

**CODING GUIDE FOR VIOLENT INCIDENTS:
INSTRUMENTAL VERSUS HOSTILE/REACTIVE AGGRESSION**

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This is the coding guide we used to code violent crimes as instrumental or hostile/reactive forms of aggression. The coding guide is being made available to researchers, but it is not an established clinical instrument and is intended only for research purposes. For additional information, see the published study:

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CODING GUIDE FOR VIOLENT INCIDENTS

The primary distinction is between instrumental and reactive/hostile aggression. Originally we attempted to make this distinction through a global rating based on the rater's overall evaluation of the incident. However, some violent incidents had both instrumental and reactive/hostile qualities. For example, a person planned and carried out a robbery, but in the course of the robbery became angry when a storekeeper resisted him, and shot him in anger. Therefore, we decided to give priority to the presence of instrumental qualities, based on the theory that reactive hostility is the more common, pervasive form of aggression in criminal behavior and that instrumental aggression in criminal behavior represents a more pathological development and elaboration of the capacity for reactive aggression.

In addition to coding for the presence of instrumental and reactive aggression, the coders will make secondary ratings of these specific aspects of the aggressive act:

- 1) Planning - degree of premeditation or preparation for aggression
- 2) Goal-directedness - degree to which aggression is motivated by some external gain or incentive such as money
- 3) Provocation - degree of provocation, frustration or threat from victim
- 4) Arousal - degree of anger experienced by aggressor
- 5) Severity of violence - degree of injury to victim
- 6) Relationship to victim - closeness of relationship between victim and aggressor
- 7) Intoxication - intoxication on drugs or alcohol during incident
- 8) Psychosis - presence of psychotic symptoms during incident

These secondary ratings reflect aspects of the aggressive act which are not necessarily independent of one another. For example, planning and goal-directedness may be correlated. However, each of the components can be distinguished conceptually from the others and we are able to identify specific cases which support these distinctions.

In our discussion of various aggressive acts, the secondary ratings (especially the first four) seem to tap characteristics which contribute to the primary distinction between reactive and instrumental aggression, but these ratings are not equivalent to it. We used the secondary ratings to examine several questions:

- 1) Is there a stable combination or set of decision rules for the secondary ratings which is equivalent to the primary distinction?
- 2) Do the secondary ratings permit a sub-classification or refinement of the primary distinction which improves upon it?

Subjects may be dishonest, inaccurate, or incomplete in their account of the offense. Consider all available sources. Code what you believe to be true, what actually happened. If the subject claims self-defense, but all other available information indicates otherwise, and the subject is of doubtful credibility, code what you believe to be true.

Instrumental Aggression

The two cardinal characteristics of instrumental aggression are goal-directedness and planning. The instrumental aggressor acts to obtain a readily apparent goal such as power, money, sexual gratification, or some other objective beyond inflicting injury on the victim. Examples of instrumental aggression include shooting a police officer in the course of a bank robbery, stabbing a homeowner during a burglary, and strangling a rape victim. Rape is almost always instrumental. Sadistic aggression is a special form of instrumental aggression in which the objective is some form of pleasure (e.g., power or sexual gratification) that stems from the infliction of pain or attainment of dominance over the other person. Instrumental aggression is initiated as a means to an end rather than as an act of retaliation or self-defense.

Instrumental aggression often involves planning or preparation. However, in some cases instrumental aggression involves relatively little planning, such as in the case of a criminal who engages in an opportunistic offense (e.g., unexpected opportunity to rob someone that involves assaulting the victim). In some cases, a subject may plan a robbery or burglary, and when something goes wrong, engages in an act of aggression, such as shooting someone in order to get away. In these cases the coder should consider that the subject's plans included the possibility of violence, even if there was no specific plan to shoot someone.

Instrumental aggression usually involves little or no provocation by the victim. In some cases subjects may be "provoked" into violence in the course of another crime, e.g., a robbery victim who insults the subject or resists the robbery in some way. These acts are still considered instrumental acts of aggression.

Instrumental aggressors are motivated by goals, not emotions. It follows that their level of emotional arousal, especially anger, is relatively low or is secondary to the act. Some instrumental aggressors try to calm themselves prior to an offense through drug use or drinking. In extreme cases, instrumental aggressors are not angry toward their victims and may have a cold, "business-like" attitude about their behavior. Nevertheless, many less hardened instrumental aggressors are nervous and highly aroused while committing a crime, even though it is not their arousal which motivates their actions.

The term "instrumental" should not be defined so broadly that it encompasses all aggressive behavior simply because there is a definable goal or desired outcome to the aggression, such as warding off an attacker or taking revenge on someone. Aggressive behavior whose purpose is to

defend against a threat or in some way respond to provocation is defined as reactive/hostile aggression. If the subject is engaged in some form of criminal activity, such as a drug deal, associated violence is almost always instrumental.

Reactive/Hostile Aggression

The two cardinal characteristics of reactive/hostile aggression are reaction to provocation and arousal of hostility. Aggressive behavior represents reactive hostility to the extent that the aggressor reacts to perceived provocation or threat by the victim. The provocation may include insults, threats of aggression, or other acts that frustrate and anger the aggressor. The objective of the aggressive act is to harm or injure the victim, in response to feelings of hostility that may include a mixture of anger, resentment, fear, or other distress aroused by the victim's actions. Typically, there should be some form of interpersonal conflict (argument, dispute, prior aggression) between aggressor and victim. In many cases the aggressor and victim have a prior relationship as relatives or acquaintances, but in other cases there is no prior relationship and the parties are strangers to one another.

Bear in mind that reactive/hostile aggression can involve extended time-frames. For example, an abused family member may plan an ambush to rid the family of the abuser. The most recent episode of abuse could be long before the aggressive reaction. The critical issue is that the reactive/hostile subject is reacting to an interpersonal conflict that arouses hostility.

3 - Clearly instrumental aggression

2 - Both reactive and instrumental qualities are prominent

(subsequently these cases combined with instrumental group)

1 - Clearly reactive hostile aggression

Do not consider "displaced anger" or any form of displacement from one situation to the next. Many instrumental offenders may be angry at someone else, upset over a failed relationship, lost job, etc. This provides a context for understanding the person, but it should not enter into the determination that a person engaged in instrumental versus reactive/hostile violence. A person who sets out to rob a bank is committing an instrumental act, regardless of any prior life stress. A person who is embroiled in an intense interpersonal conflict with the victim will commit a reactive/hostile offense.

SECONDARY SCALES FOR VIOLENT INCIDENTS

Planning

How much did the subject plan or prepare for the aggressive action? Consider both the length of time involved in preparation and the amount of preparatory activity.

- 4 - extensive planning (detailed plan or preparation, rehearsal)
- 3 - moderate planning (contemplation of action for more than 24 hours)
- 2 - some planning (action within 24 hours, some plan or preparation)
- 1 - very little or no planning (acts during argument or fight, no preparation)

Assign a (1) to actions which are part of contiguous event, such as pausing during an argument to grab and load a gun. Assign a (2) if there is a break in the argument where the subject leaves the scene of an argument and returns with a gun later in the day.

Goal-Directedness

How much is the subject motivated by an external incentive, goal, or objective beyond just responding to provocation or threat? Readily apparent goals include money, power, sexual gratification, or some other external goal of benefit to the aggressor. Do not include such goals as self-defense, escaping harm, taking revenge for previous aggression, or acting out of frustration.

- 4 - Clear, unequivocal goal-directedness (include shooting during crimes)
- 3 - Primary goal-directedness, with presence of other motives
- 2 - Secondary goal-directedness, in presence of other primary motives
- 1 - No apparent goal-directedness (motive to injury victim, retaliate, defend)

Provocation

Did the victim's actions provoke the subject's aggression? Include provocation that occurred prior to the incident (e.g., prior abusive treatment).

- 6 - Exceptionally strong provocation (repeated assault, severe abuse)
- 5 - Very Strong provocation (assault)
- 4 - Strong (break-up of a romantic relationship, threat of major life change)
- 3 - Moderate provocation (serious argument or dispute, threat of assault)
- 2 - Mild provocation (insult, minor argument, confrontation with police)
- 1 - No apparent provocation

Consider the subject's personal point of view, even if the subject has a delusional perception of threat.

Arousal

How much emotional arousal, especially anger, did the subject experience at the time of the aggressive act? Just code the subject's mental state, not attitude toward the victim.

- 4 - Enraged, furious, described as "out of control" or "irrational"
- 3 - Angry, mad, extremely frightened (can be protracted state)
- 2 - Excited, very nervous, anxious
- 1 - Calm or tense at most

Arousal at the (4) level is extraordinary, and should be of short duration.

Severity of violence

- 7 - Extreme homicide (multiple killing, mutilation)
- 6 - Homicide
- 5 - Severe injury (lasting impairment or life-threatening injury, some rapes)
- 4 - Serious injury, requiring substantial hospital treatment (broken limb, rape, gunshot)
- 3 - Minor injury (e.g., bruises, minor medical treatment, attempted rape)
- 2 - Assault without injury
- 1 - No assault (e.g., threatened with weapon)

Relationship with victim

Code the degree of contact or closeness between aggressor and victim. The scores listed here are typical scores. Some relationships may require higher or lower scores than indicated. Generally give maximum scores to immediate family members, unless there has been prolonged separation or lack of contact that substantially alters the relationship (e.g., father who never lived in the home, mother who turned over care of child to grandmother). A step-parent may receive the same score as a parent if there appears to have been similar bonding and contact since early childhood. Code based on duration and closeness of relationship.

- 5 - Very close relationship (immediate family member, romantic partner)
- 4 - Close relationship (friend, relative, dating partner, etc.)
- 3 - Specific relationship (teacher, babysitter, etc.)
- 2 - Acquaintance
- 1 - Stranger

Intoxication

Code whether the subject was intoxicated at the time of the aggressive incident. Consider alcohol and other drugs. Primary concern is degree to which the person is impaired or has clouded consciousness. Consider how much intoxication played a role in the subject's actions.

- 4 - Severe intoxication (large quantities of alcohol or drugs, very impaired)
- 3 - Intoxicated
- 2 - Mild intoxication (e.g., 1 or 2 drinks)
- 1 - Not intoxicated

Generally code (4) for subjects who are "falling down drunk" or extremely impaired by multiple substances, etc.

Psychosis (reality testing, not mood)

- 4 - Substantial psychotic symptoms (e.g., bizarre or pervasive delusions)
- 3 - Moderate psychotic symptoms (intermittent voices or delusions)
- 2 - Non-psychotic disturbance (e.g., depersonalized)
- 1 - Not psychotic

Generally code (4) for subjects who are very impaired by psychosis and have active symptoms. What you might call "falling down psychotic." Code (3) for individuals with mild, residual symptoms or more circumscribed symptoms that do not seriously impair everyday functioning. A man with a paranoid delusion about the victim who is nevertheless able to hold a job and function in many social situations is a (3). An actively psychotic man living on the street is probably a (4).

Subject _____

Coder

VIOLENT INCIDENT CODING SHEET

Incident date:

Instrumental v Reactive/Hostile (code actual event, not just subject's claim)

- 4 - Clearly instrumental aggression (e.g., crime-related incident, drug deal)
- 3 - Primarily instrumental, some reactive qualities
- 2 - Primarily reactive hostile aggression, some instrumental qualities
- 1 - Clearly reactive hostile aggression (e.g., interpersonal conflict)

Planning (include plans for robbery, burglary, etc.)

- 4 - extensive planning (detailed plan or preparation, rehearsal)
- 3 - moderate planning (contemplation of action for more than 24 hours)
- 2 - some planning (action within 24 hours, some plan or preparation)
- 1 - very little or no planning (acts during argument or fight, no preparation)

Goal-Directedness (consider goals like financial gain, not just revenge)

- 4 - Clear, unequivocal goal-directedness (include shooting during crimes)
- 3 - Primary goal-directedness, with presence of other motives
- 2 - Secondary goal-directedness, in presence of other primary motives
- 1 - No apparent goal-directedness (motive to injure victim, retaliate, defend)

Provocation (includes provocation prior to incident, use subject's perception)

- 6 - Exceptionally strong provocation (repeated assault, severe abuse)
- 5 - Very Strong provocation (assault)
- 4 - Strong (break-up of a romantic relationship, threat of major life change)
- 3 - Moderate provocation (serious argument or dispute, threat of assault)
- 2 - Mild provocation (insult, minor argument, confrontation with police)
- 1 - No apparent provocation

Arousal (mental state, primarily code anger, but also consider other affects like fear)

- 4 - Enraged, furious, described as "out of control" or "irrational" or panicked (brief state)
- 3 - Angry, mad, extremely frightened (can be protracted state)
- 2 - Excited, very nervous, anxious, scared
- 1 - Calm or tense at most

Severity of violence (consider actual harm to victim, not subject's intention)

- 7 - Extreme homicide (multiple victims or multiple fatalities, mutilation)
- 6 - Homicide
- 5 - Severe injury (e.g., lasting impairment or life-threatening injury, some rapes)
- 4 - Serious injury, requiring substantial hospital treatment (e.g, broken limb, rape, gunshot)
- 3 - Minor injury (e.g., bruises, minor medical treatment, attempted rape)
- 2 - Assault without injury
- 1 - No assault (e.g., threatened with weapon)

Relationship with victim (if 2 or more victims, code highest)

- 5 - Very close relationship (immediate family member, romantic partner)
- 4 - Close relationship (friend, relative, dating partner, etc.)
- 3 - Specific relationship (teacher, babysitter, etc.) or Between friend and acquaintance
- 2 - Acquaintance
- 1 - Stranger

Intoxication

- 4 - Severe intoxication (large quantities of alcohol or drugs, very impaired)
- 3 - Intoxicated
- 2 - Mild intoxication (e.g., 1 or 2 drinks)
- 1 - Not intoxicated

Psychosis (reality testing, not mood)

- 4 - Substantial psychotic symptoms (e.g., bizarre or pervasive delusions)
- 3 - Moderate psychotic symptoms (intermittent voices or delusions)
- 2 - Non-psychotic disturbance (e.g., depersonalized)
- 1 - Not psychotic

CODER RELIABILITY STUDIES

We completed two reliability studies on the classification of instrumental and reactive offenders and the accompanying eight offense scales. In the first study, these scales were applied to a sample of 20 criminal defendants evaluated at the UVA Forensic Clinic. For five judges, the intraclass correlation coefficient for the scale distinguishing instrumental from reactive violence was .98. For 18 subjects all five judges agreed on violence type, and for the remaining two subjects four of five judges were in agreement. The other eight scales are listed below:

- 1) Planning (degree of planning and preparation prior to violence) .97;
- 2) Goal-directedness (presence of goals such as obtaining money) .94;
- 3) Provocation (subject's perception that victim provoked violence) .81;
- 4) Arousal (subject's degree of anger and excitement during violence) .83;
- 5) Severity of violence (degree of injury to victim) .97;
- 6) Relationship with victim (subject-victim relationship) .92;
- 7) Intoxication (alcohol or drug intoxication during violence) .96;
- 8) Psychosis (presence of psychotic symptoms during violence) .96.

In the second reliability study, we applied the slightly modified scales to records of 33 violent offenders incarcerated at the Staunton Correctional Center, a medium security state prison in Virginia. For 2 judges, the intraclass correlation for instrumental/reactive distinction was .93. The intraclass correlations for the other scales were all above .75, except for two scales: 1) the correlation for the provocation scale was .50, apparently because the records did not provide consistent information on the victim's behavior prior to the violent incident; and 2) the psychosis scale could not be used because none of the inmates were described as psychotic at the time of the offense.

Offense characteristics of instrumental and reactive violence. We examined the association between the instrumental/reactive classification and each of the eight offense variables for 50 Forensic Clinic defendants. These analyses were conducted for descriptive purposes to refine and clarify our conceptualization of instrumental and reactive aggression. Briefly, these analyses indicated that no single offense characteristic is synonymous with the instrumental/reactive distinction. The characteristics most strongly associated with instrumental violence are presence of a clearly definable goal, little or no provocation by the victim, and comparatively low levels of emotional arousal at the time of the offense. In contrast, reactive violence is associated most strongly with a lack of goal-directedness, little or no prior planning, provocation by the victim, and comparatively greater emotional arousal at the offense. Reactive violence more often involves family member victims, while instrumental violence is more often associated with acquaintances or strangers.

Categorical versus dimensional classification. We have found that *specific violent incidents* can be readily and reliably classified categorically as reactive or instrumental. Relatively few offenses pose classification difficulties, and in those cases we give greater weight to the presence of instrumental characteristics such as goal-directedness. However, the lifetime classification of violent offenders who have committed multiple offenses raises additional problems. Some offenders have extensive histories of reactive (or instrumental) violence while others have little or no history of violence prior to their recent offense. These cases suggest it may be viable to place subjects along a continuum for severity of reactive (or instrumental) violence.

Moreover, some offenders have a history of both reactive and instrumental violent offenses. (We have conducted detailed case studies of subjects with "mixed histories" of both instrumental and reactive violence, and it is clear that such individuals tend to be more similar to purely instrumental offenders, particularly in the presence of psychopathic characteristics.) A study by Vitiello, *et al.* (1990) found that violent juveniles fell into two groups, one an affective or reactive group, but the other a mixed group with both affective and predatory or instrumental aggression. Since persons can engage in both reactive and instrumental aggression, there is no reason why some offenders would not engage in both reactive and instrumental violence.

An alternative to the lifetime classification of offenders into instrumental, reactive, and mixed groups is to treat instrumental and reactive violence as separate dimensions. We are giving further consideration to this possibility. Our work linking instrumental violence to individual psychopathy is referenced below.

Cornell, D. G., Warren, J., Hawk, G., Stafford, E., Oram, G., & Pine, D. (1996). Psychopathy of instrumental and reactive violent offenders. *Journal of Consulting and Clinical Psychology*, *64*, 783-790.

**Offense Characteristics of Reactive
and Instrumental Violent Offenders**

	Reactive N=32	Instrumental N=18
Planning		
None	23	6
Some	6	11
Extensive	2	1
Goal Directedness		
Clearly goal-directed	0	12
Mixed motives	2	6
No apparent goal-directedness	30	0
Provocation by Victim		
Strong	6	0
Moderate	16	1
Weak or none	10	17
Arousal at Offense		
Enraged	5	0
Angry	21	1
Excited/tense	3	9
Calm	1	4
Harm to Victim		
Homicide	24	8
Serious injury	6	4
Not serious	2	6
Relationship to Victim		
Very close (family)	19	2
Close (friend)	7	2
Acquaintance	5	6
Stranger	1	8
Intoxicated at Offense		
Intoxicated	12	9
Some use	2	0
No use	18	9
Psychotic at Offense		
Clearly psychotic	5	0
Some disturbance	2	3
Not psychotic	25	15

<p>Note: Classification based on most recent offense. Incomplete information on some variables.</p>

Here is a list of studies that incorporate the Coding Guide:

- Camp, J. P., Skeem, J. L., Barchard, K., Lilienfeld, S. O., & Poythress, N. G. (2013). Psychopathic predators? Getting specific about the relation between psychopathy and violence. *Journal of Consulting and Clinical Psychology, 81*(3), 467-480.
- Declercq, F., Willemsen, J., Audenaert, K. and Verhaeghe, P. (2012), Psychopathy and predatory violence in homicide, violent, and sexual offences: Factor and facet relations. *Legal and Criminological Psychology, 17*: 59–74.
- Hancock, M., Tapscott, J. L., & Hoaken, P. N. (2010). Role of executive dysfunction in predicting frequency and severity of violence. *Aggressive behavior, 36*(5), 338-349.
- Kimonis, E. R., Skeem, J. L., Cauffman, E., & Dmitrieva, J. (2011). Are secondary variants of juvenile psychopathy more reactively violent and less psychosocially mature than primary variants? *Law and human behavior, 35*(5), 381.
- Lexcen, F. J., Vincent, G. M., & Grisso, T. (2004). Validity and structure of a self- report measure of youth psychopathy. *Behavioral sciences & the law, 22*(1), 69-84.
- Laurell, J., Belfrage, H., & Hellström, Å. (2010). Facets on the psychopathy checklist screening version and instrumental violence in forensic psychiatric patients. *Criminal Behaviour and Mental Health, 20*(4), 285-294.
- Laurell, J., Belfrage, H., & Hellström, Å. (2013). Deceptive behaviour and instrumental violence among psychopathic and non-psychopathic violent forensic psychiatric patients. *Psychology, Crime & Law, (ahead-of-print)*, 1-13.
- Petitclerc, A. (2001). Impulsive criminal behaviour in adolescents. (Doctoral dissertation, University of British Columbia).
- Tapscott, J. L., Hancock, M., & Hoaken, P. N. (2012). Severity and Frequency of Reactive and Instrumental Violent Offending Divergent Validity of Subtypes of Violence in an Adult Forensic Sample. *Criminal Justice and Behavior, 39*(2), 202-219.
- Vitacco, M. J., Gonsalves, V., Tomony, J., Smith, B. E., & Lishner, D. A. (2012). Can Standardized Measures of Risk Predict Inpatient Violence? Combining Static and Dynamic Variables to Improve Accuracy. *Criminal Justice and Behavior, 39*(5), 589-606.
- Willoughby, T. V. (1996). Psychopathy and juvenile homicide. (Doctoral dissertation, University of Calgary)