

Exploring the Relationship and Direction of Influence Between Attitudes, Outcome Expectancies, and Violent Behaviour

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Attitudes towards Violence

- According to psychological theories about violence, violent attitudes can influence the likelihood of engaging in violent behaviour (see General Aggression Model; Anderson & Bushman, 2002)
- Attitudes are thought to be dynamic causal risk factors for violent offending (Andrews & Bonta, 2010)
- Focused on in a forensic and correctional setting due to their amenability to treatment

Definition of Attitudes

- Typically defined as evaluations of psychological objects such as people, things, or behaviours (e.g., Ajzen, 2001; Eagley & Chaiken, 1993; Fazio, 2007)
- **Implicit Attitudes:** immediately activated evaluations of a psychological object (APE; Gawronski & Bodenhausen, 2006)
- **Explicit Attitudes:** deliberative propositional reasoning about a psychological object (APE; Gawronski & Bodenhausen, 2006)

Measurement of Attitudes

1. **Self-report Measures:**
 - Violence scale of the Measures of Criminal Attitudes and Associates (MCAA-V; Mills, Kroner, & Forth, 2002)
 - Semantic Differential measures
 - Outcome Expectancies for violence
2. **Implicit Measure:**
 - Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998)

Current Research Project

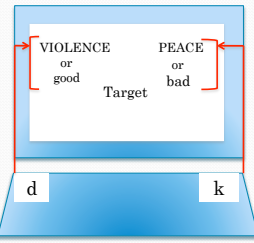
- Purpose
 - To assess the relationship between attitudes and outcome expectancies regarding violence
 - And the relationship between these cognitions regarding violence and violent behaviour (self-reported past and future risk)
- 3 Studies:
 - 2 contain 1st and 2nd year university students from Carleton
 - 1 contains offenders from OCDC

Research Design

- Studies 1 and 2
 - Correlational and cross-sectional
 - Study 1: sample of 125 male undergraduate students
 - Study 2: sample of 19 male offenders
- Study 3
 - Experimentally manipulated violent behaviour
 - to assess directionality of relationship between attitudes and behaviour
 - Sample of 126 male undergraduate students

Implicit Attitudes towards Violence

- **Implicit Association Test (IAT)** (IAT; Greenwald, McGhee, & Schwartz, 1998)
 - **Categories:**
 - “Violence or Good” and “Peace or Bad”
 - “Violence or Bad” and “Peace or Good”
 - Measures response latencies
 - Faster response latencies when sorting words for categories that share greater association
 - IAT score = [Violence or Bad] – [Violence or Good]



◦ Internal consistency found to range between .58 and .63.

Studies 1 and 2: Measures

- **Implicit Attitudes towards Violence**
 - **Violent Attitude IAT**
- **Self-report Measures**
 1. **Attitudes towards Violence**
 - **MCAA-R-V** (Mills et al., 2002)
 2. **Outcome Expectancies for Violence**
 - **Violence Outcome Expectancies (VOE) scale**
 3. **Behavioural Outcome Measures**
 - **Antisocial Behaviour Scale-Violent (ABS-V)** (Study 1)
 - **Self-Appraisal Questionnaire (SAQ)** (Loza, 2005; Study 2)

Results of Correlational Analyses

- **Study 1- Student Sample (N = 125)**
 - Pearson’s *r* (above diagonal) and Spearman’s rho

Construct	1	2	3	4
Implicit Attitudes	-	.07	.01	.02
Outcome Expectancies	.06	-	.28**	.28**
Self-report Attitudes	.04	.27**	-	.22*
Prior Violent Behaviour	-.02	.30**	.31***	-

****p* < .001, ***p* < .01, **p* < .05

Results of Correlational Analyses

- **Study 2- Offender sample (N = 19)**
 - Pearson’s *r* (above diagonal) and Spearman’s rho

Construct	1	2	3	4
Implicit Attitudes	-	.21	.10	-.16
Self-report Attitudes	.10	-	-.09	.47*
Outcome Expectancies	.15	-.20	-	-.37
Risk of Violence	-.15	.60**	-.47*	-

***p* < .01, **p* < .05

Study 3: Measures

- **Implicit Attitudes towards Violence:**
 - **Violent Attitude IAT**
- **Self-report Measures:**
 1. **Explicit Attitudes towards Violence**
 - **Semantic Differential (SD)**
 2. **Outcome Expectancies for Violence**
 - **VOE scale**
 3. **Behavioural Outcome Measure**
 - **Violent Behaviour Questionnaire (VBQ)**

Study 3: Experimental Design

- **Manipulation:**
 - Participants were 126 male undergraduate students
 - either watched someone playing or played Wii boxing or Wii tennis
- **Procedure:**
 - VBQ
 - Violent Cognition measures
 - **Manipulation**
 - Violent Cognition measures

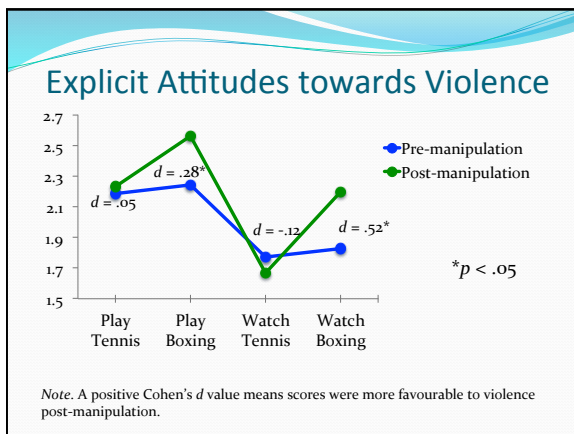
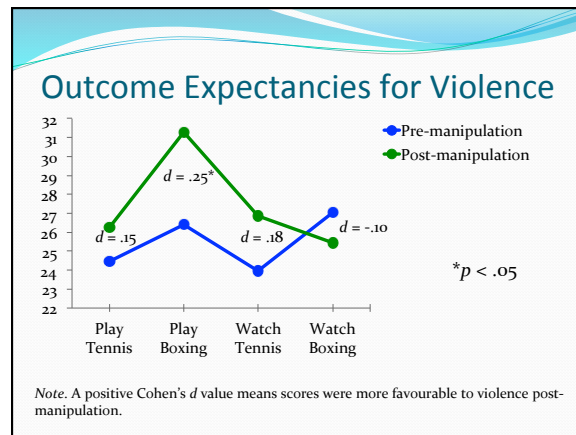
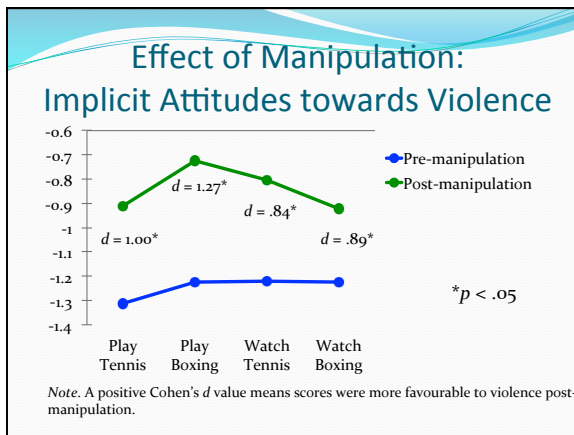
Study 3: Replication of Studies 1 and 2

• Pre-manipulation bivariate correlations (N = 126)

Construct	1	2	3	4
Implicit Attitudes	-	.15	.01	-.00
Outcome Expectancies	.16	-	.13	.01
Explicit Attitudes	-.06	.20*	-	.05
Prior Violent Behaviour	-.08	.01	.03	-

Note. Pearson's *r* correlations are above the diagonal and Spearman's rho correlations are below. **p* < .05

- ### Study 3: Experimental Manipulation
- Experimental Manipulation:
 - 4 conditions:
 - Playing Wii tennis (n = 39)
 - Observing someone else play Wii tennis (n = 19)
 - Playing Wii boxing (n = 41)
 - Observing someone else play Wii boxing (n = 27)
 - Hypothesis:
 - Violent cognitions will significantly differ before and after manipulation for those in violent condition (i.e., Wii boxing)



- ### Limitations
- Small sample of offenders in Study 2 (N = 19)
 - Only manipulated violent behaviour in Study 3
 - Manipulation in Study 3 may not be generalizable
 - IAT may have not accurately assessed participants' implicit attitudes towards violence

Implications

- This research provides insight into the role that violent cognitions play in the commission of violent behaviour
 - Suggests that implicit attitudes towards violence may not be important in understanding such behaviours
 - Self-report or explicit attitudes towards violence appear to be important in the commission of violence
- Causal effect of exposure to violence (by playing a violent video game) on explicit attitudes and outcome expectancies regarding violence

Thank you!

Questions?

- Maimone, S., Nunes, K. L., Balemba, S., Pettersen, C., Dupuis, M., Staddon, M., & Frank, C. (2015, June). Exploring the Relationship and Direction of Influence Between Attitudes, Outcome Expectancies, and Violent Behaviour. In K. L. Nunes (Chair) *Violent Cognitions*. Symposium to be conducted at the 3rd North American Correctional and Criminal Justice Psychology Conference (NACCJPC), Ottawa, Ontario.
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