

Four Approaches to Measuring Attitudes Towards Violence: Beliefs, Explicit Evaluation, Outcome Expectancies, and Implicit Evaluation



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Purpose: To explore the relationship between attitudes towards violence, impulsive and premeditated aggression, psychopathy, and risk of violent recidivism.

Attitudes are typically defined as evaluations of a psychological object (e.g., person, behaviour).

- **Attitudes towards violence are evaluations of violence.**
- Attitudes theoretically play a causal role in violent behaviour and are considered to be an important criminogenic need that can be targeted in treatment to reduce violence.
- Much of the research conducted to date on cognitions about violence has not specifically examined evaluations of violence (see Nunes et al., 2014).

Implicit evaluations of violence are automatically activated evaluations.

- Mixed evidence for the relationship between implicit evaluations of violence and violent behaviour.

Explicit evaluations of violence are deliberative evaluations.

- Mixed evidence for the relationship between explicit evaluations of violence and violent behaviour.

Beliefs regarding violence are cognitions about violence that a person believes to be true.

- Beliefs regarding violence tend to be associated with indicators of violent behaviour.

Outcome expectancies for violence are indicators of attitudes towards violence. They are evaluations of the outcomes of violent behaviour and/or evaluations weighted by their perceived likelihood.

- Outcome expectancies of sexual violence are related to sexual aggression.

Impulsive aggression (a.k.a., affective, reactive, hostile) is a hair-trigger aggressive response to provocation with loss of behavioural control.

- Theory suggests **implicit evaluations** of violence are associated with impulsive aggression.

Premeditated aggression (a.k.a., instrumental, predatory, proactive) is a planned or conscious aggressive act, not spontaneous or related to an agitated state.

- Theory suggests **explicit evaluations** of violence are associated with premeditated aggression.

Hypotheses

(1) **Implicit evaluations** of violence will be positively associated with impulsive violence, risk for violent recidivism, and psychopathy.

(2) **Explicit evaluations** of violence and **outcome expectancies** for violence will be associated with premeditated violence, risk for violent recidivism, and psychopathy.

(3) **Beliefs** regarding violence will be associated with risk for violent recidivism.

Method

Participants

30 violent adult male patients from a secure forensic psychiatric hospital in Canada (M age = 32.38 [10.12])

Measures

Implicit evaluation: Implicit Association Test (VE-IAT) designed to assess automatic associations between *violence + positive* and *peace + negative* relative to *violence + negative* and *peace + positive*.

Explicit evaluation: Violence Semantic Differential (VSD) scale: five seven-point semantic differential scales (negative/bad/useless/wrong/immoral vs. positive/good/useful/right/moral).

Outcome expectancies: Three self-generated outcomes of violence rated on perceived likelihood and evaluation. VO Evaluation: sum of the three evaluation ratings. VOE: sum of the three evaluation ratings weighted by the perceived likelihood ratings.

Beliefs: Violence scale of the MCAA-R (Mills & Kroner, 2007) consists of 10 self-report items rated on a four-point scale 1 (*disagree*) to 4 (*agree*).

Impulsive/Premeditated Aggression Scale (IPAS) (Stanford et al., 2003): self-report measure consisting of 30 items rated on a five point scale 1 (*strongly disagree*) to 5 (*strongly agree*) to assess the extent to which one has engaged in impulsive and premeditated aggression.

Violence Risk Appraisal Guide (VRAG) (Harris et al., 1993): actuarial measure of risk of violent recidivism.

Psychopathy Checklist-Revised (PCL-R) (Hare, 1991): measure of psychopathy. Factor 1 assesses interpersonal and affective traits. Factor 2 assesses unstable and antisocial behaviour.

Procedure

Participants completed measures on a laptop computer. Participants completed the measures in a counterbalanced order. The VRAG and PCL-R were coded from participants' files.

Table 1. Descriptive statistics and internal consistencies for each measure

Measures	M (SD)	n	Range	α
Implicit Evaluation of Violence (VE-IAT)	-1.07 (0.48)	30	-2.12 to -0.13	.66
Explicit Evaluation of Violence (VSD)	1.75 (1.01)	30	1.00 to 4.00	.89
Outcome Expectancies for Violence (VOE)	-28.37 (21.31)	30	-60.00 to 27.00	-
Outcome Evaluation for Violence (VO EVAL)	-5.70 (3.93)	30	-9.00 to 6.00	-
Beliefs Regarding Violence (MCAA-R-V)	19.73 (6.69)	30	10.00 to 36.00	.86
Risk of Violent Recidivism (VRAG)	5.14 (9.80)	21	-11.00 to 22.00	.61
Psychopathy (PCL-R TOTAL)	18.68 (8.18)	22	4.00 to 34.00	.92
Psychopathy: Interpersonal and Affective Traits (PCL-R F1)	6.50 (4.34)	18	0 to 15.00	.88
Psychopathy: Antisocial Behaviour (PCL-R F2)	9.89 (5.02)	18	2.00 to 18.00	.88
Impulsive Aggression (IPAS IA)	28.80 (7.14)	30	15.00 to 44.00	.80
Premeditated Aggression (IPAS PM)	19.47 (5.86)	30	10.00 to 31.00	.76

Table 2. Correlations between implicit evaluation of violence, explicit evaluation of violence, outcome expectancies, and beliefs regarding violence

	Explicit Evaluation (VSD)	Outcome Expectancies (VOE)	Outcome Evaluation (VO EVAL)	Beliefs Regarding Violence (MCAA-R-V)
Implicit Evaluation (VE-IAT)	.07	.21	.24	.05
Explicit Evaluation (VSD)	-	.49*	.42*	.75*
Outcome Expectancies (VOE)		-	.91*	.59*
Outcome Evaluation (VOEVAL)			-	.55*

Note. Bolded values indicate non-negligible effect sizes

Table 3. Correlations between measures of violent cognition, risk of violent recidivism, and psychopathy

	Risk of Violent Recidivism (VRAG)	Psychopathy (PCL-R TOTAL)	Psychopathy: Affective and Interpersonal Traits (PCL-R F1)	Psychopathy: Antisocial Behaviour (PCL-R F2)
Implicit Evaluation (VE-IAT)	-.08	.11	.13	-.08
Explicit Evaluation (VSD)	.19	.09	.15	.02
Outcome Expectancies (VOE)	.22	.23	.34	-.06
Outcome Evaluation (VO EVAL)	.22	.24	.31	-.12
Beliefs Regarding Violence (MCAA-R-V)	.28	.19	.27	.10

Note. Bolded values indicate non-negligible effect sizes

Table 4. Correlations between measures of violent cognition, impulsive aggression, and premeditated aggression. Group differences (Cohen's d and 95% CI) between predominately premeditated aggressive group and predominately impulsive aggressive group.

	Impulsive Aggression (IPAS IA)	Premeditated Aggression (IPAS PM)	Cohen's d	95%CI
Implicit Evaluation (VE-IAT)	.16	.25	0.12	-0.62, 0.86
Explicit Evaluation (VSD)	.00	.50*	0.48	-0.27, 1.24
Outcome Expectancies (VOE)	-.14	.37*	0.59	-0.17, 1.34
Outcome Evaluation (VO EVAL)	-.15	.50*	0.99*	0.21, 1.77
Beliefs Regarding Violence (MCAA-R-V)	-.19	.39*	0.32	-0.43, 1.07
Risk of Violent Recidivism (VRAG)	-.01	.08	0.67	-0.26, 1.60
Psychopathy (PCL-R TOTAL)	-.02	.21	0.86	-0.05, 1.76
Psychopathy: Interpersonal and Affective Traits (PCL-R F1)	.08	.33	0.83	-0.24, 1.90
Psychopathy: Antisocial Behaviour (PCL-R F2)	.35	-.00	0.25	-0.79, 1.28

Note. Positive Cohen's d values indicate that the group characterized predominantly by premeditated aggression scored higher than the group characterized predominantly by impulsive aggression. Bolded values indicate non-negligible effect sizes. * $p < .05$

Results and Discussion

Hypothesis 1 was not supported:

• There were no relationships between implicit evaluation of violence and impulsive violence, risk of violent recidivism, and psychopathy. As well, there was little difference between predominately premeditated aggressive participants and predominately impulsive aggressive participants on implicit evaluation of violence.

• These results suggest implicit evaluation of violence may not play a role in violent behaviour and these results are inconsistent with the general social psychology literature which suggests implicit evaluations more strongly predict spontaneous behaviour than deliberative behaviour.

• It is possible that implicit evaluation of violence may only be activated under certain circumstances (e.g., when primed by a perceived threat). It is also possible that our IAT measure did not adequately assess implicit evaluation of violence.

Hypothesis 2 was partially supported:

• Explicit evaluation of violence and outcome expectancies for violence were moderately to strongly associated with premeditated aggression and had small relationships with risk for violent recidivism (non-significant). Outcome expectancies had moderate relationships with psychopathic affective and interpersonal traits (non-significant). As well, there were moderate to large differences between predominately premeditated aggressive participants and predominately impulsive aggressive participants on both explicit evaluations and outcome expectancies for violence (non-significant). These results are generally consistent with the notion that outcome expectancies and explicit evaluations play a role in deliberative violent behaviour. Future research should continue to explore the role of attitudes in violent behaviour.

• There was a large relationship between explicit evaluations and outcome expectancies. However, both measures also had large relationships with beliefs regarding violence; as such, these constructs may not be as distinct as previously suggested. Future studies examining the distinctiveness of these constructs with offender samples should be conducted.

Hypothesis 3 was partially supported:

• Beliefs regarding violence had a moderate relationship with risk of violent recidivism, psychopathic affective and interpersonal traits, and premeditated aggression. These findings are consistent with past research on beliefs regarding violence with student and offender samples.

Limitations

• Small sample size ($N = 30$) limited our statistical power. To compensate we focused on effect sizes instead of p values. Small sample size also limits the generalizability of our results.

• None of the attitude measures examined in the current study have much, if any, available evidence regarding construct validity, therefore we cannot be confident about how accurately we assessed the intended constructs. However, some of our results provide evidence suggesting these measures were assessing their intended constructs (e.g., large correlations between explicit evaluation of violence and outcome expectancies of violence). Future research should continue to explore the construct validity and utility of these measures.

Hermann, C. A., Nunes, K. L., Ennis, L., Maimone, S., & Choy, A. (2014, July). Four Approaches to Measuring Attitudes Towards Violence: Beliefs, Explicit Evaluation, Outcome Expectancies, and Implicit Evaluation. Poster presented at the 21st world meeting of the International Society for Research on Aggression, Atlanta, Georgia. chantalhermann@cmail.carleton.ca