

A Quantitative Review of Two Attention-Based Measures of Pedophilic Sexual Interest

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Background

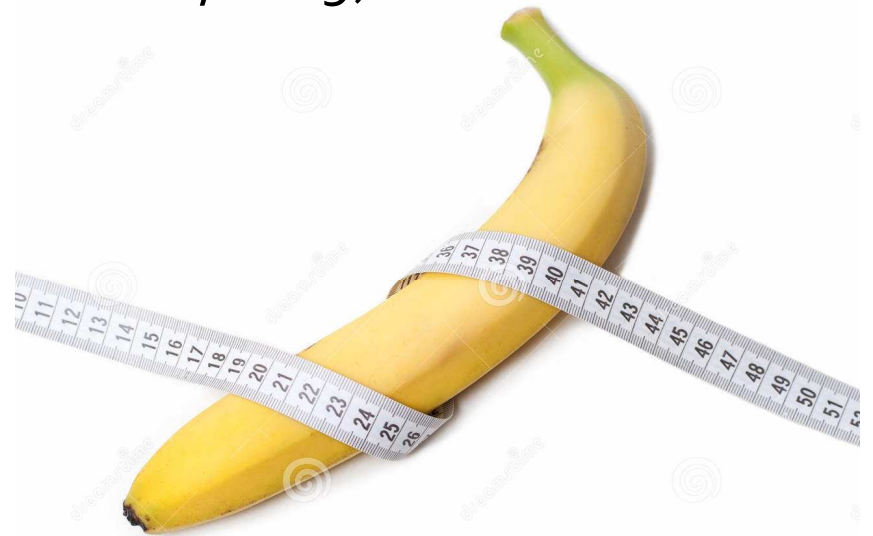
Sexual interest in children is a strong predictor of sexual re-offending against children (Hanson & Morton-Bourgon, 2004)

Common treatment target (McGrath, Cumming, Buchard, Zeoli, & Ellerby, 2010)

Background

Issues with phallometric assessment methods (Akerman & Beech, 2012; Winters, Christoff, & Gorzalka, 2009)

- Intrusive
- Expensive
- Susceptible to faking



Attention-based measures

Attention-based measures

Rationale: Individuals process information differently when distracted by sexually attractive stimuli

Advantages:

- Non-intrusive
- Inexpensive
- Less susceptible to faking?



Current study

To what extent do attention-based measures of pedophilic interest actually reflect pedophilic interest?

Logic:

- If attention-based measures of pedophilic interest are valid, then they should be associated with independent indicators of sexual interest in children, such as
 - a) Sexual offending against children
 - b) Victim characteristics associated with pedophilic interest

Current study

Research question: Are attention-based measures associated with independent indicators of pedophilic interest?

Quantitative review of:

- Rapid serial visual presentation (RSVP) task
- Choice reaction time (CRT) task

RSVP

Rapid serial visual presentation task

RSVP task

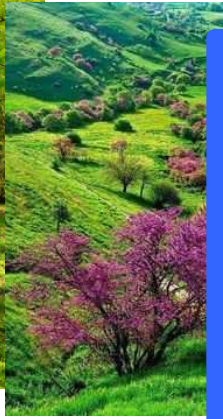
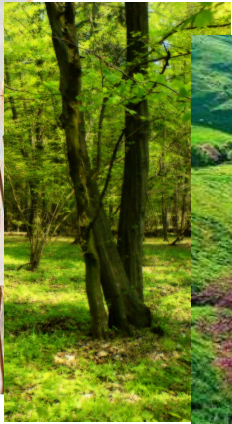


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graph LR; A[Sexually attractive image] --> B[Increased attentional blink]; B --> C[Fail to detect subsequent stimuli];
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Sexually
attractive
image

Increased
attentional
blink

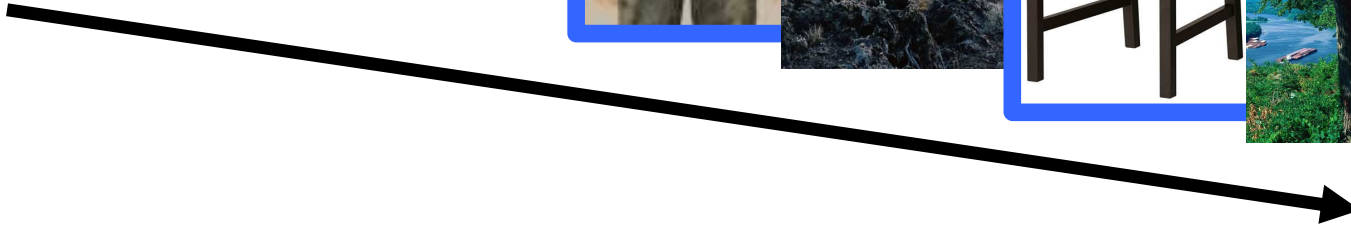
Fail to detect
subsequent
stimuli



T₁



T₂



T₁

Child		Animal
Train L		Train R
Chair L		Chair R

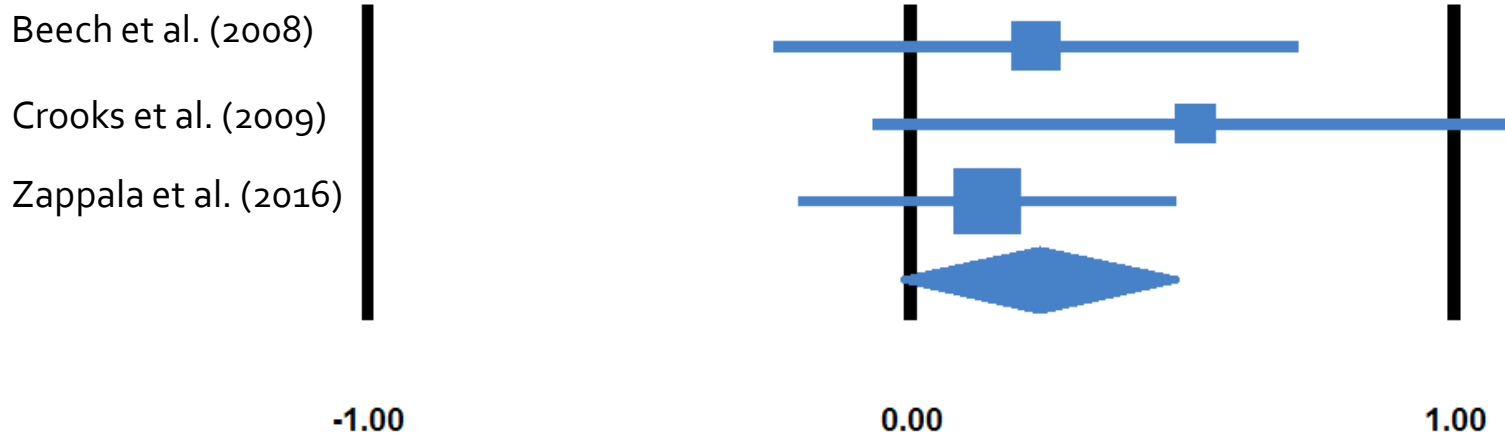
T₂

RSVP: Results

- Sex offenders against children tended to be less accurate than individuals who have not sexually offended against children at identifying Time 2 images when they followed an image of a child.

RSVP: Results

Cohen's d and 95% Confidence Intervals



Weighted average $d = 0.24$, 95% CI[-0.02; 0.49], $k = 3$, $n = 311$

CRT

Choice reaction time task

CRT task

Sexually
attractive
image

Increased
attention
to image

Slower
reaction
times



7	8	9
4	5	6
1	2	3

CRT: Results

- Sex offenders against children tended to have slower reaction times when viewing child vs. adult images compared to individuals who have not sexually offended against children.

CRT: Results

Cohen's d and 95% Confidence Intervals



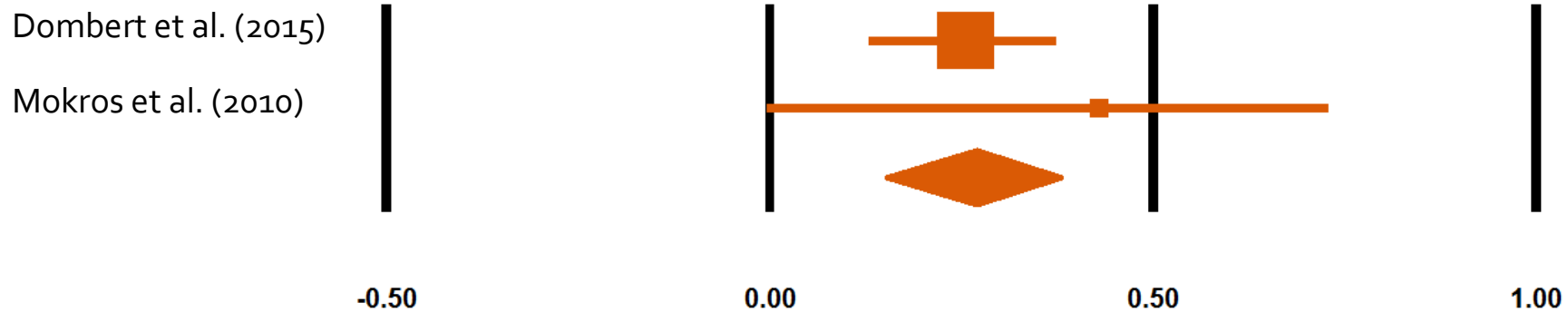
Weighted average $d = 0.98$, 95% CI[0.62; 1.35], $k = 2$, $n = 275$

CRT: Results

- Scores on the CRT were moderately associated with victim characteristics indicative of pedophilic interest (Screening Scale for Pedophilic Interests; Seto & Lalumière, 2001).

CRT: Results

Correlation r and 95% Confidence Intervals



Weighted average $r = .27$, 95% CI[.15; .38], $k = 2$, $n = 254$

Conclusions/future directions

- **Small to large** associations between attention-based measures and indicators of pedophilic interest (i.e., sexual offending against children and victim characteristics indicative of pedophilic interest)
- More research needed on the RSVP and CRT tasks (still very early!)
- Alternative explanations for effects?
- Future research should examine whether it would be beneficial to use a combination of measures during assessment

Thank you!



Questions?

Contact me: Chloe.Pedneault@carleton.ca

Visit Aggressive Cognitions and Behaviour

Research lab website: <http://carleton.ca/acbrlab>

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