other-directed and self-directed aggression not only involve individual suffering but also can involve harm to families, communities, and societies more broadly, contributing to substantial psychological, physical, and economic burdens (e.g., World Health Organization, 2002).

These two subtypes of aggression have both overlapping and distinctive facets (McCloskey, Ben-Zeev, et al., 2008). Other-directed aggression is a risk factor for self-directed aggression (Keilp et al., 2006). Increased risk for both subtypes of aggression is correlated with several psychological disorders, including posttraumatic stress disorder, borderline personality disorder, and alcohol use disorder (Briere & Gil, 1998). However, other disorders, such as major depressive disorder, are associated with an increased risk for self-directed aggression but not other-directed aggression (Zlotnick et al., 1999). By understanding the similarities and differences between these two subtypes, practitioners,

policymakers, and other stakeholders may develop, refine, and tailor interventions based on their overlapping yet distinct features.

Within existing research on aggression, the area of social-emotional processes remains underexplored. The social-emotional information processing (SEIP) model has been used to theorize about other-directed aggression in adults (Coccaro et al., 2009, 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017). Nevertheless, there has been no research using the SEIP model to study the social-emotional processes of self-directed aggression. Furthermore, no studies have compared the social-emotional processes of other-directed aggression with that of self-directed aggression. The present study addresses this gap in the literature by applying the SEIP model for adults (Coccaro et al., 2009, 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017) to compare mean differences in social-emotional processes (hostile attribution, negative affect, response evaluation, outcome expectancies, self-efficacy evaluation of responses, and behavior enactment) among people with histories of other- versus self-directed aggression.

Literature Review

Definition and Operationalization of Major Terms

Aggression, Other-Directed Aggression, and Self-Directed Aggression

Human aggression is defined as "a multidetermined act that results in physical or verbal injury to self, others, or objects" (Coccaro, 2012, p. 577). Aggression is categorized into at least three distinctive types: (a) medically related, (b) premeditated (e.g., proactive, relational, or instrumental), and (c) impulsive (e.g., reactive, angry, or

affective; Barratt, 1991; Barratt et al., 1997; Dodge et al., 1990).

Impulsive aggression is defined as an "aggressive act [that] occurs as a quick, nonpremeditated response to some form of real, or perceived, provocation" (Coccaro, 1998, p. 336). Although aggressive behavior can include both impulsive and premeditated aspects, the vast majority of aggression is impulsive (Fanning et al., 2018). Moreover, research on biological markers (e.g., 5-hydroxyindoleacetic acid concentration; Linnoila et al., 1983), environmental factors (e.g., socioeconomic status; Dodge et al., 1994), psychological treatment response (e.g., cognitive-behavioral therapy effects; McCloskey, Noblett, et al., 2008), and pharmacological treatment response (e.g., effects of phenytoin and lithium; Barratt et al., 1997; Sheard et al., 1976) has shown a convergent pattern of correlations with impulsive but not premeditated aggression (Coccaro, 2012). Thus, the current study aims to examine impulsive aggression. In particular, this study investigates two subtypes of impulsive aggression, which are categorized according to the target of the aggressive behavior: aggression directed toward others (other-directed aggression) and aggression directed toward oneself (self-directed aggression).

IED has been known as a hallmark diagnosis of other-directed aggression (Coccaro, 2012; Grant et al., 2014; Medeiros et al., 2019). The IED diagnostic criteria in the fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association [APA], 2013) is "verbal aggression (e.g., temper tantrums, tirades, verbal arguments or fights) or physical aggression toward property, animals, or other individuals, occurring twice weekly, on average, for a period of 3

months" (criterion A1) or "three behavioral outbursts involving damage or destruction of property and/or physical assault involving physical injury against animals or other individuals occurring within a 12-month period" (criterion A2), that "are grossly out of proportion to provocation or to any precipitating psychosocial stressors" (criterion B), that "are not premeditated (i.e., they are impulsive and/or anger-based) and are not committed to achieve some tangible objective (e.g., money, power, intimidation)" (criterion C), and that "cause either marked distress in the individual or impairment in occupational or interpersonal functioning, or are associated with financial or legal consequences" (criterion D), and among individuals whose "chronological age is at least 6 years" (criterion E; APA, 2013, p. 466). In this study, other-directed aggression is operationalized as having a lifetime diagnosis of IED, according to the DSM-5 diagnostic criteria for IED.

Two forms of self-directed aggression that are commonly characterized as pathological are NSSI and SA (McCloskey, Noblett, et al., 2008; Medeiros et al., 2019). *NSSI* is defined as the "direct, deliberate destruction of one's own body tissue in the absence of any intent to die" (Nock, 2012, p. 255). Common NSSI behaviors include self-cutting, self-hitting, banging the head or other body parts against the wall, and scratching and burning skin (Jacobson & Gould, 2007).

In contrast, a *suicide attempt* refers to "a potentially self-injurious behavior with a nonfatal outcome, for which there is evidence (either explicit or implicit) that the person intended at some (nonzero) level to kill himself/herself. A suicide attempt may or may not result in injuries" (O'Carroll et al., 1996, p. 247). In the current study, self-directed

aggression is operationalized as reporting a lifetime history of one of the following behaviors: (a) NSSI, (b) at least one suicide attempt, or (c) both NSSI and suicide attempt(s).

Prevalence

Other-Directed Aggression: IED

Accurate data on IED prevalence is difficult and complicated to obtain (Coccaro & McCloskey, 2019). First, community surveys in the United States have mostly used the diagnostic criteria of IED included in the fourth edition of DSM (DSM-IV, APA, 1994). Second, existing community surveys have adopted both *broad* and *narrow* definitions of IED diagnosis. The broad definition of *lifetime prevalence* only requires at least three anger attacks in lifetime. The narrow definition of *lifetime prevalence* requires three anger attacks in any given year. The broad definition of *12-month prevalence* requires at least one anger attack in the past year. The narrow definition of *12-month prevalence* is closer to criterion A2 of DSM-5 IED, which requires at least three aggressive outbursts in 12 months (Coccaro & McCloskey, 2019).

For broadly defined IED, community surveys have reported lifetime and 12-month prevalence as 5.3%–7.3% and 1.7%–3.9%, respectively. For narrowly defined IED, community surveys have found lifetime and 12-month prevalence rates of 5.4%–6.2% and 2.7%–4.1%, respectively (Kessler et al., 2006; McLaughlin et al., 2012; Oliver et al., 2016; Ortega et al., 2008). According to the DSM-5 diagnostic criteria, IED can be diagnosed when one of the following is met: (a) criterion A1, (b) criterion A2, or (c) both criteria A1 and A2. Research on patients with a lifetime diagnosis of IED (Coccaro &

McCloskey, 2019) has revealed that around 20% of IED-diagnosed patients only met criterion A1. As the existing community survey data have excluded criterion A1, the true prevalence of IED in the United States is underestimated.

The average age of onset for IED is 10.0 to 18.3 years old (Coccaro et al., 2004; Kessler et al., 2006; McLaughlin et al., 2012; Oliver et al., 2016). IED is more prevalent among individuals younger than 30 years of age, and it becomes less prevalent with increasing age. In terms of education, higher prevalence is found among individuals who received less than a high school education than those with high school and beyond. Importantly, the presence of lifetime DSM-5 IED is related to a nearly fivefold higher risk of having a history of a suicide attempt (Odds Ratio: 4.69). After relevant comorbid diagnoses (i.e., anxiety, mood, posttraumatic stress, and substance use disorders) are added, the odds ratio for a history of a suicide attempt is lowered to around twofold but is still significant (Odds Ratio: 2.11; Coccaro & McCloskey, 2019).

Self-Directed Aggression: NSSI and SA

NSSI. A recent systematic review (Cipriano et al., 2017) of 53 studies found that the lifetime prevalence of NSSI ranged from 7.5% to 46.5% among adolescents, 38.9% among university students, and 4.0% to 23.0% among adults. NSSI typically has an onset age between 12 and 14, and it is more prevalent among adolescents and young adults, relative to middle-aged and older adults. Similar rates of NSSI between the two genders are reported in samples of adolescents, college students, and adults. Most importantly, NSSI is a strong predictor of suicidal ideation and attempts. Overall, 70% of adolescents with NSSI behaviors have had one attempt at suicide during their lifetime, and 55% have

had multiple attempts (Nock et al., 2006).

SA. The latest figures suggest that the worldwide lifetime suicide attempt rate is 2.7% (Nock et al., 2008). Individuals who attempted suicide and were sent to the emergency room have a 16.3% risk of a further suicide attempt in 12 months, a 1.6% risk of completed suicide in 12 months, and a 3.9% risk of completed suicide in 5 years (Carroll et al., 2014). Females are more likely than males to attempt suicide, especially during adolescence. Males' completed suicide rate is nearly four times higher than that of females (Lewinsohn et al., 2001). The World Health Organization (2014) has reported that suicide is most prevalent among middle-aged and older males. Nevertheless, the suicide rates among adolescents and young adults are climbing, and suicide has become the second leading cause of death for those aged 15 to 29.

A Social Cognitive Approach: Social-Emotional Information Processing Model

A wide range of research has shown that aggressive behavior is influenced by both biological and environmental factors. As shown in twin studies, nonbiological, environmental factors contribute to not less than 50% of the variance in aggression (Coccaro & Ridder, 2019). Such variance is comprised of shared environmental factors, nonshared environmental factors unique to each twin, and measurement error. The shared and nonshared environmental factors can include the influence of caregivers' behavior and exposure to violence (Coccaro & Ridder, 2019), which are relevant to the concept of *social cognition*.

One of the early studies in social cognition was the famous social learning theory of aggression (Bandura, 1973), which suggested that aggression could be acquired by

observing and imitating others. Bandura's Bobo doll experiment showed that children who had observed a parental figure's aggressive behavior learned such behavior by imitating or modeling the parental figure. The result demonstrated that social cognitive learning processes were evident in transmitting aggression from caregivers and other imitated figures to children.

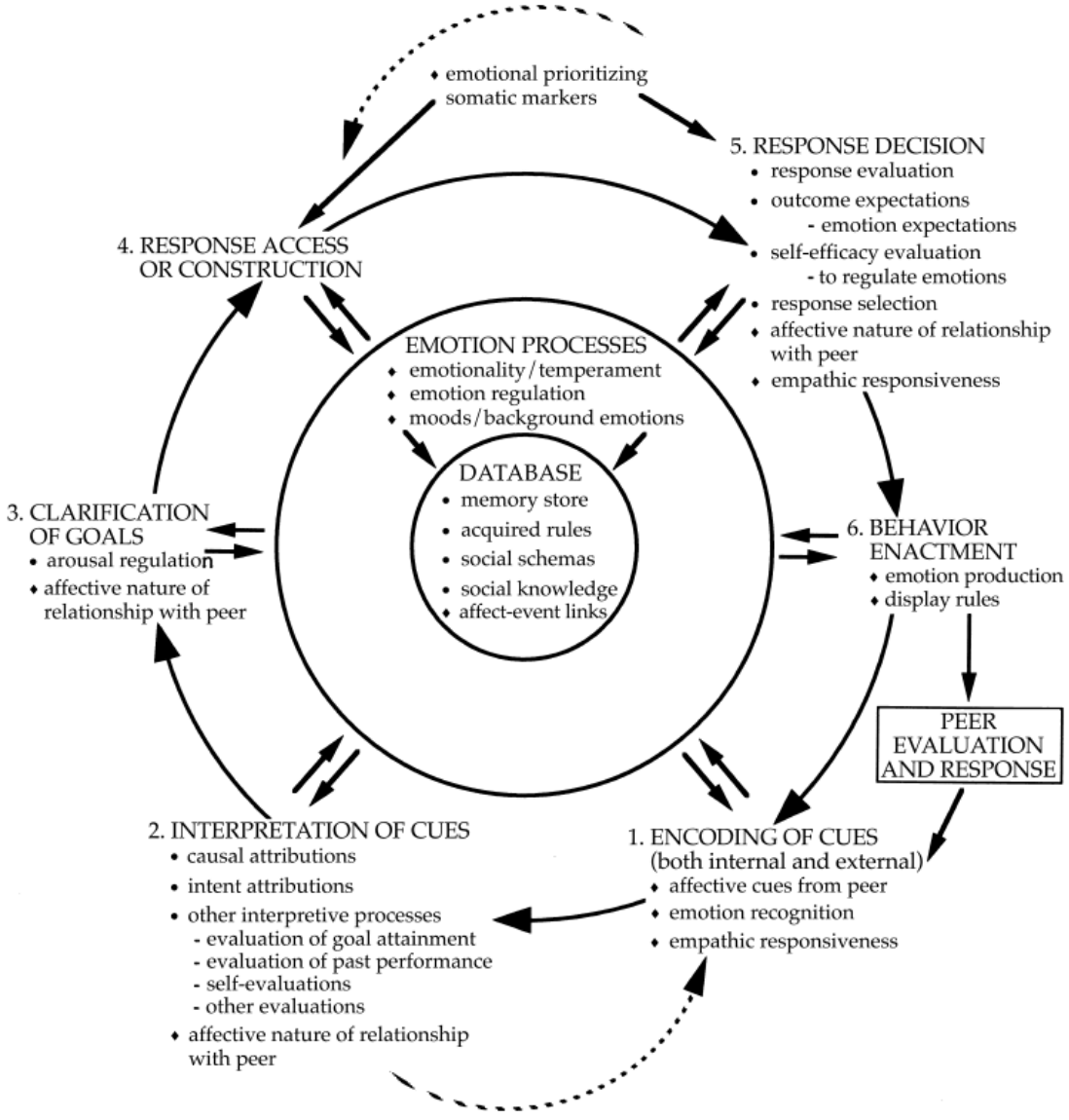
In 1990, Dodge and colleagues proposed a social information processing theory, which suggested that children who were abused would develop deficits in their social information processes, resulting in more aggressive behaviors in social situations. This model has then undergone several iterative transformations. Lemerise and Arsenio (2003) proposed an integrated model of social-cognition and emotional processes to underscore the dynamic interactions between cognition and emotion. This *social-emotional information processing (SEIP) model* possesses enhanced power to understand social-emotional processes and explain aggressive behavior among children. Specifically, the SEIP model describes six cognitive biases (items filled with circles) with emotional processes (items filled with diamonds), as shown in Figure 1.

First, an individual *encodes* both external and internal cues, including one's own and others' cognitive and emotional signals. Second, such cognitive and affective cues are *interpreted*, mental representations of these cues are formed, and attributions are made. This step includes attributions of another person's intent (e.g., hostile attribution of intent). Third, after interpreting the situation, *goals* are clarified and selected. Fourth, an individual *accesses* one's memory for possible responses or *constructs* new behavioral responses to the situation. Fifth, when selecting a response, an individual engages in

decision-making processes, which could be influenced by the emotion one is experiencing. These processes include response evaluation, outcome expectancies, self-efficacy evaluation, and response selection. In the second, third, and fifth steps, the affective nature of relationships with peers is taken into account. Sixth and finally, the selected behavioral and associated emotional responses are *enacted*.

Figure 1

The Social-Emotional Information Processing (SEIP) Model



Note. Items marked with filled circles represent social-cognitive processes and those marked with filled diamonds represent emotional processes. From "An Integrated Model of Emotion Processes and Cognition in Social Information Processing," by E. A. Lemerise and W. F. Arsenio, 2003, *Child Development, 71*(1), p. 113. Copyright 2003 by the American Psychological Association. Reprinted with permission.

Research focusing on the connection between social-emotional processes and aggression has shown the largest amount of evidence supporting *hostile attribution of intent*, response evaluation, and decision-making processes (i.e., *response evaluation, outcome expectancies, self-efficacy evaluation, and behavior enactment*) among aggressive children (Coccaro, Fanning, & Lee, 2017). Additionally, the SEIP model that has incorporated emotional processes reflects the essential role of *negative affect* in explaining aggressive behavior (Berkowitz, 1990; Verona et al., 2002). Therefore, the current study examines the mean differences of these processes among people with histories of other-directed aggression versus self-directed aggression.

Hostile Attribution of Intent

The term *hostile attribution of intent* or *hostile attribution* is defined as "the hostile attribution of intentions to a peer in social situations in which the peer's intentions are ambiguous or vary systematically over presented situations (e.g., partly ambiguous, partly benign, and partly hostile)" (de Castro et al., 2002, p. 918). Aggressive individuals attribute hostile intent to their peers more often than their non-aggressive counterparts (e.g., Steinberg & Dodge, 1983). Specifically, adults with IED have been found to have significantly more hostile attribution than psychiatric and healthy controls (Coccaro et al., 2009, 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017). Because a robust significant relationship is found between other-directed aggression and hostile attribution (e.g., de Castro et al., 2002), it is expected that people with histories of only other-directed aggression will report a higher mean value of hostile attribution, relative to those without such a history.

Research has revealed that one of the functions of NSSI is interpersonal negative reinforcement; for example, NSSI facilitates an individual's escape from social situations when they are stressful or undesirable (Nock, 2009). Thus, self-directed aggression is likely associated with hostile attribution to peers in stressful or undesirable social situations. It is expected that people with histories of only self-directed aggression will report a lower mean value than those with histories of only other-directed aggression but a higher mean value than control participants. It is expected that people with histories of both other- and self-directed aggression will report the highest mean value of hostile attribution, due to the combined effect of the two subtypes of aggression.

Negative Affect

Negative affect refers to "a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low [negative affect] being a state of calm" (Watson et al., 1988, p. 1063). Voluminous evidence has supported that NSSI serves the function of regulating negative affect through intrapersonal positive and negative reinforcements (e.g., Muehlenkamp et al., 2009; Nock, 2009). Suicidality research has also revealed significant correlations between suicidality and negative affect, particularly depressed mood and hopelessness (Apter et al., 1990; Turecki et al., 2019; Turecki & Brent, 2016). As negative affect significantly contributes to both NSSI and SA, it is expected that that people with histories of only self-directed aggression will report a higher mean value of negative affect, relative to those without such a history.

Research showed that a lifetime history of aggressive behavior was uniquely

correlated with negative affect (termed as *negative emotional response* in these studies; Coccaro et al., 2009, 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017). Given the evidence of the important role that *negative affect* plays in aggressive behavior, it is expected that people with histories of only other-directed aggression will report a high mean value of negative affect, which is similar to that reported by those with histories of only self-directed aggression. People with histories of either self- or other-directed aggression only will report a higher mean value than control participants. Due to the combined effect, it is expected that people with histories of both other-directed and self-directed aggression will report the highest mean values of negative affect.

Response Evaluation

Response evaluation is defined as "an assessment of the quality of social behaviors with respect to a given dimension (e.g., friendliness, goodness, assertiveness, kindness)" (Crick & Ladd, 1990, p. 615). Multiple studies (Asarnow & Callan, 1985; Crick & Ladd, 1990; Deluty, 1983; Quiggle et al., 1992) have found that rejected, aggressive children evaluate competent responses (e.g., assertive or prosocial) more negatively and aggressive responses more positively than their more psychologically well-adjusted peers. Because a significant association is found between aggressive response evaluation and other-directed aggression, it is expected that people with histories of only other-directed aggression will report a higher mean value of aggressive response evaluation, relative to those without such a history.

Nock (2009) proposed a social learning hypothesis of self-injury, which suggests

that individuals are exposed to and learn these behaviors from family, friends, and media. These normalized representations of self-harming behaviors may prime individuals to adopt self-injury because they evaluate self-directed aggressive responses more positively than other-directed aggressive responses. Therefore, it is expected that people with histories of only self-directed aggression will report a lower mean value of aggressive response evaluation than those with histories of only other-directed aggression but a higher mean value than control participants. It is further expected that people with histories of both other- and self-directed aggression to report the highest mean value of aggressive response evaluation, due to the combined effect.

Outcome Expectancies

Outcome expectancies are "[individuals'] descriptions of what would occur in an interaction with a peer following the implementation of a designated social strategy" (Crick & Ladd, 1990, p. 613). Research has shown that the display of observed (Dodge et al., 1986), self-reported (Deluty, 1983), and peer-assessed (Perry et al., 1986; Quiggle et al., 1992) aggressive behavior are positively associated with favorable expectations for the outcomes of both physically and verbally aggressive behavior. Due to significant connections between aggressive outcome expectancies and other-directed aggression, it is expected that that people with histories of only other-directed aggression will report a higher mean value of aggressive outcome expectancies, relative to those without such a history.

For NSSI and SA, outcome expectancies on aggressive behavior have not been explored. However, self-directed aggressive individuals may not have favorable

expectations for the outcomes of aggressive behavior as much as other-directed aggressive individuals, so it is expected that that people with histories of only self-directed aggression will report a lower mean value than those with histories of only other-directed aggression but a higher mean value than control participants. Similar to other processes, it is expected that that people with histories of both other- and self-directed aggression will report the highest mean value of aggressive outcome expectancies.

Self-Efficacy Evaluation of Responses

Self-efficacy refers to "the conviction that one can successfully execute the behavior required to produce the outcome" (Bandura, 1977, p. 79). Most studies indicate that aggressive children report feeling more efficacious when performing physically and verbally aggressive acts than their peers report feeling (Crick & Dodge, 1989; Perry et al., 1986; Quiggle et al., 1992). Due to the well-established linkage between other-directed aggression and self-efficacy evaluation of aggressive response, it is expected that that people with histories of only other-directed aggression will report feeling more efficacious for them to act aggressively, thereby reporting a lower mean value of self-efficacy evaluation, relative to those without such a history.

Research on self-directed aggression and self-efficacy evaluation of aggressive response is currently lacking. It is expected that that people with high self-directed aggression may not feel as efficacious in conducting other-directed aggressive behavior as those with high other-directed aggression. Thus, people with histories of only self-directed aggression will report a higher mean value of self-efficacy evaluation than those with histories of only other-directed aggression but a lower mean value than control

participants. It is further expected that people with histories of both other- and self-directed aggression will report the lowest mean value of self-efficacy evaluation.

Behavior Enactment

Behavior enactment may include other-directed aggression (e.g., IED) and self-directed aggression (e.g., NSSI and/or SA), as well as other responses such as prosocial and avoidant behaviors. Individuals with high levels of IED have been found to differ significantly from psychiatric and healthy controls in behavior enactment (Coccaro et al., 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017). Because a robust significant relationship is found between other-directed aggression and aggressive behavior enactment, it is expected that people with histories of only other-directed aggression will report a higher mean value of aggressive behavior enactment, relative to those without such a history.

At present, research assessing the relationship between aggressive behavior enactment and self-directed aggression is minimal. Nevertheless, the presence of lifetime DSM-5 IED is related to a nearly fivefold higher risk of having a history of a suicide attempt (Odds Ratio: 4.69). After relevant comorbid diagnoses (i.e., anxiety, mood, posttraumatic stress, and substance use disorders) are added, the odds ratio for a history of a suicide attempt is still significant but is lowered to around twofold (Odds Ratio: 2.11; Coccaro & McCloskey, 2019). These results imply that people with histories of self-directed aggression may exhibit aggressive behavior enactment, but likely to a lesser extent than people with a lifetime diagnosis of IED. Therefore, it is expected that that people with histories of only self-directed aggression will report a lower mean value of

behavior enactment than those with histories of only other-directed aggression, but a higher mean value than control participants. It is further expected that people with histories of both other- and self-directed aggression will report the highest mean value of behavior enactment.

Purpose of Study

Currently, there is a lack of research applying the SEIP model to study the social-emotional processes of people with histories of only self-directed aggression. More importantly, there is a research gap in comparing the social-emotional processes between people with histories of other- versus self-directed aggression. The current study addresses this gap in the literature by examining the mean differences in the social-emotional processes among people with histories of other- and/or self-directed aggression according to the overarching framework of the SEIP model for adults. Specifically, this study examines four comparison groups: (a) people with histories of only other-directed aggression (i.e., lifetime diagnosis of IED), (b) people with histories of only self-directed aggression (i.e., lifetime history of NSSI and/or SA), (c) people with histories of both other-directed and self-directed aggression (i.e., both a lifetime diagnosis of IED and a lifetime history of NSSI and/or SA), and (d) control participants (i.e., without histories of IED, NSSI, or SA).

Research Questions and Hypotheses

Among the four comparison groups, this study investigates the following six social-emotional processes: (a) hostile attribution, (b) negative affect, (c) response evaluation, (d) outcome expectancies, (e) self-efficacy evaluation, and (f) behavior

enactment.

It is hypothesized that people with histories of both other- and self-directed aggression will report the highest mean values of hostile attribution, response evaluation, outcome expectancies, and behavior enactment, followed by those with histories of only other-directed aggression, then those with histories of only self-directed aggression, and finally control participants.

It is also hypothesized that people with histories of both other- and self-directed aggression will report the lowest mean values of self-efficacy evaluation, followed by those with histories of only other-directed aggression, then those with histories of only self-directed aggression, and finally, control participants.

It is further hypothesized that people with histories of both other- and self-directed aggression will report the highest mean value of negative affect, followed by those with histories of either self-directed or other-directed aggression only, and finally, control participants.

A summary of the hypotheses including the prediction of mean difference comparisons of various social-emotional processes among the four groups is presented in Table 1.

Table 1

Summary of Hypotheses: Prediction of Mean Difference Comparisons of Social-Emotional Processes Among Four Comparison Groups

Social-emotional processes	**Mean values**			
	Both other- and self-directed aggression (IED *plus* NSSI and/or SA)	**Other-directed aggression only (IED)**	**Self-directed aggression only (NSSI and/or SA)**	**Control**
a. Hostile attribution	Highest	High	Low	Lowest
b. Negative affect	Highest	High	High	Lowest
c. Response evaluation	Highest	High	Low	Lowest
d. Outcome expectancies	Highest	High	Low	Lowest
e. Self-efficacy evaluation	Lowest	Low	High	Highest
f. Behavior enactment	Highest	High	Low	Lowest

Note. IED = intermittent explosive disorder; NSSI = nonsuicidal self-injury; SA = suicide attempts.

Methods

Procedure

The data collected for this study was originally gathered for more extensive research on social-emotional information processes, as part of ongoing research conducted since 2001 by the Clinical Neuroscience and Psychopharmacology Research Unit at the University of Chicago. The research protocol was approved by the University of Chicago's Institutional Review Board. This study employs a descriptive survey-based comparison groups design using this archival data. Participants were recruited through newspaper advertisements, public service announcements, and the research unit webpage. On visit one, participants provided written consent (see Appendix A) and completed brief inventories to determine their eligibility to participate in research. Then they were given a questionnaire booklet, including the measure of this study, to complete at home. On visit two, participants completed a demographic history interview (see Appendix B) and 3–4 hours of diagnostic assessment as detailed below. Participants received financial compensation of up to US$150 depending on the proportion of research they completed.

Participants

Participants were 369 adults (166 males and 203 females) who either had other- and/or self-directed aggressive problems or were "healthy" volunteers (without any psychiatric issues). They aged from 18 to 82 years old (M = 37.28, SD = 11.73). Their socioeconomic status as measured by Hollingshead score ranged from 6 to 66 (M = 43.00, SD = 13.61). They had diverse educational backgrounds: 8.7% did not complete high school, 16.3% were high school graduates, 30.4% had partial college experiences,

and 44.7% earned a college diploma and beyond. The majority of participants were Caucasian (66.1%), followed by African American (21.7%), Hispanic (5.4%), Asian (3.3%), Native American (0.5%), and other ethnicities (3.0%).

Participants were excluded from this study if they had reported (a) current alcohol or drug dependence, (b) psychopharmacotherapy within the past month, (c) any psychotic symptoms or a lifetime history of any psychotic or bipolar disorder, or (d) a lifetime history of traumatic head injury with a loss of consciousness for more than 60 minutes. Participants were classified into one of the following groups based on their responses to diagnostic assessments:

1. Other-directed aggression only (n = 140; Ages 18-65, M_{age} = 38.71, SD = 10.41; 52.1% female): These participants had a lifetime diagnosis of IED.
2. Self-directed aggression only (n = 28; Ages 22-55, M_{age} = 34.79, SD = 8.68; 78.6% female): These participants reported a lifetime history of one of the following behaviors: (a) NSSI, (b) at least one suicide attempt, or (c) both NSSI and suicide attempt(s).
3. Both other-directed and self-directed aggression (n = 61; Ages 19-57, M_{age} = 36.59, SD = 10.68; 62.3% female): These participants (a) had a lifetime diagnosis of IED, and (b) reported a lifetime history of NSSI, at least one suicide attempt, or both NSSI and suicide attempt(s).
4. Control (n = 140; Ages 19-82, M_{age} = 36.64, SD = 13.72; 50.0% female): These participants had no lifetime diagnosis of IED and did not report a history of NSSI or suicide attempt(s).

A summary of the participants' demographics of each of the four groups is presented in Table 2.

Table 2

Demographic Characteristics for Four Comparison Groups

	IED *plus* NSSI and/or SA		**IED**		**NSSI and/or SA**		**Control**		**Total**	
Age (*SD*)	36.59	(10.68)	38.71	(10.41)	34.79	(8.68)	36.64	(13.72)	37.28	(11.73)
Socioeconomic status by Hollingshead score (*SD*)	37.85	(12.77)	41.28	(13.74)	41.14	(16.40)	47.33	(12.03)	43.00	(13.61)
Gender (%)										
Male	23	(37.7%)	67	(47.9%)	6	(21.4%)	70	(50.0%)	166	(45.0%)
Female	38	(62.3%)	73	(52.1%)	22	(78.6%)	70	(50.0%)	203	(55.0%)
Education (%)										
Less than high school	8	(13.1%)	16	(11.4%)	1	(3.6%)	7	(5.0%)	32	(8.7%)
High school graduate	13	(21.3%)	23	(16.4%)	1	(3.6%)	23	(16.4%)	60	(16.3%)
Partial college	23	(37.7%)	50	(35.7%)	13	(46.4%)	26	(18.6%)	112	(30.4%)
College or beyond	17	(27.9%)	51	(36.4%)	13	(46.4%)	84	(60.0%)	165	(44.7%)
Ethnicity (%)										
Caucasian	33	(54.1%)	84	(60.0%)	20	(71.4%)	107	(76.4%)	244	(66.1%)
African American	18	(29.5%)	37	(26.4%)	5	(17.9%)	20	(14.3%)	80	(21.7%)
Hispanic	6	(9.8%)	10	(7.1%)	0	(0.0%)	4	(2.9%)	20	(5.4%)
Asian	1	(1.6%)	5	(3.6%)	0	(0.0%)	6	(4.3%)	12	(3.3%)
Native American	0	(0.0%)	0	(0.0%)	2	(7.1%)	0	(0.0%)	2	(0.5%)
Others	3	(4.9%)	4	(2.9%)	1	(3.6%)	3	(2.1%)	11	(3.0%)
TOTAL (%)	61	(16.5%)	140	(37.9%)	28	(7.6%)	140	(37.9%)	369	(100.0%)

Note. IED = intermittent explosive disorder; NSSI = nonsuicidal self-injury; SA = suicide attempts.

Diagnostic Assessment

IED diagnoses were made according to DSM-5 diagnostic criteria. Lifetime history of NSSI and suicide attempt(s) were assessed, including the number, methods, intent, medical treatment, and comorbidities of these self-directed aggressive acts. Diagnoses and classification of groups were based on information collected from: (a) the Structured Clinical Interview for DSM Diagnoses (SCID-I; First et al., 1997; see Appendix C for SCID-I: Interview Questions for DSM-5 IED), (b) a diagnostic interview (see Appendix D for Diagnostic Assessment: Questions for NSSI; see Appendix E for Diagnostic Assessment: Questions for Suicide Attempt), and (c) a thorough review of all other available clinical data. SCID-I interviews were conducted by individuals with either a master's or doctoral degree in clinical psychology, whereas the diagnostic interviews were conducted by a research psychiatrist. The well-trained research psychiatrist and graduate-level clinical psychologists were blind to the study hypotheses. Final diagnoses and classification of groups were made through the best-estimate consensus procedures (Coccaro et al., 2012) by the team involving the research psychiatrist and clinical psychologists.

The interrater reliabilities of the SCID-I have been found to be mostly moderate to excellent across mood, anxiety, schizophrenia, substance use, and posttraumatic stress disorders (Cohen's κ range = 0.53–1.00; First et al., 1995; Segal et al., 1995; Skre et al., 1991; Zanarini et al., 2000; Zanarini & Frankenburg, 2001). Studies (Basco et al., 2000; Fennig et al., 1994, 1996; Kranzler et al., 1995, 1996) that have adopted the validity standard of LEAD (*L*ongitudinal, *E*xpert diagnosticians, with *A*ll *D*ata) have shown that

the SCID-I has been superior to standard clinical interviews. Importantly, SCID was often used as a "gold standard" when researchers conducted assessment of DSM-IV Axis I and Axis II diagnoses, thereby making it possible to classify and assign group membership and to compare among groups (Gorgens, 2018).

Social-Emotional Information Processing Questionnaire

The Social-Emotional Information Processing Questionnaire (SEIP-Q; Coccaro, Fanning, & Lee, 2017; see Appendix F) is a self-report measure that evaluates the SEIP processes of hostile attribution, negative emotional response, response valuation, outcome expectation, response efficacy, and response enactment. SEIP-Q consists of eight written vignettes of socially ambiguous situations in that an adverse action is directed at "Person A" by "Person B" and respondents are asked to identify with "Person A." Such adverse actions were designed to assess one of the two categories: (a) relational aggression (e.g., being "rejected" by someone) and (b) overt aggression (e.g., being "hit" by someone). To assess attribution biases, respondents are asked to indicate to what extent they agree with each attributional statement of intent about Person B's behavior: (a) *hostile attribution* (e.g., "My karate classmate wanted to physically hurt me"), (b) *instrumental attribution* (e.g., "My karate classmate wanted to make me look 'bad'"), and (c) *benign attribution* (e.g., "My karate classmate did it by accident"). Immediately after each attributional statement, two items were designed to assess *Negative Emotional Response* (e.g., "How likely is it that you would be angry if this happened to you?") to the vignette situation.

Subsequently, respondents are asked to imagine each of three possible behavioral

response scenarios to Person B's action: (a) socially appropriate response (e.g., "You say: We weren't taught that move. Let's keep it to the moves we were taught"), (b) relationally aggressive response (e.g., "You spread rumors about your karate classmate to other people"), and (c) overtly aggressive response (e.g., "You hit your karate classmate hard during the next match"). These responses are modified from those created by Fontaine et al. (2002) for adolescent participants. After each of the above response options, respondents are asked to answer seven questions to assess: (a) *Response Valuation* (e.g., "How good or bad is it to act in this way?"), (b) *Outcome Expectation* (e.g., "If you acted this way, how likely is it that your karate classmate will use only the moves you were taught the next time you and your karate classmate have a competition?"), (c) *Response Efficacy* (e.g., "How easy would it be for you to act this way?"), and (d) *Response Enactment* (e.g., "How likely is it that you would act this way?).

Respondents used a 4-point Likert scale to answer all the questions (e.g., 0 = *not at all likely* to 3 = *very likely*). Subscores are calculated by summing all the items for each process and then dividing them by the number of questions for that process. This study will focus on *overtly aggressive responses* and associated social-emotional processes.

Coccaro and colleagues (Coccaro et al., 2009; Coccaro, Fanning, & Lee, 2017) have demonstrated that each SEIP-Q subscale has adequate reliability and validity. A summary of the subscales, corresponding measured constructs, and associated internal consistency and test-retest reliability data is presented in Table 3. A summary of convergent and divergent validity information is presented in Table 4.

Table 3

Internal Consistency and Test-Retest Reliability of the Social-Emotional Information Processing Questionnaire (SEIP-Q)

SEIP-Q subscales	**SEIP processes**	**Internal consistency (α)**	**Test-retest reliability (*r*)**
a. Hostile attribution	Hostile attribution	.87 to .88	.75
b. Negative emotional response	Negative affect	.85 to .87	.71
c. Response valuation	Response evaluation	.77	.71
d. Outcome expectation	Outcome expectancies	.88	.75
e. Response efficacy	Self-efficacy evaluation	.83	.74
f. Response enactment	Behavior enactment	.78	.74

Note. Data from Coccaro et al. (2009) and Coccaro, Fanning, & Lee (2017).

Table 4

Convergent and Divergent Validity of the Social-Emotional Information Processing Questionnaire (SEIP-Q)

SEIP-Q subscales	**SEIP processes**	**External Validators (*r*)**							
		Life history of aggression	Buss-Perry aggression	Hostile automatic thoughts	Positive automatic thoughts	Strategies of emotion regulation	Clarity of emotional perception	Eysenck neuro-ticism	Eysenck extra-version
a. Hostile attribution	Hostile attribution	.19 to .21*	.28 to .34*	.30 to .37*	-.15 to -.26*	-	-	-	-.12 to .00*
b. Negative emotional response	Negative affect	-	-	-	-	-.33*	-.28*	.34*	-.04
c. Response valuation	Response evaluation	.14	.40*	.34*	-.14	-	-	-	-.08
d. Outcome expectation	Outcome expectancies	.18	.38*	.40*	-.08	-	-	-	-.01
e. Response efficacy	Self-efficacy evaluation	.21*	.45*	.39*	-.12	-	-	-	-.02
f. Response enactment	Behavior enactment	.31*	.45*	.44*	-.11	-	-	-	-.04

Note. Data from Coccaro et al. (2009) and Coccaro, Fanning, & Lee (2017).

* $p < .05$.

Data Analysis Plan

To test the hypotheses in this study, single-factor independent-measures analysis of variance (ANOVA) technique was used. The single independent variable (IV: group) was analyzed, and its four levels were: IED (n = 140), NSSI and/or SA (n = 28), IED *plus* NSSI and/or SA (n = 61), and control (n = 140). There were 6 dependent variables (DVs: hostile attribution, negative affect, response evaluation, outcome expectancies, self-efficacy evaluation of response, and behavior enactment).

First, pre-analysis data screening was conducted to identify missing data and outliers and perform any necessary transformations (e.g., square root transformation, logarithmic transformation, or inverse transformation). Next, whether the data met the necessary assumptions was evaluated. The assumptions of a standard independent-measures ANOVA on means include: (a) independent samples, (b) univariate normality, and (c) homogeneity of variance. Each observation of the samples was independent as per the methodological protocol.

The normality assumption was violated for all DVs except for negative affect. However, the standard one-way ANOVA was still conducted for all DVs because ANOVA is robust against violation of the normality assumption (Glass et al., 1972; Harwell et al., 1992; Schmider et al., 2010). The homogeneity assumption held for the DVs of hostile attribution and negative affect. For these two DVs, ANOVA was conducted to assess the mean differences among the four groups. Because the Scheffe post hoc test works well with unequal sample sizes (Sauder & DeMars, 2019), it was selected to facilitate pairwise comparisons and determine exactly which mean differences

are significant. The homogeneity assumption is violated for the other four DVs. Nevertheless, ANOVA is a robust statistic against the violation of the homogeneity assumption if appropriate post hoc tests are used (Shingala & Rajyaguru, 2015). Because these four DVs have the Behrens-Fisher problem (Behrens, 1929; Fisher, 1938), the Games-Howell post hoc test was conducted because it works well with unequal sample sizes and unequal variances while having higher power than other post hoc tests (Sauder & DeMars, 2019).

Results

ANOVA Results

One-way ANOVA revealed significant mean differences between at least two groups in all 6 DVs. For hostile attribution ($F(3, 365) = 17.61$, $p < .001$, $\omega^2 = .12$), response evaluation ($F(3, 365) = 13.18$, $p < .001$, $\omega^2 = .09$), and outcome expectancies ($F(3, 365) = 12.65$, $p < .001$, $\omega^2 = .09$), the mean differences between groups were of medium effect size as measured by Omega square ($\omega^2 = .09$ to .12). For negative affect ($F(3, 365) = 20.53$, $p < .001$, $\omega^2 = .14$), self-efficacy evaluation ($F(3, 365) = 20.58$, $p < .001$, $\omega^2 = .17$), and behavior enactment ($F(3, 365) = 33.97$, $p < .001$, $\omega^2 = .21$), the mean differences between groups were of large effect size ($\omega^2 = .14$ to .21). Means and standard deviations of each group and results of ANOVA for each DV are presented in Table 5.

Table 5

Means and Standard Deviations of Each of the DVs for Four Comparison Groups

Dependent variables (DVs)	IED *plus* NSSI and/or SA		IED		NSSI and/or SA		Control		ANOVA			
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*(3,365)	*p*	Effect size ω^2	Size range
a. Hostile attribution	1.23	0.55	1.05	0.51	1.05	0.42	0.75	0.41	17.61	< .001	.12	Medium
b. Negative affect	1.89	0.59	1.82	0.55	1.82	0.52	1.40	0.46	20.53	< .001	.14	Large
c. Response evaluation	0.86	0.58	0.80	0.47	0.63	0.33	0.52	0.34	13.18	< .001	.09	Medium
d. Outcome expectancies	0.84	0.41	0.80	0.34	0.59	0.23	0.60	0.29	12.65	< .001	.09	Medium
e. Self-efficacy evaluation	1.68	0.88	1.83	0.68	2.19	0.55	2.41	0.52	26.58	< .001	.17	Large
f. Behavior enactment	1.22	0.78	1.06	0.61	0.71	0.43	0.50	0.40	33.97	< .001	.21	Large

Note. IED = intermittent explosive disorder; NSSI = nonsuicidal self-injury; SA = suicide attempts.

Pairwise Comparison Results

For hostile attribution and negative affect, Scheffe post hoc analysis showed that control participants reported lower mean values, indicating less likelihood to attribute hostile intent to a peer in an ambiguous situation and of experiencing less aversive states, than the three other groups: people with IED plus NSSI and/or SA, people with only IED, and people with only NSSI and/or SA. There was no significant difference between people with IED plus NSSI and/or SA, people with only IED, and people with only NSSI and/or SA.

Outcome expectancies and behavior enactment showed another pattern. Games-Howell post hoc analysis revealed that people with IED plus NSSI and/or SA and people with only IED reported higher mean values, indicating more favorable expectations of outcomes for aggressive behavior and performing more aggressive behavior, than people with only NSSI and/or SA and control participants. For self-efficacy evaluation, post hoc analysis revealed that people with IED plus NSSI and/or SA (M = 1.68, SD = 0.88) and people with only IED (M = 1.83, SD = 0.68) reported lower mean values, indicating feeling more efficacious or easier for them to act in an aggressive way, than people with only NSSI and/or SA (M = 2.19, SD = 0.55) and control participants (M = 2.41, SD = 0.52). However, among outcome expectancies, self-efficacy evaluation, and behavior enactment, there were no significant differences between people with IED plus NSSI and/or SA and those with only IED. Likewise, no significant difference was found between people with only NSSI and/or SA and control participants.

Response evaluation exhibited an idiosyncratic pattern. Games-Howell post hoc

analysis showed that control participants (M = 0.52, SD = 0.34) reported a lower mean value in response evaluation, indicating evaluating aggressive responses less positively, than people with IED plus NSSI and/or SA (M = 0.86, SD = 0.58) and people with only IED (M = 0.80, SD = 0.47) but not people with only NSSI and/or SA (M = 0.63, SD = 0.33). Additionally, no significant difference was found among people with IED plus NSSI and/or SA, those with only IED, and those with only NSSI and/or SA.

Pairwise comparisons for each DV are presented in Table 6. A summary of the results of the hypotheses, including the mean difference comparisons of all 6 DVs among the four groups, is presented in Table 7.

Table 6

Pairwise Comparisons for Each DV

(a) Hostile attribution, using Scheffe criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.09		
NSSI and/or SA	.39	1.00	
Control	< .001*	< .001*	.03*

(b) Negative affect, using Scheffe criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.87		
NSSI and/or SA	.96	1.00	
Control	< .001*	< .001*	.002*

(c) Response evaluation, using Games-Howell criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.87		
NSSI and/or SA	.09	.13	
Control	<.001*	<.001*	.40

(d) Outcome expectancies, using Games-Howell criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.92		
NSSI and/or SA	.003*	.001*	
Control	<.001*	<.001*	.99

(e) Self-efficacy evaluation, using Games-Howell criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.62		
NSSI and/or SA	.007*	.02*	
Control	<.001*	<.001*	.21

(f) Behavior enactment, using Games-Howell criterion

Pairwise comparison / *p*	**IED *plus* NSSI and/or SA**	**IED**	**NSSI and/or SA**
IED	.53		
NSSI and/or SA	.001*	.004*	
Control	<.001*	<.001*	.09

Note. IED = intermittent explosive disorder; NSSI = nonsuicidal self-injury; SA = suicide attempts.

Table 7

Summary of Pairwise Comparison Results of the Six Social-Emotional Processes Among Four Comparison Groups

Dependent Variables (DVs)	IED *plus* NSSI and/or SA	IED	NSSI and/or SA	Control
a. Hostile attribution	High			Low
b. Negative affect	High			Low
c. Response evaluation	High			Low
d. Outcome expectancies	High		Low	
e. Self-efficacy evaluation	Low		High	
f. Behavior enactment	High		Low	

Note. IED = intermittent explosive disorder; NSSI = nonsuicidal self-injury; SA = suicide attempts.

Discussion

The present study is, to our knowledge, the first to apply the SEIP model to examining self-directed aggression empirically. Moreover, this study is the first to compare social-emotional processes between people with histories of other- and/or self-directed aggression. Mean differences were found among comparison groups in all DVs. People with IED plus NSSI and/or SA, people with only IED, and people with only NSSI and/or SA reported higher hostile attribution and negative affect than control participants. People with IED plus NSSI and/or SA and those with only IED reported higher response evaluation than control participants, but not those with only NSSI and/or SA. Lastly, people with IED plus NSSI and/or SA and those with only IED reported higher outcome expectancies and behavior enactment and lower self-efficacy evaluation than those with only NSSI and/or SA and control participants.

Hostile Attribution

The result findings did not support the hypothesis that people with IED plus NSSI and/or SA report the highest hostile attribution, followed by those with only IED, then those with only NSSI and/or SA, and finally control participants. Instead, it was found that people with IED plus NSSI and/or SA, those with only IED, and those with only NSSI and/or SA had similar levels of hostile attribution. This might be due to a common process of how childhood maltreatment causes cognitive deficits, which then contributes to both self- and other-directed aggression (Irigaray et al., 2013; Sinclair et al., 2007; Yang & Clum, 2000).

Childhood maltreatment includes childhood physical, sexual, or emotional abuse

and caregivers' neglect. Exposure to childhood maltreatment is well-researched as associated with IED (Nickerson et al., 2012), NSSI (Nock, 2009), and lifetime suicide risk (Brezo et al., 2008; Hogg et al., 2022). Childhood maltreatment is related to adverse effects on a range of social-cognitive processing issues, including increases in hostile attribution to socially ambiguous interactions (Weiss et al., 1992). When the cognitive effects of childhood maltreatment interact with incompletely developed prefrontal cortical systems among adolescents and young adults, it leads to increased likelihood of risk-taking and impulsive behavior (Lee et al., 2014). Therefore, hostile attribution may be one of the social-emotional processes mediating the effect of childhood maltreatment on self- and other-directed aggression. As IED, NSSI, and SA may share similar etiologic pathways, it is reasonable that people with IED plus NSSI and/or SA, those with only IED, and those with only NSSI and/or SA had similar levels of hostile attribution.

Negative Affect

Likewise, the result findings did not support the hypothesis that people with IED plus NSSI and/or SA report the highest negative affect, followed by either those with only IED or only NSSI and/or SA, and finally control participants. Instead, it was found that people with IED plus NSSI and/or SA, those with only IED, and those with only NSSI and/or SA had similar levels of negative affect. This might be because IED, NSSI, and SA share similar etiologic pathways. It might be due to other factors why some people select IED, NSSI and/or SA, or both.

In addition to social cognitive factors, childhood maltreatment further contributes to emotion dysregulation. Neuroscientific evidence supports that childhood maltreatment

is correlated to subsequent neurobiological abnormalities, such as decreased activity in the frontal cortex and heightened stress response (Kaufman & Charney, 2001). These abnormalities represent a pathway through which childhood maltreatment may lead to disruptions of the trial-and-error learning process, thus contributing to heightened negative affect. IED, NSSI, and SA may share these similar etiological pathways, and these different forms of behaviors may serve the same function to regulate negative affect. Hence, people with IED plus NSSI and/or SA, those with only IED, and those with only NSSI and/or SA had similar levels of negative affect.

Response Evaluation and Decision-Making Processes

The response, evaluation, and decision-making (RED) processes refer to response evaluation, outcome expectancies, self-efficacy evaluation, and behavior enactment in the SEIP model. It was found that people with IED plus NSSI and/or SA and those with only IED evaluate aggressive responses more positively than control participants. It was also found that people with IED plus NSSI and/or SA and those with only IED expect more favorable outcomes from aggressive behavior, feel more efficacious to act aggressively, and engage in more aggressive acts than people with only NSSI and/or SA and control participants.

One possible explanation for these results is that people with NSSI and/or SA do not consider their self-directed aggressive acts as “aggressive” in nature. In U.S. culture, aggression may tend to connote hostile or violent behavior or attitudes directed toward others but not oneself. Thus, even if people with NSSI and/or SA evaluate self-injury or SA positively, expect favorable outcomes from self-injury or SA, feel efficacious to harm

themselves or commit suicide, or engage more in these acts, they may not report in the same way as people with IED plus NSSI and/or SA and those with only IED in the SEIP-Q. Accordingly, people with only NSSI and/or SA do not report significant mean differences from control participants.

Theoretical Contributions

The SEIP model has been used to theorize other-directed aggression for adults that individuals who were abused would develop deficits in their social-emotional information processes, resulting in more aggressive behaviors in social situations (Coccaro et al., 2009, 2016; Coccaro, Fanning, Fisher, et al., 2017; Coccaro, Fanning, & Lee, 2017). Findings from this study reveal that people with IED plus NSSI and/or SA, people with only IED, and people with only NSSI and/or SA reported higher hostile attribution and negative affect than control participants. These results suggest that people with NSSI and/or SA may respond in a similar way as people with IED in hostile attribution and negative affect, thereby supporting the SEIP's potential to explain the hostile attribution and negative affect processes among people experiencing self-directed aggression (e.g., nonsuicidal self-injurious thoughts or behaviors).

Implications for Clinical Practice

One of the most important implications of this study is to use the research results to inform and tailor interventions for people who engage in IED, NSSI, and/or SA. Because this study applies the SEIP model, the clinical implications can be broadly classified into two main categories: namely the social-cognitive processes and the emotional process.

The social-cognitive processes are hostile attribution, response evaluation, outcome expectancies, self-efficacy evaluation of responses, and behavior enactment. For people who engage in IED, NSSI, and/or SA, they may be more likely to attribute hostile intentions to a peer in an ambiguous situation, therefore possibly manifesting in more hostility and anger issues, more skepticism of others' intentions, and generally more cynicism toward the world. When these people seek professional psychological services, the presenting problems may not only include IED, NSSI, and/or SA but also possibly anger management issues, interpersonal difficulties, and cynicism. Practitioners can use cognitive-behavioral therapy (CBT) to help reduce hostile attribution. In particular, cognitive restructuring can be used to reduce hostile automatic thoughts, thus reducing hostile attribution, by helping people with IED, NSSI, and/or SA identify their "anger distortions" and challenge these maladaptive thoughts. Instead of solely attributing the adverse actions toward them with hostile intentions, they can see possible alternate intentions of these actions, such as instrumental (serving as a means of pursuing a purpose) or benign (by accident) nature. Through the process of gathering evidence and developing more balanced thoughts, people with IED, NSSI, and/or SA can lower their hostile attribution, thereby reducing the maladaptive behaviors of IED, NSSI, and/or SA.

Another treatment practitioners can use is schema therapy (Young, 1990). Hostile attribution of intentions to a peer in an ambiguous situation may be originated from the "mistrust/abuse" early maladaptive schema. With mistrust/abuse schema and hostile attribution, these individuals perceive that the harm done toward them is either intentional or the result of extreme and unjustified negligence. Therefore, they may

engage in overcompensation behaviors to treat these peers aggressively (e.g., “get others before they get you”). Practitioners can make use of cognitive techniques to help reduce patients’ hypervigilance to perceived mistreatment or abuse; change their exaggerated view of others as badly intentioned, manipulative, dishonest, or abusive; and educate the possible spectrum of intentions ranging from hostile, instrumental, to benign. After patients learn to identify and change their mistrust/abuse schema and hostile attribution, they can explore and adopt more adaptive means of meeting their own core needs.

Alternatively, practitioners can adopt acceptance and commitment therapy (ACT; Hayes et al., 1999, 2012) to deal with hostile automatic thoughts and hostile attribution. Practitioners can first guide people with IED, NSSI, and/or SA to understand that their hostile automatic thoughts are merely some of the thoughts their minds are telling themselves. They may become fused with such hostile automatic thoughts, which capture their full attention and dictate what they do, resulting in aggressive behaviors, NSSI, and/or SA. Practitioners can specifically teach defusion techniques, such as Just Noticing (Say, “I notice I am having a thought that…”) or Problem Solving (Ask yourself, “Is this thought a helpful thought that will enhance your life in the long-term?”). With these skills, they can feel the loss of impact from the thought and choose not to act on their hostile automatic thoughts and hostile attribution. Instead, they can move forward to connect and engage with the things that make their lives meaningful.

Cognitive-behavioral treatment also includes coping skill training. Under the practitioner’s guidance and supervision, people with IED imagine or reexperience social situations that provide their anger. They are then directed to employ different responses

to the perceived social threat and reduce reactive anger. This kind of training can reduce general favorability of aggressive responses to perceived social threats (Coccaro & Ridder, 2019), thereby reducing aggressive response evaluation, outcome expectancies, and behavior enactment as well as self-efficacy evaluation of aggressive responses. A 12-session cognitive-behavioral treatment specifically developed to treat IED, focusing on cognitive restructuring, relaxation, and coping skills training (CRCST), shows efficacy in reducing aggression, anger, hostile thoughts, and depressive symptoms in a pilot randomized clinical trial (McCloskey, Noblett, et al., 2008).

The emotional process in SEIP model is negative affect, the findings of which offer another important clinical implication. People with IED, NSSI, and/or SA may experience a higher level of subjective, global distress with a range of aversive mood states, including anger, contempt, disgust, guilt, fear, anxiety, depressed mood, and hopelessness. When they seek therapy, the presenting issues may manifest as not only IED, NSSI, and/or SA but also disliking themselves and others, lower self-confidence and self-esteem, extra stress resulting in somatization or health issues, and generally reduced life satisfaction. Practitioners can use evidence-based treatments to reduce negative affect to decrease IED, NSSI, and/or SA. Dialectical behavior therapy (DBT) developed by Linehan (1987) can help individuals cope with stressful life events in this way. Emotion regulation is one of the four modules in DBT. It refers to the "ability to control or influence which emotions you have, when you have them, and how you experience and express them" (Linehan, 2014, p. 323). DBT emotion regulation skills training aims at increasing understanding of one's own emotions and practicing skills to

regulate these emotions to decrease the intensity and frequency of negative affect. The most recent meta-analysis on DBT (Decou et al., 2019) covering 18 randomized clinical trials supports that DBT is effective for treating self-directed aggression, including NSSI and SA. Moreover, Brown et al. (2013) find that DBT is effective in treating participants with self-injury and IED.

Emotion-focused therapy (EFT) developed by Greenberg (Greenberg, 2002; Greenberg & Johnson, 1988) is informed by understanding the role of emotion and is designed to help patients become aware of and make productive use of their emotions. Unlike DBT (which seeks to alleviate negative affect through skills training while leaving negative affect undisclosed and unexperienced), EFT aims at using various techniques to help patients explore their negative affect and articulate associated unmet needs or underlying meanings, thus bringing about emotional transformation. Although emotional transformation is not merely about reducing negative affect, research shows solid evidence in this aspect. For example, the EFT technique of labeling affect is associated with reduced activity in the amygdala (Lieberman et al., 2007). Studies (e.g., Pascual-Leone, 2009) show that such effective emotional processing was associated with steady improvement in affect and progressively shortened emotional collapses.

Limitations

Our study should be interpreted in light of its limitations. First, this study adopted a descriptive survey-based comparison groups design using archival data and had four comparison groups with unequal sizes. Such unequal sizes have led to violating the homogeneity of variance assumption in one-way ANOVA. Moreover, the differences in

group sizes may have undermined the statistical power to detect mean differences for the total sample size. The standard one-way ANOVA was still conducted because ANOVA is a robust statistic against the violation of the homogeneity assumption, given appropriate post hoc tests are used (Shingala & Rajyaguru, 2015). Therefore, the Games-Howell post hoc test was used as it works well with unequal sample sizes and unequal variances with the maximum unequal sample size ratio of 1:5 while having higher power than other post hoc tests (Sauder & DeMars, 2019). The unequal group size ratio was further limited to 1:5 in our sample, so the size of the larger groups (only IED group and control participants group) was limited to 140. Future studies may use equal size for all comparison groups with matching demographic variables, including gender, age, and socioeconomic status scores, to maximize the statistical power to detect mean differences.

Second, the main questionnaire used in this study is the SEIP-Q, questions which are primarily related to overt or relational aggression directed toward others. Although human aggression is defined as physical or verbal injury to self, others, or objects, the SEIP-Q lacks questions and assessments directly related to self-directed aggression. In future studies, the SEIP-Q may first need to be revised to include questions relevant to self-directed aggression.

Third, this study might be compromised by selection bias. The comparison groups differ significantly in terms of socioeconomic status, gender, education, and ethnicity. Without the use of any sophisticated sampling technique, the samples were regarded as predetermined. It might not be able to ascertain the outcome due to the classification of

other- and self-directed aggression versus the demographic variables. In future studies, demographic variables should be matched, or techniques like propensity score matching should be used.

Finally, as the samples in this study were not representative samples or matched with the census population of the United States, this study might be subject to external validity threat of sample characteristics. Our results might not be extended to subjects whose characteristics may differ from those included in the investigation. Furthermore, the SEIP-Q is a new measure with eight written vignettes of interesting, socially ambiguous situations (Coccaro, Fanning, & Lee, 2017), which may restrict the results to the context in which that is novel or new in this way. Finally, there might be questions on the extent to which the results could extend to other measures, settings, or assessment occasions than those included in this study.

Conclusions

This study found that people with IED plus NSSI and/or SA, people with only IED, and people with only NSSI and/or SA reported higher hostile attribution and negative affect than control participants. Our results may not only support expanding the SEIP's potential to explain the hostile attribution and negative affect processes among people experiencing self-directed aggression but also provide important insight for developing tailored interventions targeting specific social-emotional processes. For example, individuals with IED, NSSI, and/or SA could use CBT cognitive restructuring, schema therapy cognitive techniques, and ACT defusion skills to reduce hostile attribution, and those with IED can use CBT coping skills to decrease general favorability

of aggressive responses to perceived social threats. People with IED, NSSI, and/or SA can further use DBT emotion regulation or EFT emotional transformation interventions to reduce negative affect. Future directions of studies may include specific assessments of self-directed aggression in the SEIP model.

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Appendix A

Written Informed Consent

THE UNIVERSITY OF CHICAGO
The Division of the Biological Sciences The University of Chicago Hospitals

CONSENT BY SUBJECT FOR PARTICIPATION IN RESEARCH PROTOCOL

Protocol Number: **14328B** **Subject's Name: _____**

Title of Protocol: **Social Information Processing: Assessment Development**

Doctor Directing Research: **Emil Coccaro, M.D.**
Phone: 773-834-4083
5841 S. Maryland – MC3077,
– Chicago, IL, 60637

You are being asked to participate in a research study. A member of the research team will explain what is involved in this study and how it will affect you. This consent form describes the study procedures, the risks and benefits of participation, as well as how your confidentiality will be maintained. Please take your time to ask questions and feel comfortable making a decision whether to participate or not. This process is called informed consent. If you decide to participate in this study, you will be asked to sign this form.

I. WHY IS THIS STUDY BEING DONE?

In this study we are trying to develop a new assessment instrument to measure social information processing styles in people with and without aggression problems. Social information processing involves making judgments about people's actions and intentions, and has been found to be different in people with disorders of aggression. The social information processing assessment instrument will require you to either view pictures or video clips of social interactions between two or more people and make judgments about their behaviors.

How many people will take part in this study: We expect to enter 200 subjects into the study total. Of these, 100 will be healthy volunteers (subjects without anger disorders) and 100 will be subjects with aggression problems.

II. WHAT IS INVOLVED IN THE STUDY?

During this study, Dr. Coccaro and his research team will collect information about you for the purposes of this research. No data will be collected from your medical record. The data collected during the screening process and during the actual study are being collected in order to provide data for the research study. The types of data collected include personal information about you, psychological information gathered

from questionnaires and interviews, biological data collected by blood tests, and cognitive and physiological data collected during performance of computer tasks. Outlined below are the "Visits" involved in this study and the specific kinds of data being collected:

Visit #1: Questionnaires and Screening: If you agree to take part in this study you will first be asked to complete some brief questionnaires and to meet with one of our study staff to determine if you are eligible to take part in this study. This screening visit will take approximately 60 to 90 minutes. If you pass the screening visit, you will be asked to return for a full behavioral evaluation lasting approximately three (3) hours. You will also be given a medical history evaluation.

Visit #2: Full Behavioral Assessment . During this visit you will take part in a series of interviews about your feelings, thoughts, moods, impulses, and behavior. The interviews can take up to three hours. If these interviews are not completed during this visit they can be continued over the next few weeks, or over the telephone if necessary, until completed. Some of the questions may be of a personal and/or sensitive nature. For purposes of research and supervision of research, we would like to record these interviews (videotaped or audio taped); the videotapes or audiotapes will be kept in locked cabinets until at least 10 years after the end of the study.

Please initial the space below granting, or not granting, permission for the videotaping of your diagnostic interview:

____ I consent for my interview to be videotaped.

____ I do not consent for my interview to be videotaped.

At both Visit 1 and 2 you will also be given a medical history evaluation, a urine drug test, and a breathalyzer test. A negative drug test and breathalyzer test are required to continue during both visits. If you are found to be eligible to take part in this study, you will be given a questionnaire booklet to complete at home and bring back to the study staff. The questionnaire booklet will take about (3) three hours to complete, but you will do this at home and bring it back to us by Visit #3. These questionnaires are part of the Full Behavioral Assessment. If it is determined that you are not eligible to take part in this study, you will be referred for further evaluation and possible treatment to a clinical treatment program. If the results of this evaluation and of these tests reveal that you qualify for the study either as a healthy control or an aggression-disordered subject, we will schedule you for further visits. The evaluation may reveal that you have a different psychiatric disorder excluding you from this study. If this is the case, we will inform you of this diagnosis, following which you may request clarification from study staff, who can arrange for you to meet with a psychiatrist or psychologist to discuss the results of

the evaluation. If it is determined that you are not eligible to take part in this study, you will be referred for further evaluation and possible treatment to a clinical treatment program, if appropriate.

Visit #3: Computer Tasks. With time for breaks, this testing session, with four (4) tasks, will take about two (2) hours to complete. These tasks will include: a) Social Information Processing Task in which you will view video clips of social interactions between two or more people and make judgments regarding their behaviors, b) Emotion Picture Rating Task in which you will be asked to view pictures and listen to sounds on computer while rating them based on your positive or negative emotional reaction, c) Spatial Learning Task in which you will view pictures on computer and predict the location of a picture on the computer screen based on information provided in previous pictures, d) Emotional Faces Task in which you will view pictures of human faces on computer and identify the emotion and intensity of the emotion associated with the facial expression.

You should be aware that prior to undergoing the computer tasks session you will be given breathalyzer and urine drug tests to assure that you are not under the influence of alcohol or drugs during this study session. If you do not pass these two drug tests you will not undergo this study session and, only after the study doctors have determined that it is safe for you to leave our unit, will you be released to go home. You may return home by having a relative or friend pick you up or by a car service that we arrange. In this case, you may be rescheduled for these tasks. However, if you fail the drug tests again you may be terminated from this research project. Regardless, no record will exist indicating that failed the drug tests on either occasion.

Visit #4: Social Information Processing Re-test. Some subjects will be asked to return to the laboratory to re-take the Social Information Processing Task a second time no less than 6 months following Visit #3. This is to ensure the stability of the task over time. Subjects will be selected at random for Visit #4, which will take approximately 45 minutes to complete.

How long will I be in this study: This study includes two (2) visits for a diagnostic screen and behavioral evaluation lasting approximately two (2) and three (3) hours, respectively. If you are eligible for the study following completion of the behavioral evaluation, you will be invited back for one (1) or two (2) more visits lasting approximately two hours total, and scheduled approximately two to six months apart. Dr. Coccaro may take you off of the study without your consent if:

- You are unable to meet the requirements of the study;
- Your medical condition changes;
- New information becomes available that indicates that participation in this study is not in your best interest; or
- If the study is stopped.

If the study doctors judge you to be dangerous to yourself or others you will be withdrawn from the study and may be admitted to the hospital until you are no longer a danger to yourself or others. We will warn anyone to whom you may pose a danger.

III. WHAT ARE THE RISKS OF THE STUDY

1. *Behavioral Tasks*. There are no physical risks specifically related to doing the four computer tasks. However, you may get bored or frustrated during the sessions. Some of the pictures you will view contain images that some people may find offensive or distressing. You may refuse to view the pictures at any time. Clinical staff will debrief you following the computer tasks.

2. *Full Behavioral Assessment*. The "Full Behavioral Assessment" is being conducted for research purposes and is not being done for any treatment purposes. The Full Behavioral Assessment is administered as a research procedure in the context of this study to fully describe the people who take part in this study. While there are no known risks associated with the diagnostic interviews or the paper and pencil questionnaires, you may become bored or fatigued completing the interviews and questionnaires.

3. *Confidentiality*. Study records that identify you will be kept confidential. All information obtained during this study is strictly confidential and the information will be kept secure in locked cabinets. Only people involved in this project and working with Dr. Coccaro (the Director of the Study) will be able to see this information. For regulatory and safety purposes the data may be available to the following agencies. Your records may be reviewed by federal agencies whose responsibility is to protect human subjects in research including the Food and Drug Administration (FDA) and Office of Human Research Protections (OHRP). In addition, representatives of the University of Chicago, including the Institutional Review Board, a committee that oversees the research at the University of Chicago, may also view the records of the research. If your research record is reviewed by any of these groups, they may also need to review your entire medical record. You should know that we are required by law to report information about ongoing acts of child abuse to the authorities. This does not include acts that may have occurred to you in your childhood.

IV. ARE THERE ANY BENEFITS TO TAKING PART IN THIS STUDY?

If you agree to take part in this study, there may not be any direct medical benefit to you. It may, however, add to psychiatric knowledge so that treatments may be improved for the benefit of future patients.

V. WILL I BE PAID FOR MY PARTICIPATION?

You will receive financial compensation for your time involved in this research activity as follows: a) $50 for the diagnostic interview, b) $25 for the questionnaire booklet; c) $25 for the testing session c) $25 for the re-test session for those subjects selected for a fourth visit and d) $25 as a bonus for completing all study tasks. This means that there is a maximum compensation of $150 if you complete all procedures in this study. Completion of only part of the study will result in a smaller payment depending on what

parts of the study were completed. These funds are intended to compensate you for your time spent participating in this project.

VI. WHAT ARE THE COSTS?

You will not incur any costs in participating in this research study.
If you suffer an unanticipated injury as a direct result of this research and require emergency medical treatment, the University of Chicago Medical Center will provide such treatment at the University of Chicago Medical Center at no cost to you. Costs of related non-emergency care for an unanticipated research injury will be covered if that care is provided at the University of Chicago Medical Center. You must notify Dr. Emil F. Coccaro as promptly as possible after your injury in order to receive this care. An injury is "unanticipated" if it is not one of the known effects of a study drug, medical device or procedure. If you think that you have suffered a research related injury, you must let Dr. Emil F. Coccaro know right away.

VII. WHAT OTHER OPTIONS ARE THERE?

You may choose not to participate. The decision whether or not to participate in this study will not affect your care at the University of Chicago Hospitals.

VIII. WHAT ABOUT CONFIDENTIALITY?

During the study, Dr. Coccaro and his research team will collect the following information about you for the purposes of this research: name, address, social security number (required to issue payment), date of birth, age, gender, ethnicity, and phone/fax/e-mail contact information, answers from basic behavioral questionnaires, your medical history, results from behavioral tasks, behavioral assessments and questionnaires used during the study. Your social security number is necessary to issue payment, and will be disclosed to the Comptroller's Office, along with your name, in order to process payment.

General. All information obtained during this study is strictly confidential. However, if there is a risk of serious harm to yourself or others, we would attempt to get you or others the appropriate help. In addition, we are not prevented from taking steps, including reporting to authorities, to prevent serious harm to yourself or others. For example, if the study staff determines that you are a danger to yourself or others the study staff will inform law enforcement and/or social service authorities who will then take appropriate action. All information will be maintained and stored in source document binders, electronic files and in a computer database at the University of Chicago which is accessible only by the research team. Videotapes and audiotapes will be kept in locked cabinets, available only to the study personnel. Data that may be reported in scientific journals will not include any information that identifies you as a subject in this study.

Disclosure of Protected Health Information. Study records that identify you will be kept confidential. The data collected in this study will be used for the purpose described in the form. By signing this form, you are sharing some Protected Health

Information with the research team. Protected Health Information (PHI) consists of any health information that is collected about you, which could include your medical history and new information collected as a result of this study. The research team includes the individuals listed on this consent form and other personnel involved in this study at the University of Chicago. Your records may be reviewed by federal agencies and by agencies whose responsibility is to protect human subjects in research including the Food and Drug Administration (FDA) and the Office of Human Research Protections (OHRP). In addition, representatives of the University of Chicago, including the Institutional Review Board, a committee that oversees the research at the University of Chicago, may also view the records of the research. In order to process your payment, we must disclose your name, address and social security number to the University of Chicago Comptroller's office.

During your participation in this study, you will have access to you medical record. Dr. Coccaro does not have access to your medical record as part of this study. The study results will be kept in your research record and be used by the research team forever. Data from this study may be used in medical publications or presentations. Your name and other identifying information will be removed before this data is used. If we wish to use identifying information in publications, we will ask for you approval at that time.

This consent form document will be kept by the research team for at least 6 years.

IX. WHAT ARE MY RIGHTS AS A PARTICIPANT?

Taking part in this study is voluntary. If you choose not to participate in this study, your care at the University of Chicago/University of Chicago Hospitals will not be affected. You may choose not to participate at any time during the study. Leaving the study will not affect your care at the University of Chicago/University of Chicago Hospitals.

If you choose to no longer be in the study and you do not want any of your future health information to be used, you must inform Dr. Coccaro in writing at the address on the first page. Dr. Coccaro may still use your information that was collected prior to your written notice.

You will be given a signed copy of this document.

This consent form does not have an expiration date.

X. WHO DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

You have talked to one of the research personnel about this study and you had the opportunity to ask questions concerning any and all aspects of the research. If you have further questions about the study, you may call Dr. Coccaro's office at 773-834-4083.

If you have a research related injury, you should immediately contact Dr. Emil Coccaro by paging him. Dial 773-753-1880, PIN #4425.

If you have any questions concerning your rights in this research study you may contact the Institutional Review Board, which is concerned with the protection of subjects in research projects. You may reach the Committee office between 8:30 am and 5:00 pm, Monday through Friday, by calling (773) 702-6505 or by writing: Institutional Review Board, University of Chicago, 5751 S. Woodlawn Ave., McGiffert Hall,

Chicago, Illinois 60637.

XI. CONSENT

SUBJECT: The research project and the procedures associated with it have been explained to me. The experimental procedures have been identified and no guarantee has been given about the possible results. I will receive a signed copy of this consent form for my records.

I agree to participate in this study. My participation is voluntary and I do not have to sign this form if I do not want to be part of this research study.

Signature of Subject: _____

Date: _____ Time: _____ AM/PM (Circle)

PERSON OBTAINING CONSENT: I have explained to _____ the nature and purpose of the study and the risks involved. I have answered and will answer all questions to the best of my ability. I will give a signed copy of the consent form to the subject.

Signature of Person Obtaining Consent: _____

Date: _____ Time: _____ AM/PM (Circle)

INVESTIGATOR/PHYSICIAN:
Signature of Investigator/Physician _____

Date: _____ Time: _____ AM/PM (Circle)

Appendix B

Demographic History Interview

DEMOGRAPHIC HISTORY INTERVIEW V4.0

I.D. #:_____ **D.O.B.:**_____/_____/_____ **Age:**_____ [id/dob/agertg]

Sex (circle)**: 1= Male 2 = Female** [sex]

Date of Interview:_____/_____/_____ **Interviewer:** _____ [datertg / rater]

Name of Subject:_____ [frstname/lastname]

Type of Interview: [typeintv]

1 = Face-to-Face Interview
2 = Phone Interview

Race (observed)		**Religion**	**Childhood**	**Current**	[race / relchild / relign_c]
White	1	Catholic	1	1	
Black	2	Protestant	2	2	
Asian	3	Jewish	3	3	
Hispanic	4	Other	4	4	
Native American	5	Not Affiliated	5	5	
Other	6				

Level of Education Obtained [educatn]

Completed Graduate Professional Training	7
Standard College / University Graduate	6
Partial College Training	5
High School Graduate	4
Partial High School (10^{th} -11^{th} grade)	3
Junior High School (7^{th} - 9^{th} grade)	2
Under 7 Years of Schooling	1

If subject failed to complete a program in which enrolled: **Why didn't you finish?** [whynofin]

Detailed Occupational History

Which of the following best describes your current employment status? [cur_emp]

Unemployed	0
Employed	1
Full-Time Student	2
Disabled (record disability here:_____)	3
Retired	4
Receiving public assistance for childcare (welfare)	5
Not working in order to care for my child, not receiving public assistance	6

What is your current / last occupation? _____ [cur_occ]

[To be coded on p. 12 for calculation of Hollingshead Index (non-students)]

How long have you been / were you at that job?_____total month(s) [long_emp]

If anything other than employed:
How are you currently supporting yourself?_____ [how_supp]

If unemployed:
Why are you not working now?_____ [whynowrk]

As an adult, was there ever a time when you were unemployed, that is, when you didn't work or go to school?
0 = No 1 = Yes [unemply]

If yes,
How many times were you unemployed?_____ [num_unem]

How many times have you been fired from a job?_____ [num_fire]

If>0,
Where were you fired on this / these occasions?
[Reasons fired: Code 3 most recent firings using scale below and provide some detail on the right.]

	Details	
Most recent		[rsn_fire]
2nd most recent		[rsn_fir2]
3rd most recent _____		[rsn_fir3]

1 = Verbal outbursts
2 = Physical outbursts
3 = Damaging property (intentionally)
4 = Multiple aggressive outbursts, including more than one form of aggression
5 = Other aggression-related reason for being fired
6 = Stealing
7 = Other non-aggressive reason for being fired
-2 = NA (never fired)

Have you been in active military duty? 0 = No [military]
If yes,
What type of discharge did you received? 1 = Yes, Honorable Discharge [discharge]
2 = Yes, Dishonorable Discharge
3 = Yes, Medical Discharge
4 = Yes, General Discharge

Marital History

What is your current marital status? [marital]

Never Married	1
Married	2
Separated	3
Divorced	4
Widowed	5
Remarried	6
Common Law	7

What is the length of your current marriage / relationship? _____ year(s) [lgthrel]
What is the longest relationship you have ever been in? _____ year(s) [lngstrel]

Subject

Number of marriages (including current marriage): _____ [nummar_s]

Number of divorces: _____ [numdiv_ s]

Do you have any children? *If yes:* **How many?** _____ [numchild]

Home environment of subject

With whom do you currently live? [home_env]

Alone	1
With partner, but not legally married (for at least 6 months)	2
In own home with spouse and/or children	3
In home with parents or children	4
In home of sibling(s) or other non-lineal relative(s)	5
In shared home with other relative(s) or friend(s)	6
Treatment facility (specify): _____	7
Other: (specify): _____	8

What is the education level of your spouse? [edu_spou]

Completed Graduate Professional Training	7
Standard College / University Graduate	6
Partial College Training	5
High School Graduate	4
Partial High School (10^{th} – 11^{th} Grade)	3
Junior High School (7^{th} – 9^{th} Grade)	2
Under 7 years of schooling	1
N/A (Not married)	-2
No Information (Don't know)	-9

Spouse's Occupation: _____ [spousocc]
[Enter –2 if not married; to be coded on p. 12 for calculation of Hollingshead Index (non-students)]

Annual Family Income
What is your family's annual income from all sources combined, before taxes? If you are a full-time student receiving financial support from you parents, please give your parents' income. Do not include loans.

ESTIMATE FOR MOST RECENT YEAR. [famincom]

Less that $2,000	01	$15,000-17,000	13
$2,000-2,999	02	$17,500-19,999	14
$3,000-3,999	03	$20,000-24,999	15
$4,000-4,999	04	$25,000-34,999	16
$5,000-5,999	05	$35,000-49,999	17
$6,000-6,999	06	$50,000-69,999	18
$7,000-7,999	07	$70,000-99,999	19
$8,000-8,999	08	$100,000 and over	20
$9,000-9,999	09	Refused to answer	21
$10,000-12,499	10	Don't know	-9
$12,500-14,999	11		

Family History

Were you adopted? 0=No 1=Yes [adopted]

Were your parents (biological or adoptive) ever married?
0 = No 1 = Yes -9 = Don't know [prntmard]

Did they stay together, did they divorce, or did they otherwise permanently separate? [pstaymar]

Stayed together	0
Divorced	1
Separated (no divorce)	2

If divorced/ separated:

How old were you when your parents stopped living together?_____ [agesepar]

If not already known:

Were you raised by both of your parents throughout most of your childhood? [raisx2pn]
0 = No 1 = Yes

If no: **Who raised you?**

1 = Mother only	6 = Sibling [whoraisd]
2 = Father only	7 = Family friend
3 = Parents- joint custody	8 = Foster parents
4 = Grandparent	9 = Adopted
5 = Aunt or Uncle	10 = Other

If no (cont'd): [NOTE: Use scoring system below to code for mother and father.]

After your parents stopped living together…
How often did you see your mother? _____ [relncmom]

How often did you see your father? _____ [relncdad]

1= Daily to weekly
2 = One to three times a month
3 = Only once every two to six months
4 = Less than twice a year
5 = Did not see with any regularity (e.g., a few times in lifetime OR once every five years)
6 = No relationship with parent
7 = Parent deceased (reason for non-relationship; otherwise, circle 6)

Has anyone of significance to you passed away? 0 = No 1 = Yes [relnoncp]

If yes: **What relatives or significant others did you lose?**

	Loss				
Relation	**No**	**Yes**	**Your age at loss**		
Father	0	1	_____	year(s)	[daddied / adaddied]
Mother	0	1	_____	year(s)	[momdied / amomdied]
Primary Caretaker	0	1	_____	year(s)	[crtdied / acrtdied]
Grandparent	0	1	_____	year(s)	[gprtdied / agdpdied]
Sibling	0	1	_____	year(s)	[sibdied / asibdied]
Sibling Stillbirth	0	1	_____	year(s)	[sibstill / asibstil]
Other Relative	0	1	_____	year(s)	[othrdied / aothrdie]
Close Friend	0	1	_____	year(s)	[fnddied / afnddied]

*[*Note: If there are multiple losses within the same category, indicate age at first loss within that category.]*

	No	**Yes**	
[CODE: Before age 15, had the subject lost anyone of significance?]	0	1	[loss15]

First Degree Biological Relatives

I would now like you to identify the members of your biological family and to tell me some basic information about them

	Anger/Aggression	Alcohol/Substance Use	Psych or Mental Health Problem/Diagnoses	Treatment History
Mother				
Father				
Siblings				
Children				

Parental Employment
[To be used in calculation of Hollingshead Index for full-time students; see p. 12]

Father's current / most recent occupation:_____
[dadjob]

Mother's current / most recent occupation:_____
[momjob]

[NOTE: Use scoring system below to code education for mother and father. If subject was adopted, ask for educational level of adopted parents and score below.]

Level of Education Obtained by Rearing Parents			
Completed Graduate Professional Training	7	Father's Educational Level:	
Standard College / University Graduate	6	_____	[dadsed]
Partial College Training	5		
High School Graduate	4	Mother's Educational Level:	
Partial High School (10^{th} -11^{th} grade)	3	_____	[momsed]
Junior High School (7^{th} - 9^{th} grade)	2		
Under 7 Years of Schooling	1		
N/A (e.g., single parent home, orphanage)	-2		
Don't know	-9		

Childhood History

Before age 15, did you sleepwalk, stammer, or stutter? Did you wet the bed after age 5?

	No	**Doubtful**	**Yes**	
Sleepwalking	0	1	2	[sleepwlk]
Stammering or stuttering	0	1	2	[stutter]
Enuresis after 5^{th} birthday	0	1	2	[enuresis]

(for women only)
At what age did you begin menstruation? _____years [menses]

Did you have any difficulty learning in school? [learndif]
If yes: **What kinds of problems? Were you ever placed in special classes or school?**

No	0
Slow learner, but kept in regular classes	1
Slow learner, put in special classes	2
Placed in special school	3

	NO	**YES**	
Ever diagnosed L.D.?	0	1	[dx_ld]
Ever left back?	0	1	[leftback]

Explain:_____

As a child (before age 15), did you find it difficult to concentrate or sit still in school? [concentr]

No problem	0
Some difficulty	1
Hyperactive, restless in school	2
Diagnosed as hyperactive	3
Treated with stimulants as a child	4

Did you have any behavioral problems in school? [behvrprb]

If yes: **What kinds of problems? Did your behavior ever get you into trouble?**

Never any trouble	0
Minor detentions	1
Suspensions	2
Expulsions	3
Special school for behavioral problems	4

	No	Yes	
Before you were 10, did you have a lot of fights with peers?	0	1	[fights]
Before you were 10, were you rejected by your peers?	0	1	[rejected]

Arrest History [indicate # of times (if zero, indicate so) and list reasons below]

Juvenile Arrests:	_____	[juvarres]
Juvenile Convictions:	_____	[juvconvc]
Adult Arrests:	_____	[adultarr]
Adult Convictions:	_____	[adultcnv]
Total time in jail:	_____month(s)	[timejail]
Reasons:		[jailreason]

Any arrests related to aggressive behaviors? 0 = No 1 = Yes [aggarrst]

Brief Health History

Have you ever had any serious health problems? 0 = No 1 = Yes [health]
List:

How about…	NO	YES	
Epilepsy?	0	1	[epilepsy]
Migraine Headaches?	0	1	[mheadach]
Convulsions? (due to high fever)	0	1	[convulsn]
Head Injuries	0	1	[headinjy]

If yes to HEAD INJURIES, ***GO TO TBI SCREEN.***

Perinatal complications:

	NO	YES	
1. Did you mother have any complications during her pregnancy or at the time you were born?	0	1	[prepericomps]
2. Was it a full term pregnancy?	0	1	[fulltermpreg]
3. Did your mother use any alcohol or drugs during pregnancy?	0	1	[alcdrugpreg]

Psychiatric Treatment History

*Ask if the subject has **ever** seen **anyone** for emotional, psychiatric, alcohol, or drug problems. If positive, record the details and chronology (e.g., who, why, how often, other times).*

Outpatient Treatment

Include medication and therapy:	Don't know / refused	-9	[outpatnt]
	No contact	0	
	Consultation or brief period of treatment	1	
	Continuous treatment for 6 months or several brief periods	2	
	Continuous treatment lasting one year or more OR numerous brief periods	3	

Age at first outpatient contact:_____year(s) [ageoutpt]

Inpatient Treatment

Total time of psychiatric hospitalization OR best estimate: [hospital]

Don't know/Refused	-9
Never hospitalized	0
Less than 1 week	1
Less than 1 month	2
Less than 3 months	3
Three months to one year	4
More than 1 year	5

Age at first hospitalization_____year(s) [age_hosp]
Number of psychiatric hospitalizations_____ [num_hosp]

Untreated Psychopathology

Were there any other times when you or someone else felt you needed help because of your feelings or because of the way you were acting?

0 = No, never any time wherein someone thought subject needed treatment [untreat]
1 = Yes, someone felt subject could benefit from treatment of some sort

NOTES:_____

Medications

Have you ever taken any medication by prescription to help you sleep better or to change your mood (i.e., sleeping pills, tranquilizers, stimulants, or other such drugs)? *[Circle the names of specific substances.]*

	Ever		Last 3 weeks		
	No	Yes	No	Yes	
Sedatives for insomnia or calming nerves (Phenobarbital, Nembutal, Seconal, Restoril, Halcion, Amytal)	0	1	0	1	[sedatv_e/sedatv_3]
Stimulants for energy, staying awake, weight reduction (amphetmaine, Dexedrine, Ritalin, Benzedrine, Biphetamine, Methdrine, Preludin)	0	1	0	1	[stimln_e/stimln_3]
Minor Tranquilizers (Miltown, Librium, Valium,Buspar, Xanax, Vistaril)	0	1	0	1	[mintrq_e/mintrq_3]
Major Tranquilizers (Thorazine, Stelazine, Mellaril, Haldol, Clozaril, Prolixin, Sparine, Trilafon, Resperidol)	0	1	0	1	[majtrq_e/majtrq_3]
Antidepressants (Tofranil, Elavil, Aventyl, Nardil, Prozac, Paxil, Zoloft, Parnate, Wellbutrin, Effexor, Serzone)	0	1	0	1	[antidp_e/antidp_3]
Lithium, Depakote, Tegretol	0	1	0	1	[lithm_e/lithm_3]
Other Antipsychotic Drugs (specify)	0	1	0	1	[antpsy_e/antpsy_3]

_____

(Specify amount, duration, and when last taken)

_____

_____

Caffeine/Alcohol/Cigarette Usage

I am going to name some substances, and I want to know the total amount of time in your life you have used each.

(If used a total of 3 or fewer times, enter zero and skip next questions about average amount and last 3 weeks)

Averaging over the total time you used_____(e.g., coffee), about how many_____(e.g., cups) would you have in a week? Have you had any_____(e.g., coffee) in the last three weeks (even if only once)?

(If less than one, use a decimal [e.g., if one every month, enter .25])

	Years used:	Average/week:	Last 3 weeks No	Yes	
Coffee/Caffeinated Beverages	_____	_____ cup(s)	0	1	[coffyrs/ cupsawk/ caff_3]
Wine	_____	_____ glass(es)	0	1	[wineyrs/ glasawk/ wine_3]
Beer	_____	_____ can(s)	0	1	[beeryrs/ cansawk/ beer_3]
Other Alcoholic Beverages	_____	_____ shot(s)	0	1	[alcyrs/ shotsawk/ alc_3]
Cigarettes	_____	_____ pack(s)	0	1	[cigyrs/ packsawk/ cig_3]

History of Family Aggression
When you were growing up:

1) Did you ever see your parents (parent figures) hit each other? **No** 0 **Yes** 1 **N/A** (only 1 parental figure) -2 [prnt_hit]

a) **father / father figure hit mother / mother figure?** [dad_hit]
0 = Never
1 = Sometimes
2 = Frequently
3 = Often
-2 = N/A (only 1 parental figure)

b) **mother / mother figure hit father / father figure?** [mom_hit]
0 = Never
1 = Sometimes
2 = Frequently
3 = Often
-2 = N/A (only 1 parental figure)

2) Did your parents use physical punishment as a form of discipline?

Father to subject:
0 Never
1 Physical punishment, not abusive
2 Excessive physical punishment
3 Beaten with belts, objects; bruising
4 Severe abuse (hosp tx, DSS, charges)
-2 N/A (e.g., no father figure)

Father to other children: [dadpyy_s/dadphy_o]
0 Never
1 Physical punishment, not abusive
2 Excessive physical punishment
3 Beaten with belts, objects; bruising
4 Severe abuse (hosp tx, DSS, charges)
-2 N/A (e.g., no father figure or no siblings)
-9 Don't know

Mother to subject:
0 Never
1 Physical punishment, not abusive
2 Excessive physical punishment
3 Beaten with belts, objects; bruising
4 Severe abuse (hosp tx, DSS, charges)
-2 N/A (e.g., no father figure)

Mother to other children: [momphy_s/momphy_o o]
0 Never
1 Physical punishment, not abusive
2 Excessive physical punishment
3 Beaten with belts, objects; bruising
4 Severe abuse (hosp tx, DSS, charges)
-2 N/A (e.g., no father figure or no siblings)
-9 Don't know

Did you or any of your siblings experience any form of abuse growing up (physical, emotional, sexual)? *[Describe: perpetrator, victim, type of abuse]:*

Abuse to self: 0 = No abuse [abuse_sf]
1 = Physical abuse
2 = Emotional abuse
3 = Sexual abuse
4 = Multiple forms of abuse (emotional and/or physical and/or sexual)
-9 = Participant does not know (e.g., fuzzy memory of possible sexual abuse, not sure)

Abuse to siblings: 0 = No abuse [abuse_sb]
1 = Physical abuse
2 = Emotional Abuse
3 = Sexual abuse
4 = Multiple forms of abuse (emotional and/or physical and/or sexual)
-9 = Participant does not know
-2 = Not applicable, no siblings

Subject Report of Aggression

Sometimes when people get into fights and arguments, or are very stressed, they do things that they would not otherwise do. Did you ever do something physical to your spouse/partner like shoving, hitting, slapping, grabbing, or even threatening to get physical?

0 = No 1 = Yes [ag_o_evr]

If yes, **Approximately how many times did that occur?_____** [num_agg]
(Ask for appropriate time periods)

And of those times, how many occurred…

With your current partner (spouse) during the past year? _____ [prior_yr]

With your current partner (spouse) prior to the past year? _____ [cmr_agg]

With a previous partner? _____ [othrelag]

If yes and married:
With your spouse prior to being married, when you were dating/engaged? _____ [pmrtl_ag]

Non-Relationship Physical Fighting

As an adult (>18), outside of your romantic relationships, have you ever been in physical fights, or physically hit someone when not in a fight?

No = 0 Yes = 1 [agnonrel]

Number of times:_____
[numfight]

With men? 0 = No 1 = Yes With women? 0 = No 1 = Yes [fightmen / fightwom]

Current Stressors

1. What led to your coming here today?

2. Have you had any other problems or difficulties recently?

3. Have there been any major changes in your life recently?

END INTERVIEW HERE

****

[Note: If subject is a full-time student, use occupation and education from mother and father (from Pedigree- see p. 6).]

Subject's (or Dad's in case of student) Occupation:		[suboccup]
Higher executive, proprietor of large concern, major professional	9	
Business manager of large concern, proprietor of medium-sized business, lesser professional	8	
Administrative personnel, owner of small independent business, minor professional, farmer	7	
Technicians, semi-professionals, small business owners	6	
Clerical, sales, small farms, small business owner	5	
Smaller business owner, skilled manual worker, tenant farmers	4	
Machine operator, semi-skilled workers	3	
Unskilled workers	2	
Farm laborers, menial service workers	1	
Unemployed	0	

Spouse's (or Mom's in case of student) Occupation:		[spocccupa]
Higher executive, proprietor of large concern, major professional	9	
Business manager of large concern, proprietor of medium-sized business, lesser professional	8	
Administrative personnel, owner of small independent business, minor professional, farmer	7	
Technicians, semi-professionals, small business owners	6	
Clerical, sales, small farms, small business owners	5	
Smaller Business owner, skilled manual worker, tenant farmers	4	
Machine operator, semi-skilled workers	3	
Unskilled workers	2	
Farm laborers, menial service workers	1	
Unemployed	0	
Subject is not married	-2	

STOP DATA ENTRY HERE

HOLLINGSHEAD Calculation

Subject's Occupational Title:

Factor:	Scale Score	X	Factor Weight	=	Score X Weight
Occupation		X	5	=	
Education		X	3	=	+_____

Total Score _____ [subjhh]

***Spouse's Occupational Title*:**

Factor:	Scale Score	X	Factor Weight	=	Score X Weight
Occupation		X	5	=	
Education		X	3	=	+_____

Total Score _____ [spousehh]

Computer will tally the total Hollingshead Index. [totalhh]

Appendix C

SCID-I: Interview Questions for DSM-5 IED

INTERVIEW QUESTIONS FOR: DSM-5 IED

(RESEARCH / PHENOMENOLOGY VERSION: RPV 1.5)

Subject _____ Site _____Rater _____ Date _____

GATE: **Many people, at some time in their lives, have had a verbal argument with someone, yelled or cursed at someone, thrown or broken things, pushed, shoved or hit someone.**

1. Since 18 years of age, have you ever had a verbal or physically aggressive outburst directed at someone or something? By this, I mean an intense verbal argument with someone, a temper tantrum, or an episode where you threw or broke something, or you hit, slapped, pushed, or shoved someone?

NO YES

***** If *NO* STOP INTERVIEW HERE *****

If *YES*: CONTINUE BELOW:

[VERBAL AGGRESSION / NON-DESTRUCTIVE AGGRESSION]

		# Total Events:	LHA Scoring:
2a.	**Verbal Aggression:** Over the course of your adult life, how many times have you had an intense verbal argument with someone (whether or not the outburst went on to include breaking things or hitting people)?	_____ (0-999)	***and*** (see manual)... 0 1 2 3 4 5
2b.	Over the course of your adult life, how many times have you had a temper tantrum (yelling, throwing things, etc.), whether or not the tantrum went on to eventually include breaking things or hitting people?	_____ (0-999)	***and*** (see manual)... 0 1 2 3 4 5
2c1.	At what age did the verbal arguments and/or temper tantrums begin?	**Age of Onset:** _____	

2c2. Are these arguments and/or temper tantrums occurring now? (i.e. within the past 3 months) **YES** **NO**

IF NO: When did they stop? **Age of Offset:** _____(*skip to item #2c6*)_____(2c3)
IF YES: **Current Frequency:** How frequently have they been occurring over the past three months? (2c4)

R*ecord Actual Reported Frequency*: _____

AND check:
_____ > 2 times/week
_____ 2 times/week
_____ 1 time/week
_____ 2 times/month
_____ 1 time/month
_____ < 1 time/month

Current Duration: For how long have these outbursts been occurring *at this rate*? (2c5)
(i.e. Rate recorded above in 2c4)
Record Reported Duration: _____

AND check:
_____ < 1month
_____ 1-2 months
_____ 3-5 months
_____ 6-11 months
_____ 1year
_____>1-5 years
_____>5-10 years
_____>10 years

(*If not already known:)* Have they been occurring at this rate since
Check one: _____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

2c6. **Frequency: Greatest:**
At their most frequent, how often would these outbursts occur?
Record Reported Frequency: _____Age at greatest frequency: _____.

AND check:
_____ > 2 times/week
_____ 2 times/week
_____ 1 time/week
_____ 2 times/month
_____ 1 time/month
_____ < 1 time/month

2c7. **Duration of Period of Greatest Frequency:**
For how long a period of time were these outbursts occurring *at this rate*? (i.e. Rate recorded above in 2c6.)
Record Reported Duration: _____

AND check:
_____ <1 month
_____ 1-2 months
_____ 3-5 months
_____ 6-11 months
_____ 1 year
_____ >1-5 years
_____ >5-10 years
_____>10 years

(*If not already known:)* Have they been occurring at this rate since
Check one: _____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

(USE THE INFORMATION ABOVE TO RATE CRITERION A1 and A2 ON PAGE 7)

2d. Now, I'd like you to tell me about the three (3) **most severe verbal outbursts or temper tantrums** during your worst year with these outbursts [during the period of time of greatest frequency]. Specifically, I'd like you to tell me when the outburst occurred (e.g., Fall, 2000 or 2 months ago), with whom the outburst occurred, what led up to your having the outburst, what happened, and what the outcome was for you and the other person or objects involved. [*If subject cannot recall three incidents within a year's period, obtain the remaining incidents from the subject's lifetime].

	OUTBURST #1	**OUTBURST #2**	**OUTBURST #3**
2d1. When event occurred:			
2d2. Object of Outburst:			
2d3. Relationship to Subject (Same as Object of Outburst"):			
2d4. Provocation:			
2d5. Nature of Outburst:			
2d6. Outcome for Other Person:			
2d7. Consequence to Subject:			

(USE THE INFORMATION ABOVE TO RATE CRITERION B ON PAGE 8)

2f. [Rate or Ask for clarification:] Do these outbursts when you have arguments and/or temper tantrums happen only in certain circumstances? (e.g., only with family, only at work, only in traffic, etc.)

_____

NO YES>> >>Describe Setting>>

_____

_____

****

[DESTRUCTION OF PROPERTY]

 # Total Events: **LHA**

Scoring:

3. Over the course of your adult life, how many times have you had an outburst where you broke or damaged something? _____ (0-999) ***and*** (see manual)... 0 1 2 3 4 5

3a. How often were the items broken or damaged worth less than $50 and of no significant sentimental value?

Minor damage: < $50 _____ (0-999) ***and*** (see manual)... 0 1 2 3 4 5

3b. How often were the items broken or damaged worth more than $50, OR of significant sentimental value?

Major damage: >$50, OR of significant sentimental value _____(0-999) ***and*** (see manual)... 0 1 2 3 4 5

3c1. At what age did these outbursts, where you broke or damaged things, begin? **Age of Onset:**_____

3c2. Are these outbursts occurring now? (i.e. within the past 12 months) **YES** **NO**

IF NO: When did they stop? **Age of Offset:** _____(*skip to item #3c6*)_____(3c3)

IF YES: **Current Frequency:** How frequently have they been occurring *over the past three months*? (3c4)

Record Reported Frequency: _____

AND check:

_____ > 2 times/week
_____ 2 times/week
_____ 1 time/week
_____ 2 times/month
_____ 1 time/month
_____ < 1 time/month

Current Duration: For how long have these outbursts been occurring *at this rate*? (3c5)

(i.e. Rate recorded above in 3c4)

Record Reported Duration: _____

AND check

_____ < 1month
_____ 1-2 months
_____ 3-5 months
_____ 6-11 months
_____ 1 year
_____ >1-5 years
_____ >5-10 years
_____>10 years

(*If not already known:)* Have they been occurring at this rate since

Check one:

_____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

3c6. **Frequency: Greatest:**
At their most frequent, how often would these outbursts occur?
Record Reported Frequency: _____ Age at occurrence: _____
AND check: _____ > 2 times/week _____ 2 times/month
_____ 2 times/week _____ 1 time/month
_____ 1 time/week _____ < 1 time/month

3c7. **Duration of Period of Greatest Frequency:**
For how long a period of time were these outbursts occurring *at this rate (i.e.* Rate recorded above in 3c6)?
Record Reported Duration: _____
AND check: _____ <1 month _____ 1 year
_____ 1-2 months _____ >1-5 years
_____ 3-5 months _____ >5-10 years
_____ 6-11 months _____>10 years

(*If not already known:)* Have they been occurring at this rate since
Check one: _____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

(USE THE INFORMATION ABOVE TO RATE CRITERION A1 and A2 ON PAGE 7)

3d. Now, I'd like you to tell me about the three (3) most severe outbursts where you **broke or damaged property** or other objects during your worst one-year period with these outbursts. Again, I'd like you to tell me when the outburst occurred, with whom or with what object, what led up to your having the outburst, what happened, and what the outcome was for you and the other person or object involved. [*If subject cannot recall three incidents within a year period, obtain the remaining incidents from the subject's lifetime].

	OUTBURST #1	**OUTBURST #2**	**OUTBURST #3**
3d1. When event occurred:			
3d2. Object of Outburst: (e.g., TV, indshield)			
3d3. Owner of object:			
3d4. Provocation:			
3d5. Nature of Outburst:			
3d6. What Happened to Object:			

3d7. Consequence to Subject:			

(USE THE INFORMATION ABOVE TO RATE CRITERION B ON PAGE 8)

3f. [Rate or Ask for clarification:] Do these outbursts when you break and/or damage property happen only in certain circumstances? (e.g., only with family, only at work, only in traffic, etc.)

NO **YES >>** **>> Describe Setting:** >>

_____

_____

_

_____

_

****

[PHYSICAL AGGRESSION/ASSAULT AGAINST OTHERS]

 # Total Events: **LHA Scoring:**

4a. Over the course of your adult life, how many times have you had an outburst where you threw something at someone, pushed, shoved, slapped, or physically hit someone? _____ (0-999) ***and*** (see manual)... 0 1 2 3 4 5

4b. Was there any injury to the other person? **NO** **YES**

IF NO: Go to 4c1.

IF YES:
How often was the injury only minor, such as a welt, a bruise, superficial scratches, or a cut?
4b2. Minor injury _____ (0-999) ***and*** (see manual)... 0 1 2 3 4 5

How often did the injury involve more than minor injury (i.e., considerable bleeding, broken nose, teeth, and/or bones, black eye, loss of consciousness?
4b3. Major injury _____ (0-999) ***and*** (see manual)... 0 1 2 3 4 5

4c1. At what age did these outbursts, where you physically assaulted someone, begin? **Age of Onset:**_____

4c2. Are these outbursts occurring now? **YES** **NO**
(i.e. within the past 12 months)

IF NO: When did they stop? **Age of Offset:** ___(*skip to item #4c6*)_____(4c3)

IF YES: **Current Frequency:** How frequently have these outbursts occurred over the past three months? (4c4)

Record Reported Frequency: _____

AND check:
_____ > 2 times/week _____ 2 times/month
_____ > 1 time/week _____ 1 time/month
_____ 1 time/week _____ < 1 time/month

Current Duration: For how long have these outbursts been occurring *at this rate*? (i.e. Rate recorded above.) (4c5)

Record Reported Duration: _____

AND check:
_____ < 1month _____ 1 year
_____ 1-2 months _____ >1-5 years
_____ 3-5 months _____ >5-10 years
_____ 6-11 months _____>10 years

(*If not already known:)* Have they been occurring at this rate since

Check one:
_____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

4c6. **Frequency: Greatest:**
At their most frequent, how often would these outbursts occur? (e.g., once weekly, twice weekly, etc.)
Record Reported Frequency: _____ Age during occurrence at this frequency: _____
AND check: _____ > 2 times/week _____ 2 times/month
_____ 2 times/week _____ 1 time/month
_____ 1 time/week _____ < 1 time/month

4c7. **Duration of Period of Greatest Frequency:**
For how long a period of time were these outbursts occurring *at this rate* (i.e. Rate recorded above, in 4c6)?
Record Reported Duration: _____
AND check: _____ <1 month _____ 1 year
_____ 1-2 months _____ >1-5years
_____ 3-5 months _____ >5-10 years
_____ 6-11 months _____>10 years

(*If not already known:)* Have they been occurring at this rate since
Check one: _____adult onset (18>)
_____adolescence (13-17)
_____childhood (1-12)

(USE THE INFORMATION ABOVE TO RATE CRITERION A1 and A2 ON PAGE 7)

4d. Now, I'd like you to tell me about the three (3) most severe times during which you either **threw something at someone, pushed, shoved, or physically hit someone** and which occurred during the worst one-year period of these outbursts. Again, I'd like you to include when the outburst occurred, with whom, what led up to your having the outburst, what happened, and what the outcome was for you and the other person involved. [*If subject cannot recall three incidents within a year period, obtain the remaining incidents from the subject's lifetime].

	OUTBURST #1	**OUTBURST #2**	**OUTBURST #3**
4d1. When event occurred:			
3d2. Object of Outburst:			
3d3. Relationship to Subject (Same as Object of Outburst"):			
3d4. Provocation:			
3d5. Nature of Outburst:			

3d6. Outcome for Object/ Other Person:			
3d7. Consequence to Subject:			

(USE THE INFORMATION ABOVE TO RATE CRITERION B ON PAGE 8)

4f. [Rate or Ask for clarification:] Do these outbursts when you throw something at someone, push, shove or physically hit someone happen only in certain circumstances? (e.g. only with family, only at work, only in traffic, etc.)

_____

<<NO YES >> >> Describe Setting: >>

_____

_____

****

Rate Criterion ===> **(Rate A1)**

A1. **Several discrete episodes of failure to resist aggressive impulses that result in repeated verbal outbursts, arguments with others, temper tantrums, or non-destructive assaultive acts.** **1 2 3** (circle one)

Rate "3" if: outbursts occur ≥ 2 times weekly for at least three months.

Rate "2" if: outbursts occur ≥ 1 time weekly for at least three months.

Rate "1" if: outbursts occur < 1 time weekly for three months (Go to A2)

If Criterion A1 is rated "2" or "3" is it current (i.e. within the last year) or in the past?

Current **Past**
(circle one)

****

Rate Criterion ===> **A2.** **Several discrete episodes of failure to resist aggressive impulses that result in physically assaultive acts or destruction of property.** **1 2 3** (circle one)

(Rate A2)

Rate ”3" if: ≥ a total of 3 episodes rated Major for Property Destruction **or** Major for Assault for a one-year period.

Rate “2" if: ≥ a total of 3 episodes rated Major **or** Minor for Property Destruction **or** rated Major **or** Minor for Assault for a one-year period.

Rate “1" if: < a total of 3 episodes rated Major or Minor for Property Destruction or Assault for a one-year period.

If Criterion A2 is rated “2” or “3” is it current (i.e. within the past 3 months) or in the past?

Current **Past**
(circle one)

****
****

Rate Criterion ===> **B.** **The degree of aggressiveness expressed is grossly out of proportion to any precipitating psychosocial stressors.** **1 3** (circle one)

Rate “3" if: Aggressive behavior during relevant time period is grossly out of proportion to provocation or psychosocial stressors.

Go to next item (#6a).

Rate “1" if: Aggressive outbursts are mild and/or appear to be proportionate responses to provocation or psychosocial stressors.

Go on to next item (#6a).

****
****

Now, thinking about your <u>most typical aggressive outbursts</u>, with all types (physical verbal and property damage)…

6a. Is there usually a buildup of "tension" before your outbursts? **NO** **YES**

If YES: How long does this period of "building tension" typically last?_____ (# seconds / # minutes / # hours)[6b]

If NO: Do you seem to "explode" as if "out of the blue"? **NO** **YES** [6c]

If NO: Do you feel as if you have a "hair trigger"? **NO** **YES** [6d]

6e. How long do these outbursts typically last? _____ (# seconds/ # minutes / # hours)

6f. After an outburst, how long does it usually take for you to get back to your usual state (i.e., how you felt before the "provocation")? _____ (# seconds/ # minutes / # hours)

Now, think about the time <u>just before</u> your typical outburst takes place…

7. I am going to list a number of <u>emotions</u> that some people feel just prior and/or during their aggressive outbursts. Tell me if you have felt any of these emotions <u>just prior to, and/or during your typical outburst</u>.

CHECKLIST

a.____	Angry	h.____	Frustrated
b.____	Furious	i.____	Enraged
c.____	Irritated	j.____	Pumped Up
d.____	Clear Headed	k.____	Excited
e.____	Energetic	l.____	Calm
f.____	Relaxed	m.___	Drowsy
g.____	Detached/Unreal	n.____	Sexually Aroused

8. Now, I'm going to list a number of <u>physical or mental sensations</u> that some people have just before and/or during their aggressive outbursts. Tell me if you have had any of these physical or mental sensations <u>just prior to, and/or during your typical outburst</u>.

CHECKLIST

a.____	Racing Heart	i.____	Panic/Fear
b____	Hot Flashes	j.____	Felt Out of Control
c.____	Chest Tightness	k.____	Felt Like Screaming
d.____	Tingling Feelings	l.____	Felt Like Breaking...
e.____	Dizziness	m.___	Felt Like Hitting...
f.____	Short of Breath		
g.____	Sweating		
h.____	Trembling		

Just before your typical outburst...

9a. Do you feel yourself trying to resist the urge to act aggressively? **NO** **YES**

9b. **If YES:** How do you try to resist?

(List examples >>>) _____
_____
_____
_____

Just before your typical outburst...

10a. Are you caught by surprise by something or someone? **NO** **YES**

10b. Are you irritated by something or by someone? **NO** **YES**

10c. Are you being frustrated by something or someone? **NO** **YES**

10d. Are you insulted or challenged by someone? **NO** **YES**

10e. Are you verbally or physically threatened by someone? **NO** **YES**

11a. Do you feel yourself "losing control"? **NO** **YES**

If NO: Do you knowingly "give in to your anger"? **NO** **YES** [11b.]

11c. Do you think about (hitting/breaking/ yelling) for more than a few seconds before the outburst? **NO** **YES**

If YES: How long do you think about it? _____ (# seconds / # minutes / # hours) [11d.]

11e. Do you have plans previously worked out to have an outburst against the (person/thing assaulted) **NO** **YES**>> Describe:
_____
_____
_____

11f. Do you have anything to gain (e.g., money, power, revenge, honor, drugs, romance, intimidation, etc.) by having the outburst? **NO** **YES**>> Describe:
_____
_____
_____

11g. **[Ask, or rate if already known:]**
Do these outbursts take place as part of some other activity (e.g., robbery, etc.)

NO **YES**>> Describe:
_____
_____
_____

11h. **[Ask, or rate if already known:]**
Is there "peer" or "group pressure" urging you to have an outburst?

NO **YES**>> Describe:
_____
_____
_____

<u>Just after</u> your typical outburst.....

12a. Do you have difficulty recalling what happened? **NO** **YES**

12b. Have difficulty recalling what provoked you? **NO** **YES**

CHECKLIST

13a-f. Do you typically feel any of the following: (Check all that apply)

a.____Remorseful
b.____Relieved
c.____Disappointment
d.____ Embarrassed
e.____ Pleasure
f.____Gratification

****
****

Rate Criterion === > **C.** **The aggressive behavior is generally not premeditated (e.g., is impulsive) AND is not committed in order to achieve some tangible objective (e.g., money, power, intimidation, etc.).** **1 2 3 (circle one)**

Rate "3" if: Aggressive outbursts are generally impulsive (i.e., sudden, in response to provocation) **AND** do not appear to be goal-directed (i.e., other than to serve the expression of anger/ frustration).

Rate "2" if: Aggressive outbursts are impulsive at times but most times are not impulsive (i.e., planned or seems to serve a tangible purpose for the subject).

Rate "1" if: Aggressive outbursts do not generally appear to be impulsive and instead, are planned or seem to serve a tangible purpose for the subject.

****
****

So, continuing to think about (all types) of your aggressive outbursts…generally…

		PAST YEAR		**EVER**	
5a.	Do/did these outbursts cause you problems at work?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Problems: _____				
	_____				
	_____				
5b.	Have these outbursts cause you problems with the law?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Problems: _____				
	_____				
	_____				

		PAST YEAR		EVER	
5c.	Do/did these outbursts cause you problems in your relationships with your family (includes wife/husband and relatives)?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Problems: _____				
5d.	Do/did these outbursts cause you problems in your relationships with your friends (includes "girlfriend/boyfriend" fiancée)?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Problems: _____				
5e.	Are/were you upset about your aggressive outbursts?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Distress: _____				
5f.	**<u>If NO to 5e</u>:** Do you often feel remorseful after having an aggressive outburst?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Remorse: _____				
5g.	**<u>If NO</u>:** Do you generally feel justified in having an aggressive outburst?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Justification: _____				
5h.	Have you sought / thought about seeking counseling for this behavior?	**NO**	**YES**	**NO**	**YES**
	if YES: Describe Nature of Distress: _____				

****

****

Rate Criterion === >

D. **The aggressive behavior causes either marked distress in the individual or impairment in occupational or interpersonal functioning.** **1 3** (circle one)

Rate "3" if: Recurrent aggressive outbursts cause marked distress in the individual **OR** are associated with a functional impairment in occupational or psychosocial spheres of life.

Go on to next item (#14a)

Rate "1" if: Recurrent aggressive outbursts cause little or no distress in the individual **AND** there is little or no evidence for functional impairment which can be ascribed to the recurrent aggressive behavior.

****
****

If Criterion A1 or A2 is Rated "2" or "3" AND Criteria B, C & D are All Rated "3" ***Continue Interview.***
Otherwise, **Go to Score Sheet on Page 16**

I now want to ask you about other things that may have been going on in your life during the time of these aggressive episodes. (*Go through 14-17 asking only the relevant questions*.)

14a. [During these episodes, was subject in a state of Mania/Psychosis/ADHD/ Conduct Disorder*?]

NO YES

Aggressive episodes are not better accounted for by another major mental (e.g., Mania /Psychosis Major Depression) disorder. **1 3**

14b. If YES: Did you have similar aggressive episodes at times when you did not have problems with...
(Mood, Psychosis, ADHD, etc.)

NO YES

Rate "3" if: Aggressive behavior is CLEARLY NOT limited to periods during major Axis I disturbance.

Go on to next item

Rate "1" if: Aggressive behavior is clearly associated with an Axis I disturbance such as Mania/Psychosis/ ADHD/ Conduct Disorder.
RATE CRITERION E: PAGE 14

15a. Just before, or during, these aggressive episodes, were you physically ill?

NO YES

Aggressive episodes are not due to a General Medical Condition (e.g., head trauma, Alzheimer's Dx). 1 3

15b. If YES: What did the doctor say?
_____
_____
_____
_____
_____
_____
_____
_____

Rate "3" if: Aggressive behavior is **NOT** due to a General Medical Condition (GMC).

Go on to next item.

Rate "1" if: Aggressive behavior is (or probably is) associated with a GMC.

Use to Rate Criterion E: PAGE 14

16a. Just before, or during, the aggressive episodes were you using any medications (regardless of whether prescribed or not)?

NO YES

Aggressive episodes are NOT due to the direct physiological effects of a substance (e.g., alcohol, street drug prescribed or OTC medication). 1 3

16b. If YES: Which medications?
_____
_____

Rate "3" if: Aggressive behavior is NOT EXCLUSIVELY due to the direct physiological effects of a substance.

Go on to next item.

16c. Just before, or during, these aggressive episodes were you drinking or using street drugs?
substance.

NO YES

Rate "1" if: Aggressive behavior is (or probably is) exclusively due to the direct physiological effects of a

Use to Rate Criterion E: PAGE 14

16d. If YES: How much alcohol or street drugs?
_____
_____
_____
_____

16e. If YES: Did almost all (at least 80%) of your aggressive outbursts occur during times while you were actually using medications, alcohol or "street drugs"?

NO YES

16f. Now, thinking about the times when you were NOT drunk or high, was there ever a time when you had 2 or more **arguments** a week for 4 weeks in a row? **NO YES>> WHEN?_____**

In your lifetime, have you had at least 3 times when you were NOT drunk or high when you **broke things** on purpose and/or had **physical fights**? **NO YES>> WHEN?_____**

****
****

Rate Criterion ===> **E.** **The aggressive episodes are not better accounted for by another mental disorder (e.g., Manic / Psychotic Disorder; Major Depression); General Medical Condition (e.g., Head Trauma, Alzheimer's Dx); or to the direct physiological effects of a substance.** **1 2 3** (circle one)

Rate "3" if: Aggressive behavior, in at least three (3) episodes, is NOT better accounted for by these other conditions.

Rate "1" if: Aggressive behavior is better accounted for by Psychosis/Mania/Major Depression, Alcohol/Drug Intoxication, or Other Medical Conditions (**Circle Condition**).

****
****

GO TO CHRONOLOGY ON NEXT PAGE

CHRONOLOGY

17a. When did these kinds of aggressive outbursts **first begin**?

Age at Onset for Aggressive Outbursts:

_____ Major * (i.e.: Damage>$50 or "Severe" Injury)

_____ Minor** (i.e.: Damage<$50 or "Minor" Injury)

_____ Verbal Outbursts/Temper Tantrums

17b. Since [age of onset], have there been periods of time when these aggressive outbursts **did not occur for at least two (2) months or more**?

NO YES N/A (for Major* Outbursts)

NO YES N/A (for Minor** Outbursts)

NO YES N/A (for Verbal Outbursts/Temper Tantrums)

[Describe Chronology for Major, Minor and Verbal Outbursts, etc. For example, are there discrete periods of time when problems due to verbal outbursts continue even though major or minor [assaultive/destructive] outbursts do not occur?

_____
[_____]
[_____]
[_____]

18. If YES for Any Type of Aggression:

Over your lifetime, since the first time you regularly had outbursts, how many **different periods of time** have you been completely outburst-free for 2 or more months? _____ (# Episodes)

When you are upset by (or have problems because of) your aggressive outbursts, typically, how many **months in a row** is this a problem for you? In other words, how many months do these "periods of outbursts" last for?

_____ (# Months)

19. **[Rate based on above information:]** During what periods of your life has this "aggressive" behavior been a "problem" for you?

(During which decades of your life?)
(Check all that apply)

Childhood_____ Teens_____ 20's_____ 30's_____ 40's_____ 50's_____ 60's_____ 70's_____

****

GO TO SCORESHEET ON NEXT PAGE

SCORESHEET:

DSM-5 CRITERIA FOR INTERMITTENT EXPLOSIVE DISORDER (IED)

(Transcribe Ratings Made Previously in this Interview:)

A1.	1	2	3
	OR		
A2.	1	2	3
B.	1	2	3
C.	1	2	3
D.	1	2	3
E.	1	2	3

(If A1 or A2 =3 AND B, C, D & E=3, then Dx=IED-IR)

(If DSM-5 IED, Then Complete Below:)

PHENOMENOLOGY/CHRONOLOGY

Age of onset: _____ **(Age in Years)**

Setting:	**Situational**	**Generalized**
Lifetime Aggressive Behavior is Characterized by:		
Major Physical Assault	**NO**	**YES**
Minor Physical Assault	**NO**	**YES**
Major Destruction of Property	**NO**	**YES**
Minor Destruction of Property	**NO**	**YES**
Verbal Outbursts	**NO**	**YES**
Current Aggressive Behavior is Characterized by:		
Major Physical Assault	**NO**	**YES**
Minor Physical Assault	**NO**	**YES**
Major Destruction of Property	**NO**	**YES**
Minor Destruction of Property	**NO**	**YES**
Verbal Outbursts	**NO**	**YES**
Aggressive Behavior is Episodic:	**NO**	**YES**

Duration of Episodes: _____ **(Months/Years)**

Number of Episodes of IED: _____

Course History: (check one)

_____ **Chronic (<u>Current</u> Episode ≥ 2 years)**

_____ **Recurrent (<u>Multiple</u> Episodes with ≥ 2 month remissions)**

_____ **Single Episode (Only <u>One (1) episode</u> <2 years)**

INTERVIEW MODULE FOR

INTERMITTENT EXPLOSIVE DISORDERS

IED-M

Clinical Neuroscience & Psychopharmacology Research Unit
Department of Psychiatry
The Prtizker School of Medicine
The University of Chicago

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INTRODUCTION TO THE IED-M

This SCID-like module was developed in order to obtain systematic information sufficient to make research diagnoses of Intermittent Explosive Disorder by DSM-5 criteria.

Please note that this module does not stand on its own. It should be part of a comprehensive diagnostic assessment battery which should include either the SCID-I for Axis I Disorders and the SIDP, SCID-II, or the PDE for Axis II Disorders.

The essential differences between DSM-5 IED and IED-IR criteria is that DSM-IV IED: a) does not codify the frequency or nature of the aggressive events; b) does not require that the aggressive events be impulsive in nature; c) does not require that these events be associated with distress or impairment in social or occupational function; and d) cautions against making an IED diagnosis in the presence of an antisocial or borderline personality disorder. Another difference is that DSM-5 IED criteria can be met even in the absence of a history of serious assaultive/property destructive behavior. In this case, subjects (perhaps 10% of IED-IR cases) report less severe episodes of impulsive aggression taking place on a more frequent basis (e.g., twice weekly for at least one month) which are, nevertheless, associated with clinically significant distress or impairment in social or occupational function.

Regarding DSM-5 IED, our own research in impulsive aggression suggests that individuals with less severe (e.g., intense verbal outbursts, temper tantrums, non-destructive aggression directed property, non-injurious assault), but more regular, episodes of impulsive aggressive outbursts can benefit from psychopharmacological treatment (e.g., 5-HT Uptake Inhibitors) when the impulsive aggressive behavior is frequent and associated with personal distress or impairment in occupational or psychosocial function.

USING AND SCORING THE IED-M

The research diagnoses herein are based on assessing aggressive episodes (or events), which may consist of one or more aggressive behaviors. For example, if someone reports having an aggressive encounter in which they shouted ten times, or broke five objects, or hit someone several times, the interviewer would score that as one episode or one event. For Questions numbered 2a., 2b, 3a., 3b, 3c, and 4a, 4b, 4c, and 4d, the Rater is also asked to code the frequency of lifetime aggressive events on a 0 to 5 scale. This is to be scored as on the Life History on Aggression (LHA) assessment (Coccaro et al., 1997) and these data allow for an extracted LHA Aggression score. The scoring for these items is as follows:

0 = no events
1 = one event
2 = "a couple" or "a few" (i.e., 2-3) events
3 = "several" or "some" (i.e., 4-9) events
4 = "many" or "numerous" (i.e., 10+) events
5 = "so many events that they can't be counted"

One or more questions are used to code each criterion from which the score will be determined. Specific coding instructions are provided in the right hand column.

Score all criteria according to the following:

(1) = absent or false, (2) = subthreshold, and (3) = threshold or true.

A diagnosis summary sheet is provided on the last page of the interview.

Finally>>>>>>>>>>

Where specific written answers are requested notes by the interviewer should always be provided. It is critical that notes are provided where requested and that this notes are legible. The data from these written responses are critical to evaluating the nature of IED.

Appendix D

Diagnostic Assessment: Questions for NSSI

CNPRU ID #: _____ Subject Initials: _____

Date completed: _____/_____/_____

SELF-INJURIOUS BEHAVIOR HISTORY FORM

Rater's Name _____

1.	History of Self-Injurious Plans	No Info	No	Yes	
	Did you ever have a specific plan to physically hurt yourself, that you didn't carry out or try?	-9	0	1	[si_plan]
2.	History of Discrete Self-Injurious Acts				
	Defined as committing a physically self-damaging act with the conscious, however ambivalent, intent to hurt self but not to end one's life.				
	Have you ever tried to physically hurt yourself or purposefully done anything that could have physically hurt yourself?	-9	0	1	[si_acts]

IF NONE, SKIP REST OF SECTION

3. If yes to Question 2: Inquire for details regarding history of all self-injurious act and/or gestures (n.b.: gestures constitute "movement towards" a self-injurious act (e.g., putting knife to skin but not cutting skin).

	Attempts	**Gestures**
Record number of self-injurious acts [no_acts]	_____	_____

4. If yes: Date of most serious self-injurious act _____(Age) [seri_act]

   Date of most recent self-injurious act _____(Age) [recntact]

   Date of first self-injurious act _____(Age) [frst_act]

5. Method of Self-Injurious Acts	**Violent**	**Non-Violent**	**Method Used (#)**
Most serious self-injurious act	1	2	____ [ssi_viol/s_meth]
Most recent self-injurious act	1	2	____ [rsi_viol/rsi_meth]
First self-injurious act	1	2	____ [fsi_viol/rsi_meth]

Violent = Gunshot, Knife Wound, Hanging, Jumping (etc.)
Non-Violent = Superficial Cut, Pills, Gas, Drowning (etc.)

Methods:

1 = gunshot	4 = jumping	7 = pills	10 = other
2 = knife wound	5 = poison	8 = gas	
3 = hanging	6 = superficial cuts	9 = drowning	

6. Suicidal Intent of Most Serious Self-Injurious Act
Determine circumstances and rate most serious self-injurious act. Considering factors related to precautions against discovery, acting to gain help during or after act, degree of intent during or after act, degree of planning of attempt, and apparent purpose of the act (i.e., manipulative versus hurting self).

-9 = No information or not sure
1 = Obviously no intent, purely manipulative gesture
2 = Not sure or only minimal intent
3 = Definite but very ambivalent
4 = Serious
5 = Very serious
6 = Extreme (careful planning and every expectation of serious injury).

Intent at time of most serious self-injurious act _____ [intn_ssi]

Intent at time of most recent self-injurious act _____ [intn_rsi]

Intent at time of first self-injurious act _____ [intn_fsi]

7. Actual Medical Threat to life of physical condition following the most serious self-injurious act. Consider the method (gunshot wound more serious than knife wound), seriousness of lesion or toxicity of ingested materials, reversibility (amount of time expected for completed recover), and amount of treatment required.

-9 = No information or not sure
1 = No danger, e.g., held pills in hand
2 = Minimal, e.g., scratch on wrist
3 = Mild, e.g., took 10 aspirins, mild gastritis
4 = Moderate, e.g., took 10 seconds, briefly unconscious
5 = Severe, e.g., cut throat
6 = Extreme, e.g., respiratory arrest or prolonged coma.

Medical Threat at time of most serious self-injurious act _____ [med_ssi]

Medical Threat at time of most recent self-injurious act _____ [med_rsi]

Medical Threat at time of first self-injurious act _____ [med_fsi]

8. Self-injury occurred during a discrete period of:

CODE:
Major Depression = 1
Brief Depression = 2
Alcohol Abuse = 3
Alcohol Intoxication = 4
Drug Abuse = 5
Drug Intoxication = 6
Psychosis = 7
If not 1-7, name the specific condition = 8

Most serious: _____ [ssi_dx]

Most recent: _____ [rsi_dx]

First: _____ [fsi_dx]

Appendix E

Diagnostic Assessment: Questions for Suicide Attempts

CNPRU ID #: _____ Subject Initials: _____

Date completed: _____/_____/_____

SUICIDAL BEHAVIOR HISTORY FORM

Rater's Name _____

1.	History of Suicidal Plans	No Info	No	Yes	
	Did you ever have a specific plan to kill yourself, that you didn't carry out or try?	-9	0	1	[sui_plan]
2.	History of Discrete Suicidal Attempts				
	Defined as committing an act with the conscious, however ambivalent, intent to end one's life by means that one believed at the time could have ended his or her life.				
	Have you ever tried to kill yourself or done anything that could have killed you.	-9	0	1	[sui_atmp]

IF NONE, SKIP REST OF SECTION

3. If yes to Question 2: Inquire for details regarding history of all suicide attempts and/or gestures (n.b.: gestures constitute self-directed acts that the subject knew at the time could now have ended his/her life; includes movement toward self-harm such as only putting knife to skin).

	Attempts	**Gestures**	
Record number of suicide attempts/gestures	_____	_____	[no_atmp/no_gest]

4. If yes:	Date of most serious suicide attempt	_____(Age)	[seriatmp]
	Date of most recent suicide attempt	_____(Age)	[recntatm]
	Date of first suicide attempt	_____(Age)	[frstatmp]

5. Method of Suicide Attempts	**Violent**	**Non-Violent**	**Method Used (#)**
Most serious suicide attempt	1	2	_____ [s_violnt/s_method]
Most recent suicide attempt	1	2	_____ [r_violnt/r_method]
First suicide attempt	1	2	_____ [f_violnt/r_method]

Violent = Gunshot, Knife Wound, Hanging, Jumping (etc.)
Non-Violent = Superficial Cut, Pills, Gas, Drowning (etc.)

Methods:
1 = gunshot
2 = knife wound
3 = hanging
4 = jumping
5 = poison
6 = superficial cuts
7 = pills
8 = gas
9 = drowning
10 = other

6. Suicidal Intent of Most Serious Suicide Attempt
Determine circumstances and rate most serious attempt by considering such factors as likelihood of being rescued, precautions against discovery, acting to gain help during or after attempt, degree during or after attempt, degree of planning of attempt, and apparent purpose of the attempt (i.e.. manipulative versus killing self).

-9 = No information or not sure
1 = Obviously no intent, purely manipulative gesture
2 = Not sure or only minimal intent
3 = Definite but very ambivalent
4 = Serious
5 = Very serious
6 = Extreme (careful planning and every expectation of death).

Suicide Intent at time of most serious suicide attempt _____ [intent_s]

Suicide Intent at time of most recent suicide attempt _____ [intent_r]

Suicide Intent at time of first suicide attempt _____ [intent_f]

7. Actual Medical Threat to life of physical condition following the most serious suicidal gesture(s) or attempt(s). Consider more serious than knife wound), impaired method (gunshot wound mild consciousness at or during time of rescue, seriousness of lesion or toxicity of ingested materials, reversibility (amount of time expected for completed recover), and amount of treatment required.

-9 = No information or not sure
1 = No danger, e.g., held pills in hand
2 = Minimal, e.g., scratch on wrist
3 = Mild, e.g., took 10 aspirins, the gastritis
4 = Moderate, e.g., took 10 seconds, briefly unconscious
5 = Severe, e.g., cut throat
6 = Extreme, e.g., respiratory arrest or prolonged coma.

Medical Threat at time of most serious suicide attempt _____ [medcal_s]

edical Threat at time of most recent suicide attempt _____ [medcal_r]

Medical Threat at time of first suicide attempt _____ [medcal_f]

8. Suicide Attempt occurred during a discrete period of:

CODE:
Major Depression = 1
Brief Depression = 2
Alcohol Abuse = 3
Alcohol Intoxication = 4
Drug Abuse = 5
Drug Intoxication = 6
Psychosis = 7
If not 1-7, name the specific condition = 8

Most serious: _____ [s_dx]

Most recent: _____ [r_dx]

First: _____ [f_dx]

Appendix F

Social-Emotional Information Processing Questionnaire (SEIP-Q)

NAME _____ DATE _____ CNPRU# _____

SEIP-Q

Please read these short stories about relationships with other people and answer all questions asked about the story as honestly as possible. Please circle your answers where indicated.

STORY 1

You tell a friend something personal and ask your friend not to discuss it with anyone else. However, a couple of weeks later, you find out that a lot of people know about it. You ask your friend why s/he told other people and your friend says, "Well, I don't know, it just came up and I didn't think it was a big deal."

		Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think your friend shared your secret when you told them not to share it with anyone? *Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1. My friend wanted to expose my secret.	0	1	2	3
	A2. My friend wanted to impress other people with their secret knowledge about me.	0	1	2	3
	A3. My friend forgot that this was an important secret for me.	0	1	2	3
	A4. My friend wanted me to feel stupid for asking to keep my secret.	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?	0	1	2	3
C.	How likely is it that you would be upset with yourself if this happened to you?	0	1	2	3

Imagine that you say: "I told you that in confidence. I'm disappointed in you. Next time be more discrete."

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that your friend will keep your secrets in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you say: "How could you do that?! I'm going to "kill" you!"

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that your friend will keep your secrets in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you give your friend the "silent treatment" for the next few weeks.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your friend will keep your secrets in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 2

Imagine that you are in a karate class competition and you have to demonstrate your abilities to your instructor. You are matched up to "fight" with someone in the class who you do not know well. While you are being evaluated, your karate classmate hits you in a way other than the way you were taught and you are hurt.

			Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think your karate classmate hit you in a way other than the way you were taught?					
	Rate the likelihood of each statement on a scale of 0 to 3:					
	A1.	My karate classmate wanted to physically hurt me.	0	1	2	3
	A2.	My karate classmate wanted to win the match.	0	1	2	3
	A3.	My karate classmate did it by accident.	0	1	2	3
	A4	My karate classmate wanted to make me look "bad".	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?		0	1	2	3
C.	How likely is it that you would be embarrassed if this happened to you?		0	1	2	3

Imagine that you say: "We weren't taught that move. Let's keep it to the moves we were taught."

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that your karate classmate will use only the moves you were taught the next time you and your karate classmate have a competition?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would your karate classmate respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of Hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you hit your karate classmate hard during the next match.

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that your karate classmate will use only the moves you were taught the next time you and your karate classmate have a competition?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would your karate classmate respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you spread rumors about your karate classmate to other people.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your karate classmate will use only the moves you were taught the next time you and your karate classmate have a competition?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your karate classmate respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 3

Early one morning (at "rush hour") you go to a busy local coffee shop to get a cup of coffee. While you are waiting, someone you see at the coffee shop regularly, but do not know personally, cuts in the line in front of you.

		Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think this person cut in line in front of you? *Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1. This person wanted to make me wait longer to get my coffee.	0	1	2	3
	A2. This person was in a hurry to get in to work.	0	1	2	3
	A3. This person didn't realize that he (or she) cut in line in front of me.	0	1	2	3
	A4. This person wanted me to feel unimportant.	0	1	2	3
D.	How likely is it that you would be angry if this happened to you?	0	1	2	3
E.	How likely is it that you would be upset with yourself if this happened to you?	0	1	2	3

Imagine that you tell the person that you were in line ahead of them and that they should wait their turn?

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that this person will cut in front of you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you started cursing at this person because he/she cut in the line in front of you?

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that this person will cut in front of you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you make a "nasty comment" about the person who cut in front of you to another person at the coffee shop.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that this person will cut in front of you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 4

Imagine that you and a group of your co-workers went on a business trip. While at the hotel, waiting to meet a customer, you stop to buy a cup of coffee. Suddenly, one of your co-workers bumps your arm and spills your coffee over your shirt. The coffee is hot and your shirt is wet.

		Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think your co-worker bumped your arm making you spill your coffee? *Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1. My co-worker wanted to burn me with the hot coffee.	0	1	2	3
	A2. My co-worker was focused on the meeting.	0	1	2	3
	A3. My co-worker did it by accident.	0	1	2	3
	A4. My co-worker wanted to make me look "bad" to the customer.	0	1	2	3
F.	How likely is it that you would be angry if this happened to you?	0	1	2	3
G.	How likely is it that you would be upset with yourself if this happened to you?	0	1	2	3

Imagine that you say: "I'm a mess. Do you think I have time to go change my shirt?"

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that your co-worker will spill coffee on your shirt in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Very Much	Much	Only A Little	Not At All

Imagine that you say: "You idiot! Look what you've done."

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that your co-worker will spill coffee on your shirt in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you ignore your co-worker during the rest of the business trip.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your co-worker will spill coffee on your shirt in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 5

You make plans with one of your friends to go on a short trip for the weekend. You're very excited about these plans and have been looking forward to the trip. However, at the last minute, your friend says that he (or she) no longer wants to go on the trip and has made plans with another friend for the weekend.

			Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think your friend said he/she no longer wanted to go on the trip?	*Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1.	My friend doesn't want to be with me.	0	1	2	3
	A2.	My friend wanted to do something else.	0	1	2	3
	A3.	My friend forgot about the plans we made.	0	1	2	3
	A4	My friend wanted me to feel unimportant.	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?		0	1	2	3
C.	How likely is it that you would be upset with yourself if this happened to you?		0	1	2	3

Imagine that you say: "I was really looking forward to this. Next time I'd appreciate it if you would tell me sooner when you change your mind about these things."

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that your friend will break plans with you the next time?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

Imagine that you say: "You're such a jerk! Who needs you, anyway!?"

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that your friend will break plans with you the next time?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you exclude your friend from all your plans from then on.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your friend will break plans with you the next time?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 6

One day at work you decide to go to the cafeteria for lunch. After you purchase your lunch, you notice that the seating area is very crowded and no empty tables are available. You notice one of your co-workers sitting alone at a small table and ask if you can join him (or her) for lunch. Your co-worker says "no".

			Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think your co-worker said "no"?	*Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1.	My co-worker wanted to exclude me.	0	1	2	3
	A2.	My co-worker wanted to be alone at that time.	0	1	2	3
	A3.	My co-worker was "lost in thought" and didn't realize I had asked to join him (or her).	0	1	2	3
	A4	My co-worker wanted me to feel bad.	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?		0	1	2	3
C.	How likely is it that you would be embarrassed if this happened to you?		0	1	2	3

Imagine that you say: "I wanted to have some company while I ate lunch. If that's not OK for you today could we do that some other time?"

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that your co-worker will let you join him (her) for lunch in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you say: "The hell with you! Who wants to sit with you anyway?"

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that your co-worker will let you join him (her) for lunch in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you exclude this co-worker from any of your social plans for the next few weeks.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your co-worker will let you join him (her) for lunch in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your friend respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 7

Imagine that you go to the first meeting of a club you want to join. You would like to make friends with the other people in the club. You walk up to some of the other club members and say, "Hi!" but they don't say anything back.

			Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think the club members didn't say anything back to you?	*Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1.	The club members wanted to ignore me.	0	1	2	3
	A2.	The club members were more interested in talking among themselves.	0	1	2	3
	A3.	The club members didn't hear me say "Hi".	0	1	2	3
	A4.	The club members wanted me to feel unimportant.	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?		0	1	2	3
C.	How likely is it that you would be embarrassed if this happened to you?		0	1	2	3

Imagine that you keep standing there and wait for a pause in the conversation so that you can introduce yourself.

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that the club members will say anything back to you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would the club members respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you give them a dirty look to show you don't like their behavior and turn away to go find someone else to talk to.

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that the club members will say anything back to you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would the club members respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you ignore these co-workers for the next few weeks.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that your co-workers will say anything back to you in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would your co-worker respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

STORY 8

You are driving in to work one day and just after you pull into a parking space, another car pulls up into the space to your right. As the person in the other car, a co-worker, gets out of his/her car, their car door hits your passenger side door and leaves a scratch on your car. The person walks away as you get out of your car.

			Not At All Likely	Unlikely	Likely	Very Likely
A.	Why do you think this person acted this way?	*Rate the likelihood of each statement on a scale of 0 to 3:*				
	A1.	This person wanted to damage my car.	0	1	2	3
	A2.	This person was in a hurry to get in to work.	0	1	2	3
	A3.	This person scratched my car by accident and didn't notice.	0	1	2	3
	A4.	This person wanted me to feel unimportant.	0	1	2	3
B.	How likely is it that you would be angry if this happened to you?		0	1	2	3
C.	How likely is it that you would be upset with yourself if this happened to you?		0	1	2	3

Imagine that you walk over to the person as they are leaving and point out that they may have scratched your car and ask what can be done about repairing the damage.

D1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D3. If you acted this way, how likely is it that this person will be more careful with your car in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

D4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

D5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

D6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

D7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you start calling and cursing after this person because he/she scratched your car?

E1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E3. If you acted this way, how likely is it that this person will be more careful with your car in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

E4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

E5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

E6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

E7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much

Imagine that you make a "nasty comment" about this person to another person at work.

F1. How likely is it that you would act this way?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F2. How good or bad is it to act this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F3. If you acted this way, how likely is it that this person will be more careful with your car in the future?

0	1	2	3
Not at all Likely	Unlikely	Likely	Very Likely

F4. If you acted this way, how much would this person respect you?

0	1	2	3
Not at All	Only a Little	Much	Very Much

F5. How easy would it be for you to act this way?

0	1	2	3
Very Easy	Kind of Easy	Kind of hard	Very Hard

F6. How would you feel about yourself if you acted this way?

0	1	2	3
Very Bad	Bad	Good	Very Good

F7. How much would other people like you if they saw you acting this way?

0	1	2	3
Not at All	Only a Little	Much	Very Much