



Published in final edited form as:

Aggress Violent Behav. 2012 ; 17(3): 198–207. doi:10.1016/j.avb.2012.02.001.

Violence risk: re-defining variables from the first-person perspective

Suzanne Yang^{§,+} and Edward P. Mulvey⁺

[§]Mental Illness Research, Education and Clinical Center (MIRECC), Veterans' Administration Pittsburgh Healthcare System, Pittsburgh, Pennsylvania

⁺Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

Abstract

Over the past 25 years, there have been notable advances in violence risk assessment of mentally ill individuals using actuarial methods to define high versus low risk groups. A focus on readily observable risk factors, however, has led to a relative neglect of how the offender's subjective states may be valuable to consider in research on the ongoing assessment and prevention of violence. We argue for the relevance of considering idiographic features of subjective experience in the development of structured assessment methods. We then identify three heuristic groups of existing constructs related to aggressive and illegal behavior that may capture modifiable, time-varying aspects of mental functioning leading up to involvement in an act of violence. These hypothesized domains are: (i) construal of intent and cause; (ii) normative reference points; and (iii) emotion recognition and regulation. We suggest that risk state for violence can be studied in a parsimonious and direct manner through systematic research on coded speech samples. The coding method for such an assessment procedure would be almost identical to existing structured clinical judgment instruments with the difference that variables be defined from a first-person point of view. Some implications of this approach for the tertiary prevention of violence in high-risk individuals are described.

Keywords

mentally ill offenders; prevention; structured clinical judgment; subjective experience; violence risk assessment

1. The need for first person accounts

“[M]eaning” is not something one can see or hear in the act *qua* external material fact, as one can perceive in an object its natural properties and functions, such as colour, rigidity, and weight...A plant cannot say anything about itself to the

Correspondence: Suzanne Yang, Law and Psychiatry Program, Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, 3811 O'Hara Street, Pittsburgh, PA, 15213. yangs@upmc.edu. Tel: (412) 647-4755.

Disclosure statements: Dr. Mulvey is a shareholder in COVR, Inc., which distributes the Classification of Violence Risk (COVR) instrument through Psychological Assessment Resources, Inc. Dr. Yang was supported by a training grant from the National Institute of Mental Health (T32 MH16804) and by a VA Advanced Physician Fellowship (MIRECC) during the preparation of the manuscript. Contents do not represent the views of the Department of Veterans Affairs or the United States Government.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

botanist. It makes no attempt to explain itself in terms of the natural sciences. A social act, however, may very well carry with it a self-interpretation, a statement about what it means, for the acting individual himself attaches to his act a certain sense, which is expressed in some way or another and which is understood by those to whom the act is addressed. (Kelsen, 1934/1992). Page 9.

Observation alone does not always provide information about the meaning of an action to the individual who engages in it. This holds for a wide range of activities, including involvement in violence. Learning more about individuals' thoughts and states surrounding acts of violence may improve our ability to foresee and possibly prevent such behavior in individuals at high risk for involvement in violence. In order to explain violence and intervene in the pathways leading up to a violent act, we must improve the structured methods available for characterizing what is happening from the first person perspective of the violent individual, by assessing his subjective experience of social situations. In this paper, we examine psychological processes that may be salient in elucidating relevant mechanisms in violence and propose a conceptual framework for future study of variables defined from the offender's point of view.

1.1 The current state of violence risk assessment

Advances in violence risk assessment over the past 25 years have led to the development of actuarial instruments that are more accurate than clinical judgment alone (Gardner et al., 1996; Grove & Meehl, 1996; Hanson, 2005; Harris & Rice, 1997; Heilbrun et al., 1999; Loza & Dhaliwal, 2005; Mossman, 1994; Norko & Baranoski, 2005; Slobogin, 2006). Correlations between ratings on these instruments and future violence range from 0.30 to 0.50 (Webster et al., 1997). Improvements in the measurement of violence outcomes have been crucial to these advances, differentiating the types, severity and circumstances of aggressive behavior and ensuring that self-report is confirmed and bolstered through collateral information from close contact persons and police records (Monahan et al., 2001).

Despite this progress, existing approaches have limitations. Using receiver operating characteristic (ROC) curves as a common metric (Harris & Rice, 2007), investigators have observed a consistent plateau at an area under the curve (AUC) between 0.70 and 0.80 in aggregate data with actuarial instruments (Buchanan, 2008; Mossman, 2009), suggesting that ratings predict much better than chance but leave a substantial part of the variance unaccounted for. Limitations of these existing instruments may arise from several possible gaps in our knowledge: (i) there may be a class of objective markers not yet identified, which seems unlikely given the advanced state of the field; (ii) the variance may be completely aleatory and there is no identifiable regularity; or (iii) individual differences in conditional response to social situations have not yet been accounted for in a sufficiently precise manner.

Current research in violence risk assessment has attempted to address the limitations of existing instruments by refining knowledge of dynamic factors that indicate increases in an individual's risk state over time (Douglas & Skeem, 2005; Mulvey & Lidz, 1998). Recently developed rating instruments have moved beyond the initial focus on classification of persons with high versus low risk, in favor of assessing time-varying factors that change under specific conditions, and which therefore might be modifiable and relevant to the ongoing management of high risk individuals (Douglas & Skeem, 2005; Heilbrun, 1997; Nicholls et al., 2006; Webster & Hucker, 2007; Webster et al., 2006). These newer approaches have relied strongly upon behavioral markers or observable characteristics (e.g. external triggers, substance use) that are associated with an appreciable increase or decrease in the likelihood of violence (Webster et al., 2006).

The promise of this line of investigation resides in its potential for uncovering *mechanisms* that produce elevated risk, since these may lead to preventive steps to avoid violent incidents (Douglas & Skeem, 2005). The identification of risk indicators that fluctuate over time, are associated with violence, and are modifiable in principle does not, however, guarantee that these are causal factors related to violence (Kraemer et al., 2001). It remains unclear at this time whether targeted modification of these risk factors does in fact produce a substantial decrease in risk (van den Brink et al.). A clinically useful dynamic risk factor will be one rooted in a theoretical formulation of why and how that factor leads a person to act in a violent manner; how it exerts an effect as a direct cause of violence or as a mediator of other risk indicators.

1.2 “Subjective” experience: What is it and what does it add?

Subjective experience is described here as a general process of assigning meaning to situations. This process is necessarily idiographic, since individuals might “see” very different meaning in details that are specific to their situation. Subjective meaning is thus likely to vary considerably from one person to another, in the context of his current life circumstances and personal history.

This assumption is reflected in clinical practice and the legal framing of culpability for involvement in violence. Guidelines for clinical forensic evaluation suggest that retrospective information about inner states and anamnestic features of the life story can be elicited and inferred during an interview and that such information may be a valuable method for understanding the person’s involvement in violence (Melton et al., 2007). Evaluation of criminal responsibility or mitigation of penalty, for instance, often involves the construction of an explanatory narrative that articulates the individual’s past history and his interpretation of current life circumstances, leading up to an act that erupts at a particular time and in a particular place. The relevance of such narratives is further reflected in individualized sentencing for violent crimes, with the supposition that there is a subjective motivation which is not entirely determined by situational or historical facts.

Studies of violent offenders have described subjective distortion in the form of dissociation (“red outs”) at the time of the act (Evans, 2006; Hervé et al., 2007; Moskowitz, 2004), and it is common to represent violence as something that occurs when a person is “beside himself”. Studies of predatory offenders have also revealed compelling inferences about their implicit motivations, including tacit beliefs about sexuality and gender (Beech et al., 2005; Beech et al., 2006; Meloy, 2002; Meloy & Gacono, 1992; Milsom et al., 2003). It is reasonable to suppose that factors only indirectly related to immediate self-perception and awareness of motivations play a role in violent reactions, even when this behavior is an acknowledged part of an individual’s personal identity.

Research on the role of subjective meaning in the production of a violent act has been limited. Although researchers have classified aggressive acts as either reactive or instrumental (Barratt et al., 1999; Cornell et al., 1999), dichotomous classification may not accurately capture the range of motivational processes related to violence (Bushman & Anderson, 2001). Self-report measures of anger or criminal attitudes have been shown to predict violence (Loza & Loza-Fanous, 2000; Loza et al., 2007; Monahan et al., 2001; Novaco, 1994) and are arguably subjective in that the rating can only be obtained by asking the subject to report on internal states. Although such findings suggest that subjective perspective is a relevant factor in violence, they do not explain how a person becomes angry or why he is antisocial at some times and law-abiding at others. Consideration of idiographic features underlying the production of states such as anger, hostility or antisocial attitudes may advance our conceptualization of individual differences and contextual factors in violence risk. Examining an individual’s recourse to violence as a response to subjectively

assigned meanings may allow us to anticipate his involvement in violence under particular circumstances and thereby lead to more salient clinical interventions.

Currently available structured professional judgment schemes consider idiographic factors, but they do not do so from the first-person perspective of the offender. Certain risk assessment instruments (e.g., HCR-20, START, and others) include such variables as negative (antisocial) attitudes, which can be regarded as subjective factors, but these are defined in terms of the observer's worldview and values. While these are certainly indicators of intrapsychic functioning, the types of factors considered in these instruments do not tap into what the behavior or attitude means to the person who has it. Some scales acknowledge the potential importance of this type of information by including space on the rating form for "Case Specific Items" (Webster et al., 2006), or integrate this clinical reasoning globally into the clinician's professional judgment in rating the items and assigning an overall level of risk. Such case-specific items can be more analytically integrated into structured risk assessment if we revise our conceptualization of variables, using the first-person perspective as an organizing focus. Through conceptualization of an individual's internal mental state, researchers may be able to reduce the amount of case-specific data that is considered uncategorizable, and recognize factors with person-specific relevance. Although manifestations in individual cases may be unique, certain processes can be identified and scaled within a flexible but conceptually precise theoretical framework that accounts for the specificities of cases as well as how each individual is situated in the aggregate.

An example regarding hostility and the use of alcohol (known risk markers for involvement in violence: Mulvey et al., 2006; Odgers et al., 2009; Pulay et al., 2008; Skeem et al., 2006; Steadman et al., 1998), may illustrate the importance of subjective processes. We could consider Joe, who drinks when he is angry and feels vulnerable, withdrawn and lonely. He drinks in order to attenuate these emotions, and when the alcohol is ineffective, he drinks more and more. When his cousin comes over unexpectedly, Joe is annoyed by the visit and has hostile feelings. Joe has been drinking heavily, and the cousin makes a remark comparing Joe with his abusive father. Joe then beats up his cousin, who requires treatment in the ER. In contrast, Bobby drinks when he is bored and feeling friendly. He seeks out his friends and wishes to interact with many people and tell jokes. He likes the "buzz" of getting a little drunk and enjoys feeling less inhibited. He keeps drinking because he wants to buy drinks for everyone in the bar. When a stranger refuses a drink that Bobby has given him, Bobby feels annoyed, hostile, and makes a joke about leading a horse to water and trying to make him drink. The stranger slaps him once and Bobby rushes to defend himself, resulting in injury of the stranger.

In both cases, alcohol and hostility are associated with an act of violence, and abstinence from alcohol could be considered as an approach to reduce the chance of future violence, but it is unclear whether alcohol was the decisive factor leading up to the act in each of these instances. Indeed, by requiring Joe to stop drinking, we might be removing one of his coping strategies before he has devised a sound alternative for handling his emotions, and a harm reduction approach may initially be more effective in his situation. In both cases, further examination of the individual's subjective stance is likely to reveal additional processes beyond alcohol use or ongoing hostility level that are central to the individual's violent response.

1.3 The challenge of measuring subjective processes

Researchers have long noted that the development of improved actuarial instruments has involved only limited attention to theoretical models of involvement in violence (Douglas & Skeem, 2005). Litwack (2002), for example, called for renewing systematic "descriptive research" to enhance the research base regarding the assessment of the likelihood of

violence. By descriptive research, he referred to “narrative accounts of psychological phenomena...of the sort that articulate clinicians would provide...to readily understand the bases for the clinical evaluations at issue” (Litwack, 2002). He proposed, as we do here, that more work was needed to clinically portray the relevant psychological processes underpinning an increased likelihood of violence.

Violent incidents vary considerably from one another along several dimensions, e.g., the severity of consequences, degree of planning, motivation of the actors, cultural meaning, and the characteristics of the actors. And yet, manifestations of violence all share one basic feature that can be logically inferred: at some point, the individual is mentally activated, either through explicit or implicit awareness, to behave as though violence is a plausible or necessary response in a given situation. As noted by Vossekul and Fein (1998), a fruitful way of thinking about prevention of a violent event is to identify those factors that shift the balance between precursors such as ideation about committing violence and taking action in that regard. Given that violent behavior is to some extent an explicitly generated activity that expresses a person’s mental state, the subjective assignment of personal meanings in the social circumstances leading up to the act is likely to be relevant in the production of a violent response as well as in thinking about possible interventions.

In order to develop such a line of inquiry, several tasks must be accomplished. Exploratory studies will be needed to develop measurements for capturing and examining relevant aspects of subjective experience related to an individual’s involvement in violence, and to do so in a manner that would allow for generating probability estimates. The first stage in this line of investigation is to consider, in high-risk individuals, idiographic features that vary over time along with known predictors, define these subjective factors across subjects and test the relation between the newly-defined factors, existing predictors and subsequent violence. Even if subjective factors were to result in no increase in accuracy over existing actuarial instruments, they may identify important mediators or moderators to guide effective treatment interventions.

Two major issues must be resolved at the outset. First, a set of clinically reasonable, theoretically grounded constructs must be identified for investigation as possible subjective factors related to involvement in violence. Second, a method for accessing and coding these constructs must be developed. The rest of this paper proposes a general outline of a theoretical framework for the first task and points to a conceptual basis for guiding resolution of the latter.

Identifying relevant subjective processes related to involvement in violence requires consideration of psychological processes associated with aggression and illegal behavior, drawing upon clinical accounts of involvement in violence as a guide. Although the factors considered should apply across cases, they must be defined so as to capture individual differences in meaning and case-specific details that lead to violence. The types of variables to be examined with this aim are abstract ones, rather than directly observable features, such as impulse control, or exogenous changes in the environment that might make violence more likely. Rather than rating whether or not the person has unstable housing, one would be interested in the meaning of homelessness to that individual; does it mean chaos, creativity, disaffiliation, freedom, humiliation, rebellion? This requires a substantial phase of construct development in order to define categories that are sufficiently abstract but also precise in describing the posited subjective mechanisms for violence. In the subsequent sections, we propose three such constructs that may meet these requirements and may serve as starting points for this line of inquiry.

The second basic challenge in this pursuit is to collect accurate and consistent data. To even begin to approach a first person portrayal, one needs an account of how the individual assigns meaning at the point of involvement in a violent encounter and the role that interpretations of self, others and life circumstances may play in the occurrence of a violent incident. For obvious reasons, this type of process cannot be investigated at the time that the outcome (violence) is occurring. Furthermore, self-reports of recent past mental state are likely to be encumbered by distortion and inaccuracies (Evans, 2008; Nisbett & Wilson, 1977; Wilson & Dunn, 2004).

These uncertainties do not, however, totally negate the value of self-perceptions. First-person verbal accounts of individuals involved in violence have as yet been largely unexplored (Volavka & Nolan, 2008), even though this subjective perspective is central to clinical practice (Kendler, 2005). Some studies indicate that high-risk individuals are more accurate in their self-assessment of risk, and the factors that put them at higher risk, than knowledgeable others (Shrauger et al., 1996; Skeem et al.), and that individuals may have a sufficient level of explicit as well as implicit self-awareness (Lane, 2008) to provide meaningful data on processes that underlie their own risk for negative outcomes. In other words, even if explicit knowledge is inexact, a relevant signal may be detected if the measurement technique is precise and appropriate to the type of information sought (Bandura, 2006), and the individual does not have substantial deficits in cognitive functioning.

Existing structured instruments for relevant subjective variables are likely to provide only limited information given that the processes of interest manifest more specifically as idiographic meaning that individuals apply to particular relationships, events or circumstances. At an early stage of investigation, this requires capturing data in the form of words. Data in the form of words are likely to access information that is different in nature from that obtained in ratings, and would allow for the development of appropriate categories for describing idiographic features that intervene in the pathway to violence. Early stages of such an investigation require only that subjects be willing to speak about their experience, and some prior work indicates that individuals with substantial histories of violence are willing to do so (Maruna, 1997; Toch, 1969/1992; Yang et al., 2009).

Although words provide a distinctive form of information, they can be processed in a scientifically precise manner using any of a number of techniques, and effectively combined with numerical and categorical data within a mixed methods paradigm (Corbin & Strauss, 2008; Creswell, 2007; Creswell & Plano Clark, 2007; Glaser & Strauss, 1967). Open-response questions with a time limit for sampling of speech behavior, along with structured instruments, can be used to characterize the linkages among hypothesized subjective processes, their variation over time, and their relationship to violence. It is anticipated that this process would involve iterative qualitative reviews of transcribed open-response speech samples. These categories in turn could be further compared with ratings on psychometrically validated instruments, and analyzed for intra-individual variation over time, inter-individual comparisons, and identification of categories of subjective experience related to or mediating violence outcomes.

2. Possible initial foci for investigation

Prior reviews have synthesized the literature regarding many psychological processes related to violence (see Anderson & Bushman, 2002; Barratt & Slaughter, 1998; Bell & Naugle, 2008; Hiday, 2006; Volavka & Nolan, 2008). One of the difficulties in investigating the first-person perspective, however, is the fact that subjective experience is a synthesis of multiple overlapping constructs. Subjectivity has been conceptualized in phenomenological

and holistic terms (Giorgi, 2004), with subjective experience perceived by the individual as a synthesis of components that are not evident to the individual as separate elements. However, empirical study of the influence of subjectivity on violence risk need not proceed in a totally open-ended fashion. Existing research has already identified psychological processes that appear central to involvement in aggressive or unlawful behavior and this prior work allows us to focus on particular constructs within subjective experience.

For the purposes here, we assume that involvement in violence is most often a reaction that exceeds or bypasses rational calculation of self-interest alone (Bushman & Anderson, 2001; Cornell et al., 1999; Joireman et al., 2003); it is a discontinuity in subjective experience which presents an ethical dilemma. Situations where violent behavior becomes an option for the individual may challenge him to trespass beyond a line of normative behavior, both in the sense of broad societal standards as well as within the complexities of a person's relationship with himself. In addition to violating rules and laws externally defined by society and internalized in a variety of ways within a personal ethical stance, violence is also an experience of emotional excess and an individual's way of handling excess. We heuristically grouped the concepts reviewed into three distinct areas that may contribute to such an act: (i) construal of intent and cause, (ii) normative reference points, and (iii) emotion recognition and regulation.

The constructs examined here represent a starting point for this type of inquiry. These constructs may overlap and change in the context of recent life experiences as well as the intensity of certain internal states such as paranoid ideas or dysphoria. While described here as distinct areas of internal experience, these mental processes are also theoretically interrelated; they overlap and are dynamically intertwined.

2.1 Construal of intent and cause: Protecting personal integrity

A starting point for thinking about how subjective experience is related to violent action is the individual's perception of himself and others in social situations. The long line of investigation on social information processing, especially in aggressive adolescent males (Dodge, 2006; Dodge et al., 1997; Dodge & Pettit, 2003; Williams et al., 2003), and adults (Gardner et al., 1996; Lee & Greene, 2007; Lidz et al., 1993; Odgers et al., 2009; Pettit et al., 2010) has elucidated many of the connections among perceptions, generation of alternatives, initiation of responses and an individual's construal of threat or the perceived need for self-protection. Recent studies point to the possibility that these processes are modifiable (Fraser et al., 2005; van Manen et al., 2004), and these social information processing formulations have served as platforms for the development of effective interventions for reducing violence in high risk populations (Holmqvist et al., 2009; Hornsveld et al., 2008; Nestor, 2002), sometimes with mixed results (Serin et al., 2009). Many of these studies have measured the effectiveness of the intervention by using structured assessments of change in the perception of social situations or in the generation of alternative strategies for handling conflicts with others.

There has, however, been little development of systematic strategies for measuring these types of perceptions regarding social situations in the ongoing assessment of risk for future violence. While changes in the general level of these perceptions may indicate improvement in the target outcome of an intervention, it remains unknown whether or how much individual fluctuations in these mental processes are related to repeated involvement in violence. Two interrelated processes are particularly salient: (i) the interpretation of others' behavior as a threat and (ii) the extent to which the individual attributes causation to sources external to himself when experiencing a state of disequilibrium or distress. These processes set the stage for violent encounters, and fluctuations in an individual's processing of these cues over time may provide an indication of increased risk for violence.

2.1.1 Perceived threat—A perceived challenge to the integrity of the self is a central feature of mental processing in individual narratives of involvement in violence. Individuals often speak of being involved in violence as the result of feeling threatened, needing to defend their reputation, or as a way of ensuring a desired or “just” outcome (Gilligan, 1996; Toch, 1969/1992). Arguably, the immediate prompt for violent action is likely to be a sense of threat, and the mental state that might underlie such a perception is the extent to which the person tends to view life circumstances over time as a series of more or less threatening encounters. A perceived threat may be either physical or psychological, and either immediate or sustained over time through chronic exposure. Subjectively, depending on the immediate interpretation of events, the individual may believe to varying degrees that harm of some kind will occur from forces beyond his control (Link et al., 1992). This threat may be a menacing gesture or insulting words from another person, a perceived devaluation, or a denigration of cherished values or self-image. For some persons, many seemingly ordinary stresses of life may be interpreted as threats communicating shame or disrespect (Gilligan, 2001, page 66).

Several lines of investigation highlight the centrality of perceived threat in precipitating violence. A series of studies has demonstrated that boys identified as aggressive by parents or teachers are more likely to interpret ambiguous social situations as hostile and deserving of retaliation (Dodge & Frame, 1982; Pulay et al., 2008). In studies of adults with psychotic disorders, the presence of “threat-control override” symptoms¹ has emerged as a correlate of violence (Link et al., 1998), at least in males (Teasdale et al., 2006). While later analyses of the endorsement of these symptoms in the context of psychotic disorders cast some doubt about the utility of these symptoms as indicators of likely violence (Appelbaum et al., 2000); (Link & Stueve, 1994; Skeem et al., 2006; Stompe et al., 2004), there is still support for a link between antagonistic or generally suspicious attitudes and increased involvement in violence (Skeem et al., 2005).

In a key theoretical paper, Bentall and Taylor (2006) discuss aspects of paranoia that may link it to violence. After an overview of the psychology of paranoia, including perceptual and cognitive processes, they highlight the perception of threat, theory of mind deficits and attributional bias as potential candidates to explain the relationship between paranoia and violence. They emphasize that a dimensional view is needed in order to understand how processes such as jumping to conclusions (see Freeman et al., 2008) or anomalous perceptual experiences contribute to paranoid states. Although their focus is on dimensions within delusions, aspects of their theoretical formulation could be productively extended to a non-clinical population, as done by Freeman and colleagues (2008). Dimensional study of symptoms and symptom clusters may shed light on findings in prior studies that demonstrated an association between mental illness (Arboleda-Florez, 1998; Elbogen & Johnson, 2009) or more particularly, psychotic disorders, and violence (Eronen et al., 1998; Taylor, 1998). It may be that symptom dimensions such as perception of threat in mental disorders (Arseneault et al., 2000) are related to violence, but that these dimensions are equally influential in persons with no mental illness who engage in violence.

Some personality constellations may predispose individuals to have heightened interpretations of events as threatening (Dodge & Frame, 1982). Pathological narcissism, for example, can produce an increased awareness of potential slights (Gabbard, 2005; Kernberg, 1995; Malmquist, 2006), and perceived threat to egotism has been associated with aggression in psychopathic individuals (Cale & Lilienfeld, 2006). Low self esteem,

¹“How often have you felt that your mind was dominated by forces beyond your control?” “How often have you felt that thoughts were put into your head that were not your own?” “How often have you felt that there were people who wished to do you harm?”(Link & Stueve, 1994)

previously thought to be correlated with violence, has been reinterpreted as a construct that can be differentiated into two components: stable self-esteem and narcissism, with the latter condition being associated with particularly hostile response to perceived threat (Bushman & Baumeister, 1998). Experimental studies have further developed the finding that self-esteem and narcissism are independent constructs (Donnellan et al., 2005; Stucke & Sporer, 2002).

These lines of investigation support observations by psychodynamic theorists about the centrality of shame, humiliation and rejection (Gilligan, 1996, 2001; Thomas, 1997) in explaining the genesis of violence. Cartwright provides a detailed account of how particular circumstances lead to breakdown of the individual's narcissistic structure, with resulting identification with internalized bad objects (Cartwright, 2002). These theorizations posit that the individual's mental representations become externalized through the defense mechanism of projection, as proxies for internalized objects that are threatening to the self (Laplanche & Pontalis, 1973). Externally identified proxies can then undergo destruction through a reaction of rage against the person's internally threatening objects.

The notion of threat is also central to other, recent clinical theories of violence. Work in the development of evidence-based approaches for individuals with borderline personality disorders (Bateman & Fonagy, 2008a, 2009) has focused on the construct of mentalization, or "the process by which we implicitly and explicitly interpret the actions of ourselves and others as meaningful based on intentional mental states (e.g., desires, needs, feelings, beliefs, and reasons)" (Bateman & Fonagy, 2008b). In this framework, violence has been seen as a reaction that arises from a transient, fluctuating inhibition of the capacity to mentalize, with a resulting state of readiness to perceive situations as threatening to personal integrity (Bateman & Fonagy, 2008b; Fonagy, 2003).

2.1.2 Attributional style—Perceived threat emphasizes the individual's construal of the external world through a lens focused on potential harm and the affectively charged quality of a threat. The related construct of attributional style is more cognitively based and general; it refers to the internal mechanisms that structure how the person interprets external events in terms of causation, whether these interpretations heighten affective response or not. It is the extent to which an individual attributes causation in life situations and outcomes to his or her own abilities on the one hand, or rather to chance and other external factors (Bentall et al., 2001; Kinderman & Bentall, 1997; McKay et al., 2005). It has been examined as a personality trait as well as a state-dependent characteristic that may fluctuate (Aakre et al., 2009; Alloy et al., 1984; Goldstein et al., 2000; Peterson & Seligman, 1984).

The logic linking attributional style to a heightened risk for involvement in violence is rather straightforward, though few studies have examined this relationship. Attribution can be seen as a motivational process in which the explanation of why an event occurred and suppositions about causality may influence subsequent motivation and action. In this formulation, controllability is a key factor in the construal of negative events, with external blame assigned when the cause is interpreted as unavoidable or under someone else's control. A violent reaction would appear to be more plausible and justifiable when a negative event or situation is viewed as controllable by another party who is subsequently targeted with blame or anger (Betancourt & Blair, 1992). When a strong attributional argument is subjectively constructed so that external influences (e.g., a boss, an educational institution) are the cause of negative outcomes (e.g., poor job prospects, unfulfilling romantic relationships), it seems eminently logical to lash out at those individuals or social structures. An individual may feel internally justified in attacking someone whom he perceives to be a barrier to life success or who represents the social system that limits his freedom or happiness.

It is reasonable to posit that attributions vary in intensity and externality over time, with heightened levels of external attribution associated with violent acts when combined with intense affect or a sense of threat. The individual's causal reasoning about negative events can build upon itself in a cyclical fashion, where particular situations are interpreted with external attribution of blame, which then heightens attention to and perception of future occurrences, which in turn enhance inferences, beliefs, and a search for further data to reinforce the belief (Bentall et al., 2001). This pattern of attribution is found in case studies of rampage killings, such as school shootings, in individuals without psychotic disorders or major affective illnesses (Vossekuil & Fein, 1998).

Some empirical studies support the existence of a link between attributional style and violence. In an inpatient setting, an aggressive attributional style at the time of admission – defined as a pattern of external hostile attributions including the belief that others intend harm -- was associated with increased rates of reported violent behavior by psychiatric patients, even after controlling for demographics, diagnosis, and impulsivity (McNiel et al., 2003). Attributional style has also been studied extensively regarding interpretations of sexual violence (Gerber & Cherneski, 2006), and numerous questionnaire-based studies have shown that external attribution of blame is associated with involvement in intimate partner violence (Scott & Straus, 2007).

2.2 Normative reference points

Involvement in violence is clinically observed to be related to the reference points that an individual has for normative behavior, his or her reading of the boundaries that must be crossed to make violence an acceptable option, and the personal reconciliation between an act and a code of acceptable personal conduct. How a person views himself as belonging to a group or endorses a set of values associated with a social group, suggest tacitly whether or not violence is an acceptable response to a given situation (Horowitz & Schwartz, 1974; Soriano et al., 2004). The perceived norms of any defined community act as a limit to the individual's readiness to give free rein to aggressive impulses. These norms, whether they are construed realistically in accordance with group consensus or distorted and interpreted subjectively, are likely to be implicated in violent behavior.

The law as imposed by the state may represent the most powerful of these norms. In order for the law to be effective, however, individuals must grant credence and legitimacy to its principles, content, and procedures (Tyler, 1997b, 2006). In order to be effective in maintaining social order, legal norms are ideally internalized rather than simply obeyed as part of one's conventional behavioral repertoire. This internalization of the legitimacy of the law arises from both an acceptance of the need for legal structure in society, as well as a relational form of experientially derived perceptions about legal legitimacy that is affective, influenced by past experience (Tyler, 1997b) and possibly modifiable (Cohn et al., 2010). Given the range of developmental and ongoing life experiences, it would be expected that individuals vary considerably from one another and within themselves over time regarding their beliefs in the legitimacy of the law.

These beliefs have been studied in relation to law-breaking behavior, including violence. If the justice system is generally perceived as unfair or if recent experiences undermine an individual's belief in the fairness and legitimacy of the law, individuals may more readily engage in illegal behavior (Cohn et al., 2010). Moreover, for many repeatedly violent individuals, encounters with the police power of the state is often concrete and dramatic, and perceptions of the legitimacy of this power may change in accordance with both the affective tone and the content of that experience (Barsky & Kaplan, 2007; Sherman, 2003). If, in addition to or as a result of these experiences, an individual is unable to incorporate such norms into a personal system of meaning and believes that these norms do not apply

personally (see Cioe & Burnett, 2009; Gardiner, 2001), an internalized sense of permissiveness could further promote involvement in violence, despite awareness and endorsement of societal values in a general sense.

Beyond the authority represented in the law, and particularly in communities or families where the legitimacy of this authority is collectively questioned, alternative normative structures may guide individual choices and provide additional sources of identification and social bonds. Informal social control is an important feature of a community, since crime and violence are more likely to occur when the individual's ties to society are frail (Henry, 2009; Laub, 2006). In disadvantaged subgroups, ties to mainstream society may be mediated by or in conflict with alternative group norms or values. Some alternative value systems may even endorse the use of violence under accepted conditions, as in cultures that rely heavily on enforcing a "code of honor" or providing informal justice (Bennett & Brookman, 2008). Membership in a gang or in communities where masculinity is defined by the perceived need for violent response in order to defend an individual's sense of manhood are other examples of structures that provide alternative norms for expressing social standing (Anderson, 2000; Oliver, 1989). These alternative value systems may be so subtle, nuanced, and pervasive that individuals integrate them into their problem-solving strategies without ever identifying them explicitly. Fluctuations in an individual's internalization of normative references according to context and circumstance would appear to be relevant to the process of involvement in violence over time.

2.3 Emotion recognition and regulation

The reality of an act of violence is often horrific for the victim, witnesses, and the perpetrator. Violent acts are not only beyond normative expectations; they are also beyond the usual emotional states of most individuals. Violence commonly occurs in situations where emotional control has been strained to its breaking point, resulting in an unsettling affective experience for all involved.

Most acts of violence involve emotion reactivity and release, linked to some extent with thought content regarding a motive, which can include increased social standing (Fagan & Wilkinson, 1998). The exact role of emotion in precipitating violence, however, is still somewhat unclear (Barratt & Felthous, 2003; Bushman, 2002; Bushman & Anderson, 2001). The classic description of cathartic crisis suggests that intense emotion either chronically or acutely drives an individual to feel that no other solution is possible, and that committing an act of violence will lead to a discharge of affect that resolves the crisis (Schlesinger, 1996). Experimental studies, however, suggest that discharge of affect through alternative expression may increase aggression, while distraction (not thinking or expressing it) suppresses aggressive drives (Bushman, 2002). Although automatic hostile processing, rumination and effortful control are relevant factors in individual variation in involvement in violence (Norlander & Eckhardt, 2005; Wilkowski & Robinson, 2008), temperament-based affect also raises the risk of involvement in aggression and violent behavior (Wilkowski & Robinson, 2008). Izard differentiates emotional reactivity from basic emotions that cannot be captured by cognitive schematization (see Izard, 2009), positing that these basic emotions may become involved in cognitive schemas but are a distinct level and process of emotional experience. Ultimately, emotions are probably most coherently theorized as a cognitively inaccessible domain with indirect influence on cognitive schemas that mediate behavior (see Baumeister et al., 2007).

Emotion dysregulation has been examined as a marker of increased likelihood of involvement in violence in individuals with mental disorders. Individuals who regularly report being overwhelmed by emotions, and who have a lower capacity to bring emotions (mainly negative emotions, like sadness or irritation) into check, are more likely to be

involved in repeated violent incidents (Newhill et al., 2009). Studies also suggest that individuals who are prone to experiencing fluctuations in levels of hostility and anger (but not in psychiatric symptoms), and have a lower capacity to dampen these fluctuations, have a higher level of involvement in violent incidents (Odgers et al., 2009; Skeem et al., 2006). While the mechanisms that mediate the impact of these fluctuations in emotional state on violent behavior have not yet been identified, changes in the level of emotions are associated with significant increases in the likelihood of involvement in violence.

There are several possible explanations for an association between being emotionally overwhelmed and involvement in violence. For some individuals, engaging in violence may resolve an uncomfortable, negative emotional state, such as anxiety or emptiness. Over time, it may become an alternative behavior that is integrated into the emotional pattern of difficult life situations such as relationship conflict (Anderson & Bushman, 2002). Some individuals may even experience a form of gratification which, if not pleasure per se, represents a type of internal reward connected with engaging in violent behavior: a repeatedly violent patient may describe how he “misses” getting into fights because he must refrain from this while on probation. Others may engage in violence as part and parcel of other exciting patterns of transgression (Joireman et al., 2003), such as street robbery (Bennett & Brookman, 2008). Finally, there is some evidence that the inability to articulate emotions in words (Lane, 2008; Lane & Schwartz, 1987) – alexithymia -- may be associated with impulsive aggression (Teten et al., 2008). The role of fluctuating emotions has been demonstrated in its association with violence, but the exact mechanisms behind that association are not yet elucidated.

3. Implications for intervention

We have proposed that examining the individual’s first-person perspective may provide theoretically and practically useful insights about dynamic risk for involvement in violence. In this view, violence can productively be formulated first and foremost as a costly and misguided *solution* to inner states rather than principally as a problem behavior to be eradicated. While the perspective of violence as a *problem* is certainly valid, further progress in structured assessment and interventions for tertiary prevention may hinge more strongly on an approach focused on the subjective purpose of violence for the individuals involved.

We have proposed three examples of areas in subjective mental functioning that fluctuate over time and set the stage for this type of destructive problem-solving: (i) construal of intent and cause, (ii) normative reference points, and (iii) emotion recognition and regulation. As discussed above, existing literature provides some indication that these factors play a role when the likelihood of involvement in violence is high.

These factors are thus also logical targets for future studies on dynamic changes that place an individual at heightened risk over time, particularly with an eye toward treatment interventions. A major challenge, however, lies in expanding the methods for defining clinical variables in a precise and testable fashion and applying them to the study of how such dynamic changes relate to an individual’s involvement in violence.

The areas of mental functioning described here involve internal processes related to the formulation of subjective meaning. Psychometrically validated scales exist for the measurement of parts of these specified relations with regard to both baseline trait characteristics and intra-individual fluctuations over time (e.g., Paranoid Thoughts Scales: Green et al., 2008; Attributional Style Questionnaire: Peterson et al., 1982; Legitimacy Index of the Procedural Justice Inventory: Tyler, 1997a). Given the complexities of tapping into individuals’ subjective states, however, it is clear that alternative methods are needed beyond currently existing scales. Due to wide variation in meanings that individuals may

attribute to particular situations and life circumstances, using an idiographic, intra-individual focus to refine the relevance of these proposed processes to the person's violent response will also be needed.

One method for approaching the empirical study of subjectivity may simply be to ask the person to speak explicitly about the processes of interest or for the researcher to make inferences on the basis of themes and beliefs conveyed in a speech sample or narrative. Ethnographers and other qualitative researchers have developed precise techniques for eliciting subjective experience through open questions that are nonetheless refined and focused (Rubin & Rubin, 2004). Using either a prospective narrative or retrospective account of an act of violence, an individual could provide indications of potentially significant states or subjective interpretations and provide data on how these factors may be organized in a sequence leading up to the act. Development of qualitative and mixed methods approaches to access the types of processes outlined here would further this goal, and situate data gathered in the form of speech samples with psychometric information in relationship to existing models.

The three proposed areas identified above are potentially productive avenues for assessing dynamic changes in violence risk, but they do not exhaust the features of subjectivity that might be considered nor do they determine what the most productive therapeutic orientations might be that emerge from the type of research proposed. The story of how someone comes to act violently is clearly far more complex than the sum effect of these descriptors. Most notably, the eruption of violence as a response to particular circumstances is likely to be influenced by the range of options available to an individual in a given situation and by the person's construal of the availability and utility of these options. Fundamental to the process of considering alternatives to violence is a sense of agency, including the processes described as intentionality, forethought, self-reactiveness, and self-reflectiveness, along with the agentic "management of fortuity" (Bandura, 2001). In order to effectively avert an act of violence, an individual must believe that more constructive actions are possible for altering the current situation, that she has some say in what will happen. Individuals are not inexorably driven to violent action by an increase in dynamic risk factors, but instead most likely come to this action in part as a result of feeling that they cannot resolve internal states effectively without violence (Orpinas, 1999).

Acknowledging that violence is more than simply the product of increased risk factors "tipping a balance" is especially important for understanding the advantages and limitations of a formulation like the one presented here. While the three areas highlighted above could prove to be useful for expanding our characterization of dynamic risk, they do not determine in advance the forms of intervention that might be most relevant at a particular time. Wherever inquiries into assessing and intervening in an individual's dynamic risk for violence may lead in the future, it seems apparent that they begin with a clearer conceptualization of subjective experience and of the person's violent response in particular circumstances that have meaning for him.

A structured violence risk assessment approach that follows the internal logic of subjective experience is likely to improve accuracy in the identification of relevant foci for treatment. Even if it does not, it would convey to the individual that her personal point of view is a key part of the assessment as a consultative and collaborative process, one that she can choose to know and possibly change. It would be an approach to structured assessment that provides a scientific representation of the prospect of agency and choice, without determining in advance for the individual how and in what way that should take form.

References

- Aakre JM, Seghers JP, St-Hilaire A, Docherty N. Attributional style in delusional patients: a comparison of remitted paranoid, remitted nonparanoid, and current paranoid patients with nonpsychiatric controls. *Schizophr Bull.* 2009; 35(5):994–1002. [PubMed: 18495648]
- Alloy LB, Peterson C, Abramson LY, Seligman ME. Attributional style and the generality of learned helplessness. *J Pers Soc Psychol.* 1984; 46(3):681–687. [PubMed: 6707869]
- Anderson CA, Bushman BJ. Human aggression. *Annu Rev Psychol.* 2002; 53:27–51. [PubMed: 11752478]
- Anderson, E. *Code of the Street: Decency, Violence and the Moral Life of the Inner City.* New York: W.W. Norton & Co; 2000.
- Appelbaum PS, Robbins PC, Monahan J. Violence and delusions: data from the MacArthur Violence Risk Assessment Study. *Am J Psychiatry.* 2000; 157(4):566–572. [PubMed: 10739415]
- Arboleda-Florez J. Mental illness and violence: an epidemiological appraisal of the evidence. *Can J Psychiatry.* 1998; 43(10):989–996. [PubMed: 9868562]
- Arseneault L, Moffitt TE, Caspi A, Taylor PJ, Silva PA. Mental disorders and violence in a total birth cohort: results from the Dunedin Study. *Arch Gen Psychiatry.* 2000; 57(10):979–986. [PubMed: 11015816]
- Bandura A. Social cognitive theory: an agentic perspective. *Annu Rev Psychol.* 2001; 52:1–26. [PubMed: 11148297]
- Bandura, A. Guide for constructing self-efficacy scales. In: Pajares, F.; Urdan, T., editors. *Self-efficacy beliefs of adolescents.* Vol. 5. Greenwich, CT: Information Age Publishing; 2006. p. 307-337.
- Barratt ES, Felthous AR. Impulsive versus premeditated aggression: implications for mens rea decisions. *Behav Sci Law.* 2003; 21(5):619–630. [PubMed: 14502692]
- Barratt ES, Slaughter L. Defining, measuring, and predicting impulsive aggression: a heuristic model. *Behav Sci Law.* 1998; 16(3):285–302. [PubMed: 9768462]
- Barratt ES, Stanford MS, Dowdy L, Liebman MJ, Kent TA. Impulsive and premeditated aggression: a factor analysis of self-reported acts. *Psychiatry Res.* 1999; 86(2):163–173. [PubMed: 10397418]
- Barsky A, Kaplan SA. If you feel bad, it's unfair: a quantitative synthesis of affect and organizational justice perceptions. *J Appl Psychol.* 2007; 92(1):286–295. [PubMed: 17227170]
- Bateman A, Fonagy P. 8-year follow-up of patients treated for borderline personality disorder: mentalization-based treatment versus treatment as usual. *Am J Psychiatry.* 2008a; 165(5):631–638. [PubMed: 18347003]
- Bateman A, Fonagy P. Comorbid antisocial and borderline personality disorders: mentalization-based treatment. *J Clin Psychol.* 2008b; 64(2):181–194. [PubMed: 18186112]
- Bateman A, Fonagy P. Randomized controlled trial of outpatient mentalization-based treatment versus structured clinical management for borderline personality disorder. *Am J Psychiatry.* 2009; 166(12):1355–1364. [PubMed: 19833787]
- Baumeister RF, Vohs KD, DeWall CN, Zhang L. How emotion shapes behavior: feedback, anticipation, and reflection, rather than direct causation. *Pers Soc Psychol Rev.* 2007; 11(2):167–203. [PubMed: 18453461]
- Beech A, Fisher D, Ward T. Sexual murderers' implicit theories. *J Interpers Violence.* 2005; 20(11):1366–1389. [PubMed: 16210731]
- Beech AR, Ward T, Fisher D. The identification of sexual and violent motivations in men who assault women: implication for treatment. *J Interpers Violence.* 2006; 21(12):1635–1653. [PubMed: 17065658]
- Bell KM, Naugle AE. Intimate partner violence theoretical considerations: moving towards a contextual framework. *Clinical psychology review.* 2008; 28(7):1096–1107. [PubMed: 18430501]
- Bennett T, Brookman F. *The Role of Violence in Street Crime: A Qualitative Study of Violent Offenders.* International journal of offender therapy and comparative criminology. 2008
- Bentall RP, Corcoran R, Howard R, Blackwood N, Kinderman P. Persecutory delusions: a review and theoretical integration. *Clinical psychology review.* 2001; 21(8):1143–1192. [PubMed: 11702511]

- Bentall RP, Taylor JL. Psychological processes and paranoia: implications for forensic behavioural science. *Behav Sci Law*. 2006; 24(3):277–294. [PubMed: 16773623]
- Betancourt H, Blair I. A Cognition (Attribution)-Emotion Model of Violence in Conflict Situations. *Pers Soc Psychol Bull*. 1992; 18:343–350.
- Buchanan A. Risk of violence by psychiatric patients: beyond the “actuarial versus clinical” assessment debate. *Psychiatr Serv*. 2008; 59(2):184–190. [PubMed: 18245161]
- Bushman BJ. Does Venting Anger Feed or Extinguish the Flame? Catharsis, Rumination, Distraction, Anger, and Aggressive Responding. *Pers Soc Psychol Bull*. 2002; 28:724–731.
- Bushman BJ, Anderson CA. Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychol Rev*. 2001; 108(1):273–279. [PubMed: 11212630]
- Bushman BJ, Baumeister RF. Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: does self-love or self-hate lead to violence? *J Pers Soc Psychol*. 1998; 75(1):219–229. [PubMed: 9686460]
- Cale EM, Lilienfeld SO. Psychopathy factors and risk for aggressive behavior: a test of the “threatened egotism” hypothesis. *Law Hum Behav*. 2006; 30(1):51–74. [PubMed: 16729208]
- Cartwright, D. *Psychoanalysis, Violence and Rage-Type Murder: Murdering Minds*. New York: Brunner-Routledge; 2002.
- Cioe, J.; Burnett, M. *Self-Knowing Deficits and Psychopathic Characteristics*. International Academy of Law and Mental Health; New York, NY: 2009.
- Cohn ES, Bucolo D, Rebellon CJ, Van Gundy K. An Integrated Model of Legal and Moral Reasoning and Rule-Violating Behavior: The Role of Legal Attitudes. *Law Hum Behav*. 2010
- Corbin, J.; Strauss, A. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. 3. Thousand Oaks, CA: Sage Publications, Inc; 2008.
- Cornell DG, Peterson CS, Richards H. Anger as a predictor of aggression among incarcerated adolescents. *Journal of Consulting and Clinical Psychology*. 1999; 67(1):108–115. [PubMed: 10028214]
- Creswell, JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 2. Thousand Oaks, CA: Sage Publications; 2007.
- Creswell, JW.; Plano Clark, VL. *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage; 2007.
- Dodge KA. Translational science in action: hostile attributional style and the development of aggressive behavior problems. *Dev Psychopathol*. 2006; 18(3):791–814. [PubMed: 17152401]
- Dodge KA, Frame CL. Social cognitive biases and deficits in aggressive boys. *Child Dev*. 1982; 53(3):620–635. [PubMed: 7094675]
- Dodge KA, Lochman JE, Harnish JD, Bates JE, Pettit GS. Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. *J Abnorm Psychol*. 1997; 106(1):37–51. [PubMed: 9103716]
- Dodge KA, Pettit GS. A biopsychosocial model of the development of chronic conduct problems in adolescence. *Dev Psychol*. 2003; 39(2):349–371. [PubMed: 12661890]
- Donnellan MB, Trzesniewski KH, Robins RW, Moffitt TE, Caspi A. Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychol Sci*. 2005; 16(4):328–335. [PubMed: 15828981]
- Douglas KS, Skeem JL. Violence Risk Assessment: Getting Specific About Being Dynamic. *Psychology, Public Policy, and Law*. 2005; 11(3):347–383.
- Elbogen EB, Johnson SC. The intricate link between violence and mental disorder: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Arch Gen Psychiatry*. 2009; 66(2):152–161. [PubMed: 19188537]
- Eronen M, Angermeyer MC, Schulze B. The psychiatric epidemiology of violent behaviour. *Soc Psychiatry Psychiatr Epidemiol*. 1998; 33(Suppl 1):S13–23. [PubMed: 9857775]
- Evans C. What violent offenders remember of their crime: empirical explorations. *Aust N Z J Psychiatry*. 2006; 40(6–7):508–518. [PubMed: 16756575]
- Evans JSBT. Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology*. 2008; 59:255–278.

- Fagan, JA.; Wilkinson, DL. Social contexts and functions of adolescent violence. In: Elliott, DS.; Hamburg, BA.; Williams, K., editors. *Violence in American schools*. Cambridge: Cambridge University Press; 1998. p. 89-121.
- Fonagy, P. The Developmental Roots of Violence in the Failure of Mentalization. In: Pffafli, F.; Adshad, G., editors. *A Matter of Security: The Application of Attachment Theory to Forensic Psychiatry and Psychotherapy*. Philadelphia, PA: Jessica Kingsley Publishers; 2003.
- Fraser MW, Galinsky MJ, Smokowski PR, Day SH, Terzian MA, Rose RA, et al. Social information-processing skills training to promote social competence and prevent aggressive behavior in the third grades. *J Consult Clin Psychol*. 2005; 73(6):1045–1055. [PubMed: 16392978]
- Freeman D, Pugh K, Garety P. Jumping to conclusions and paranoid ideation in the general population. *Schizophr Res*. 2008; 102(1–3):254–260. [PubMed: 18442898]
- Gabbard, GO. *Psychodynamic Psychiatry in Clinical Practice*. 4. Washington, D.C: American Psychiatric Publishing; 2005.
- Gardiner JM. Episodic memory and autoegetic consciousness: a first-person approach. *Philos Trans R Soc Lond B Biol Sci*. 2001; 356(1413):1351–1361. [PubMed: 11571027]
- Gardner W, Lidz CW, Mulvey EP, Shaw EC. Clinical versus actuarial predictions of violence of patients with mental illnesses. *J Consult Clin Psychol*. 1996; 64(3):602–609. [PubMed: 8698955]
- Gerber GL, Cherneski L. Sexual aggression toward women: reducing the prevalence. *Ann N Y Acad Sci*. 2006; 1087:35–46. [PubMed: 17189496]
- Gilligan, J. *Violence: Reflections on a National Epidemic*. New York, NY: Vintage Books; 1996.
- Gilligan, J. *Preventing Violence*. New York, NY: Thames & Hudson; 2001.
- Giorgi A. A Way to Overcome the Methodological Vicissitudes Involved in Researching Subjectivity. *Journal of Phenomenological Psychology*. 2004
- Glaser, BG.; Strauss, AL. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine Publishing; 1967.
- Goldstein BI, Abela JR, Buchanan GM, Seligman ME. Attributional style and life events: a diathesis-stress theory of alcohol consumption. *Psychol Rep*. 2000; 87(3 Pt 1):949–955. [PubMed: 11191411]
- Green CE, Freeman D, Kuipers E, Bebbington P, Fowler D, Dunn G, et al. Measuring ideas of persecution and social reference: the Green et al. Paranoid Thought Scales (GPTS). *Psychol Med*. 2008; 38(1):101–111. [PubMed: 17903336]
- Grove WM, Meehl P. Comparative Efficiency of Informal (Subjective, Impressionistic) and Formal Mechanical, Algorithmic) Prediction Procedures: The Clinical-Statistical Controversy. *Psychology, Public Policy, and Law*. 1996; 2(2):293–323.
- Hanson RK. Twenty years of progress in violence risk assessment. *J Interpers Violence*. 2005; 20(2): 212–217. [PubMed: 15601794]
- Harris G, Rice M. Characterising the Value of Actuarial Violence risk Assessments. *Criminal Justice and Behavior*. 2007; 34:1638–1659.
- Harris GT, Rice ME. Risk appraisal and management of violent behavior. *Psychiatr Serv*. 1997; 48(9): 1168–1176. [PubMed: 9285978]
- Heilbrun K. Prediction versus management models relevant to risk assessment: the importance of legal decision-making context. *Law Hum Behav*. 1997; 21(4):347–359. [PubMed: 9335193]
- Heilbrun K, Ogloff JR, Picarello K. Dangerous offender statutes in the United States and Canada. Implications for risk assessment. *Int J Law Psychiatry*. 1999; 22(3–4):393–415. [PubMed: 10457932]
- Henry PJ. Low-status compensation: A theory for understanding the role of status in cultures of honor. *J Pers Soc Psychol*. 2009; 97(3):451–466. [PubMed: 19686001]
- Hervé, H.; Cooper, BS.; Yuille, JC. Memory Formation in Offenders: Perspectives from a Biopsychosocial Model of Eyewitness Memory. In: Christianson, SA., editor. *Offenders' Memories of Violent Crimes*. West Sussex, England: John Wiley & Sons; 2007. p. 37-74.
- Hiday VA. Putting community risk in perspective: a look at correlations, causes and controls. *Int J Law Psychiatry*. 2006; 29(4):316–331. [PubMed: 16533532]

- Holmqvist R, Hill T, Lang A. Effects of aggression replacement training in young offender institutions. *Int J Offender Ther Comp Criminol.* 2009; 53(1):74–92. [PubMed: 18162485]
- Hornsveld RH, Nijman HL, Hollin CR, Kraaiaam FW. Aggression control therapy for violent forensic psychiatric patients: method and clinical practice. *Int J Offender Ther Comp Criminol.* 2008; 52(2):222–233. [PubMed: 17636205]
- Horowitz R, Schwartz G. Normative Ambiguity and Gang Violence. *American Sociological Review.* 1974; 39(2):238–251.
- Izard CE. Emotion theory and research: highlights, unanswered questions, and emerging issues. *Annu Rev Psychol.* 2009; 60:1–25. [PubMed: 18729725]
- Joireman J, Anderson J, Strathman A. The aggression paradox: understanding links among aggression, sensation seeking, and the consideration of future consequences. *J Pers Soc Psychol.* 2003; 84(6): 1287–1302. [PubMed: 12793590]
- Kelsen, H. Introduction to the problems of legal theory. Paulson, BL.; Paulson, SL., translators. Oxford, UK: Oxford University Press, Clarendon; 1934/1992.
- Kendler KS. Toward a philosophical structure for psychiatry. *Am J Psychiatry.* 2005; 162(3):433–440. [PubMed: 15741457]
- Kernberg, OF. Aggression in Personality Disorders and Perversions. New Haven, CT: Yale University Press; 1995.
- Kinderman P, Bentall RP. Causal attributions in paranoia and depression: internal, personal, and situational attributions for negative events. *J Abnorm Psychol.* 1997; 106(2):341–345. [PubMed: 9131855]
- Kraemer HC, Stice E, Kazdin A, Offord D, Kupfer D. How do risk factors work together? Mediators, moderators, and independent, overlapping, and proxy risk factors. *Am J Psychiatry.* 2001; 158(6): 848–856. [PubMed: 11384888]
- Lane RD. Neural substrates of implicit and explicit emotional processes: a unifying framework for psychosomatic medicine. *Psychosom Med.* 2008; 70(2):214–231. [PubMed: 18256335]
- Lane RD, Schwartz GE. Levels of emotional awareness: a cognitive-developmental theory and its application to psychopathology. *Am J Psychiatry.* 1987; 144(2):133–143. [PubMed: 3812780]
- Laplanche, J.; Pontalis, J-B. The Language of Psychoanalysis. Smith, DN., translator. London: Hogarth Press; 1973.
- Laub JH, Edwin H. Sutherland and the Michael-Adler Report: Searching for the Soul of Criminology Seventy Years Later. *Criminology.* 2006; 44(2):235–257.
- Lee Y-J, Greene J. The Predictive Validity of an ESL Placement Test: A Mixed Methods Approach. *Journal of Mixed Methods Research.* 2007; 1:366–389.
- Lidz CW, Mulvey EP, Gardner W. The accuracy of predictions of violence to others. *JAMA.* 1993; 269(8):1007–1011. [PubMed: 8429581]
- Link B, Andrews D, Cullen F. The violent and illegal behavior of mental patients reconsidered. *American Sociological Review.* 1992; 57:275–292.
- Link, B.; Stueve, A. Psychotic symptoms and the violent/illegal behavior of mental patients compared to community controls. In: Monahan, J.; Steadman, H., editors. *Violence and Mental Disorder: Developments in Risk Assessment.* Chicago: University of Chicago Press; 1994.
- Link BG, Stueve A, Phelan J. Psychotic symptoms and violent behaviors: probing the components of “threat/control-override” symptoms. *Soc Psychiatry Psychiatr Epidemiol.* 1998; 33(Suppl 1):S55–60. [PubMed: 9857780]
- Litwack TR. Some Questions for the Field of Violence Risk Assessment and Forensic Mental Health: Or, ‘Back to Basics’ Revisited. *International Journal of Forensic Mental Health.* 2002; 1(2):171–178.
- Loza W, Dhaliwal GK. Predicting violence among forensic-correctional populations: the past 2 decades of advancements and future endeavors. *J Interpers Violence.* 2005; 20(2):188–194. [PubMed: 15601791]
- Loza W, Loza-Fanous A. Predictive validity of the Self-Appraisal Questionnaire (SAQ): A tool for assessing violent and nonviolent release failures. *Journal of Interpersonal Violence.* 2000; 15(11): 1183–1191.

- Loza W, MacTavish A, Loza-Fanous A. A nine-year follow-up study on the predictive validity of the self-appraisal questionnaire for predicting violent and nonviolent recidivism. *Journal of Interpersonal Violence*. 2007; 22(9):1144–1155. [PubMed: 17704460]
- Malmquist, CP. *Homicide: A Psychiatric Perspective*. 2. Washington, D.C: American Psychiatric Publishing; 2006.
- Maruna, S. Going straight. Desistance from crime and life narratives of reform. In: Lieblich, A.; Josselson, R., editors. *The Narrative Study of Lives*. Thousand Oaks, CA: US: Sage Publications, Inc; 1997. p. 59-93.
- McKay R, Langdon R, Coltheart M. Paranoia, persecutory delusions and attributional biases. *Psychiatry Res*. 2005; 136(2–3):233–245. [PubMed: 16125787]
- McNiel DE, Eisner JP, Binder RL. The relationship between aggressive attributional style and violence by psychiatric patients. *J Consult Clin Psychol*. 2003; 71(2):399–403. [PubMed: 12699034]
- Meloy JR. The “polymorphously perverse” psychopath: understanding a strong empirical relationship. *Bull Menninger Clin*. 2002; 66(3):273–289. [PubMed: 12448631]
- Meloy JR, Gacono CB. A psychotic (sexual) psychopath: “I just had a violent thought ...”. *J Pers Assess*. 1992; 58(3):480–493. [PubMed: 1613652]
- Melton, GB.; Petrila, J.; Poythress, NG.; Slobogin, C.; Lyons, PM., Jr; Otto, RK. *Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers*. 3. New York: Guilford Press; 2007.
- Milsom J, Beech AR, Webster SD. Emotional loneliness in sexual murderers: a qualitative analysis. *Sex Abuse*. 2003; 15(4):285–296. [PubMed: 14571534]
- Monahan, J.; Steadman, HJ.; Silver, E.; Appelbaum, PS.; Robbins, PC.; Mulvey, EP., et al. *Rethinking Risk Assessment: The MacArthur Study of Mental Disorder and Violence*. New York, NY: Oxford University Press; 2001.
- Moskowitz A. Dissociation and violence: a review of the literature. *Trauma Violence Abuse*. 2004; 5(1):21–46. [PubMed: 15006295]
- Mossman D. Assessing predictions of violence: being accurate about accuracy. *J Consult Clin Psychol*. 1994; 62(4):783–792. [PubMed: 7962882]
- Mossman D. The imperfection of protection through detection and intervention. Lessons from three decades of research on the psychiatric assessment of violence risk. *J Leg Med*. 2009; 30(1):109–140. [PubMed: 19241275]
- Mulvey EP, Lidz CW. Clinical prediction of violence as a conditional judgment. *Soc Psychiatry Psychiatr Epidemiol*. 1998; 33(Suppl 1):S107–113. [PubMed: 9857788]
- Mulvey EP, Odgers C, Skeem J, Gardner W, Schubert C, Lidz C. Substance use and community violence: a test of the relation at the daily level. *J Consult Clin Psychol*. 2006; 74(4):743–754. [PubMed: 16881782]
- Nestor PG. Mental disorder and violence: personality dimensions and clinical features. *Am J Psychiatry*. 2002; 159(12):1973–1978. [PubMed: 12450942]
- Newhill CE, Eack SM, Mulvey EP. Violent behavior in borderline personality. *J Pers Disord*. 2009; 23(6):541–554. [PubMed: 20001173]
- Nicholls TL, Brink J, Desmarais SL, Webster CD, Martin ML. The Short-Term Assessment of Risk and Treatability (START): a prospective validation study in a forensic psychiatric sample. *Assessment*. 2006; 13(3):313–327. [PubMed: 16880282]
- Nisbett RE, Wilson TD. Telling More Than We Can Know: Verbal Reports on Mental Processes. *Psychological Review*. 1977; 84(3):231–259.
- Norko MA, Baranoski MV. The state of contemporary risk assessment research. *Can J Psychiatry*. 2005; 50(1):18–26. [PubMed: 15754661]
- Norlander B, Eckhardt C. Anger, hostility, and male perpetrators of intimate partner violence: a meta-analytic review. *Clinical psychology review*. 2005; 25(2):119–152. [PubMed: 15642644]
- Novaco, RW. Anger as a risk factor for violence among the mentally disordered. In: Monahan, J.; Steadman, H., editors. *Violence and Mental Disorder: Developments in Risk Assessment*. Chicago, IL: University of Chicago Press; 1994. p. 21-59.

- Ogders CL, Mulvey EP, Skeem JL, Gardner W, Lidz CW, Schubert C. Capturing the ebb and flow of psychiatric symptoms with dynamical systems models. *Am J Psychiatry*. 2009; 166(5):575–582. [PubMed: 19369320]
- Oliver W. Sexual conquest and patterns of black-on-black violence: a structural-cultural perspective. *Violence Vict*. 1989; 4(4):257–273. [PubMed: 2487138]
- Orpinas P. Who is violent?: factors associated with aggressive behaviors in Latin America and Spain. *Rev Panam Salud Publica*. 1999; 5(4–5):232–244. [PubMed: 10355323]
- Peterson C, Seligman ME. Causal explanations as a risk factor for depression: theory and evidence. *Psychol Rev*. 1984; 91(3):347–374. [PubMed: 6473583]
- Peterson C, Semmel A, von Baeyer C, Abramson LY, Metalsky GI, Seligman MEP. The Attributional Style Questionnaire. *Cognitive Therapy and Research*. 1982; 6(3):287–300.
- Pettit GS, Lansford JE, Malone PS, Dodge KA, Bates JE. Domain specificity in relationship history, social-information processing, and violent behavior in early adulthood. *J Pers Soc Psychol*. 2010; 98(2):190–200. [PubMed: 20085394]
- Pulay AJ, Dawson DA, Hasin DS, Goldstein RB, Ruan WJ, Pickering RP, et al. Violent behavior and DSM-IV psychiatric disorders: results from the national epidemiologic survey on alcohol and related conditions. *J Clin Psychiatry*. 2008; 69(1):12–22. [PubMed: 18312033]
- Rubin, HJ.; Rubin, IS. *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks, CA: Sage; 2004.
- Schlesinger LB. The Catathymic Crisis, 1912-Present: A Review and Clinical Study. *Aggression and Violent Behavior*. 1996; 1(4):307–316.
- Scott K, Straus M. Denial, minimization, partner blaming, and intimate aggression in dating partners. *J Interpers Violence*. 2007; 22(7):851–871. [PubMed: 17575066]
- Serin RC, Gobeil R, Preston DL. Evaluation of the persistently violent offender treatment program. *Int J Offender Ther Comp Criminol*. 2009; 53(1):57–73. [PubMed: 18281440]
- Sherman L. *Reason for Emotion: Reinventing Justice with Theories, Innovations, and Research*. *Criminology*. 2003; 41(1):1–38.
- Strauger JS, Ram D, Greninger SA, Mariano E. Accuracy of Self-Predictions Versus Judgments by Knowledgeable Others. *PSPB*. 1996; 22(12):1229–1243.
- Skeem, JL.; Manchak, S.; Mulvey, EP.; Lidz, CW. The Utility of Patients' Self-Perceptions of Violence Risk: Consider Asking the One Who May Know Best. *Manuscript*
- Skeem JL, Miller JD, Mulvey E, Tiemann J, Monahan Jvp. Using a five-factor lens to explore the relation between personality traits and violence in psychiatric patients. *J Consult Clin Psychol*. 2005; 73(3):454–465. [PubMed: 15982143]
- Skeem JL, Schubert C, Odgers C, Mulvey EP, Gardner W, Lidz C. Psychiatric symptoms and community violence among high-risk patients: A test of the relationship at the weekly level. *J Consult Clin Psychol*. 2006; 74(5):967–979. [PubMed: 17032100]
- Slobogin C. Dangerousness and Expertise Redux. *Emory Law Journal*. 2006; 56(2):275–326.
- Soriano FI, Rivera LM, Williams KJ, Daley SP, Reznik VM. Navigating between cultures: the role of culture in youth violence. *J Adolesc Health*. 2004; 34(3):169–176. [PubMed: 14967339]
- Steadman HJ, Mulvey EP, Monahan J, Robbins PC, Appelbaum PS, Grisso T, et al. Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Arch Gen Psychiatry*. 1998; 55(5):393–401. [PubMed: 9596041]
- Stompe T, Ortwein-Swoboda G, Schanda H. Schizophrenia, delusional symptoms, and violence: the threat/control override concept reexamined. *Schizophr Bull*. 2004; 30(1):31–44. [PubMed: 15176760]
- Stucke TS, Sporer SL. When a grandiose self-image is threatened: narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *J Pers*. 2002; 70(4):509–532. [PubMed: 12095189]
- Taylor PJ. When symptoms of psychosis drive serious violence. *Soc Psychiatry Psychiatr Epidemiol*. 1998; 33(Suppl 1):S47–54. [PubMed: 9857779]
- Teasdale B, Silver E, Monahan J. Gender, threat/control-override delusions and violence. *Law Hum Behav*. 2006; 30(6):649–658. [PubMed: 16967327]

- Teten AL, Miller LA, Bailey SD, Dunn NJ, Kent TA. Empathic deficits and alexithymia in trauma-related impulsive aggression. *Behav Sci Law*. 2008; 26(6):823–832. [PubMed: 19039794]
- Thomas, HE. *The Shame Response to Rejection*. Sewickley, PA: Albanel Publishers; 1997.
- Toch, H. *Violent Men: An Inquiry into the Psychology of Violence*. Washington, D.C: American Psychological Association; 1969/1992.
- Tyler. Procedural fairness and compliance with the law. *Swiss Journal of Economics and Statistics*. 1997a; 133:219–240.
- Tyler TR. The psychology of legitimacy: a relational perspective on voluntary deference to authorities. *Pers Soc Psychol Rev*. 1997b; 1(4):323–345. [PubMed: 15661667]
- Tyler TR. Psychological perspectives on legitimacy and legitimation. *Annu Rev Psychol*. 2006; 57:375–400. [PubMed: 16318600]
- van den Brink RH, Hooijschuur A, van Os TW, Savenije W, Wiersma D. Routine violence risk assessment in community forensic mental healthcare. *Behav Sci Law*. 28(3):396–410. [PubMed: 19908211]
- van Manen TG, Prins PJ, Emmelkamp PM. Reducing aggressive behavior in boys with a social cognitive group treatment: results of a randomized, controlled trial. *J Am Acad Child Adolesc Psychiatry*. 2004; 43(12):1478–1487. [PubMed: 15564817]
- Volavka J, Nolan KA. Methodological structure for aggression research. *Psychiatr Q*. 2008; 79(4): 293–300. [PubMed: 18626770]
- Vossekuil, B.; Fein, RA. *Preventing Assassination: Reports from the Secret Service Exceptional Case Study Project*. National Institute of Justice; 1998.
- Webster, CD.; Douglas, KS.; Eaves, D.; Hart, SD. *HCR-20: Assessing Risk for Violence*. Burnaby, BC: Mental Health, Law, and Policy Institute; 1997.
- Webster, CD.; Hucker, SJ. *Violence Risk: Assessment and Management*. West Sussex, UK: John Wiley & Sons; 2007.
- Webster CD, Nicholls TL, Martin ML, Desmarais SL, Brink J. Short-Term Assessment of Risk and Treatability (START): The case for a new structured professional judgment scheme. *Behav Sci Law*. 2006; 24(6):747–766. [PubMed: 17171764]
- Wilkowski BM, Robinson MD. The cognitive basis of trait anger and reactive aggression: an integrative analysis. *Pers Soc Psychol Rev*. 2008; 12(1):3–21. [PubMed: 18453470]
- Williams SC, Lochman JE, Phillips NC, Barry TD. Aggressive and nonaggressive boys' physiological and cognitive processes in response to peer provocations. *J Clin Child Adolesc Psychol*. 2003; 32(4):568–576. [PubMed: 14710465]
- Wilson TD, Dunn EW. Self-Knowledge: Its Limits, Value, and Potential for Improvement. *Annual Review of Psychology*. 2004; 55:493–518.
- Yang S, Kadouri A, Revah-Levy A, Mulvey EP, Falissard B. Doing time: a qualitative study of long-term incarceration and the impact of mental illness. *Int J Law Psychiatry*. 2009; 32(5):294–303. [PubMed: 19619895]

Highlights

Structured assessment of violence risk has advanced but can still be improved.
Studying the first-person perspective of offenders may be valuable in this research.
We identify existing constructs to capture processes that may be linked to violence.
Measurement of subjective states should be developed in research on violence risk.