How well do Indirect Measures assess Pedophilic Interest?

A Meta-Analysis

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ATSA 2018


Strongly agree
Agree
Disagree

Cognitively-Based Indirect Measures

Current Study

Quantitative review of indirect measures

1. Concurrent validity
2. Convergent validity

1. Concurrent Validity Evidence

Are indirect measures discriminative?

2. Convergent Validity Evidence

Are indirect measures correlated with independent indicators of pedophilic interest?

Moderators Examined

- Sample characteristics
  - High vs. low sexual deviance
  - Admitter vs. Denier
  - Adolescent vs. adult
- Type of Independent Indicator
- Publication Status
- Type of Indirect Measure

Types of Indirect Measures

- Viewing time
- Implicit Association Test
- Task-irrelevant paradigms

Viewing time

1 *not attractive*

2

3

4

5 *very attractive*

Implicit Association Test

CHILD

not sex

ADULT

sex

d	k

Implicit Association Test

CHILD

sex

ADULT

not sex

d	k

Task-irrelevant paradigms

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

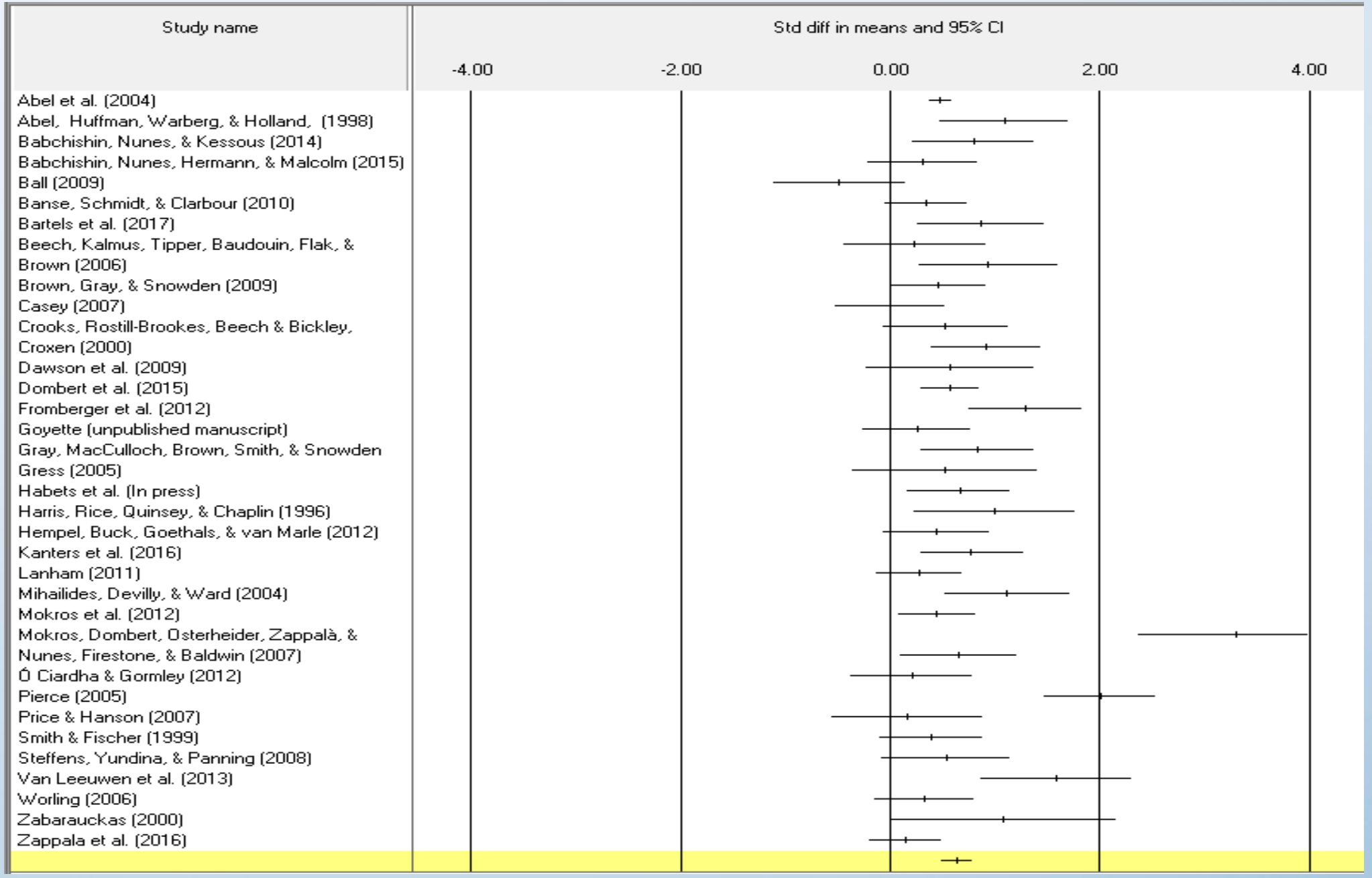
For example: CRT

7	8	9
4	5	6
1	2	3

Results

1. Concurrent Validity Evidence

Are indirect measures discriminative?


Study name
Std diff in means and 95% CI
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-2.00
0.00
2.00
4.00
Abel et al. (2004)
Abel, Huffman, Warberg, & Holland, (1998)
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Worling (2006)
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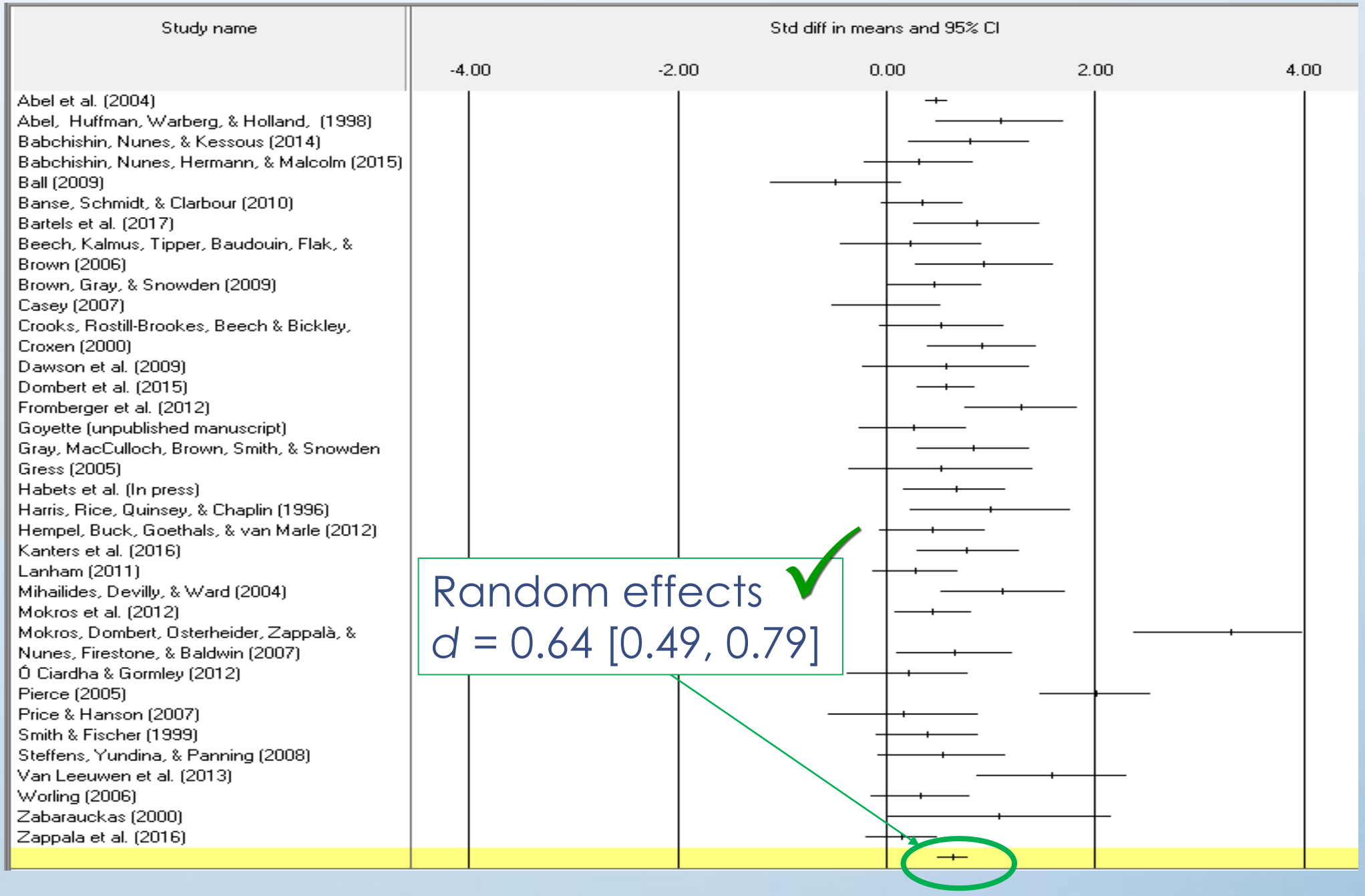
Zappala et al. (2016)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Zappala et al. (2016)
Random effects
d = 0.64 [0.49, 0.79]

Moderator Results

- ✓ Sexual Deviance (Q_b = 5.46, p = .019)
  - Low sexual deviance d = 0.36 (k = 5)
  - High sexual deviance d = 0.66 (k = 17)

Moderator Results

- Admitter vs. Denier (Q_b = 0.27, p = .607)
  - Admitters d = 0.48 (k = 7)
  - Deniers d = 0.39 (k = 3)

Moderator Results

- ✓ Sample Age(Q_b = 4.28, p = .039)
  - Adolescents d = 0.47 (k = 4)
  - Adults d = 0.61 (k = 33)

Moderator Results

- Indirect Measure (Q_b = 3.25, p = .197)
  - VT d = 0.47 (k = 13)
  - IAT d = 0.61 (k = 12)
  - Task-irrelevant d = 0.41 (k = 7)

Moderator Results

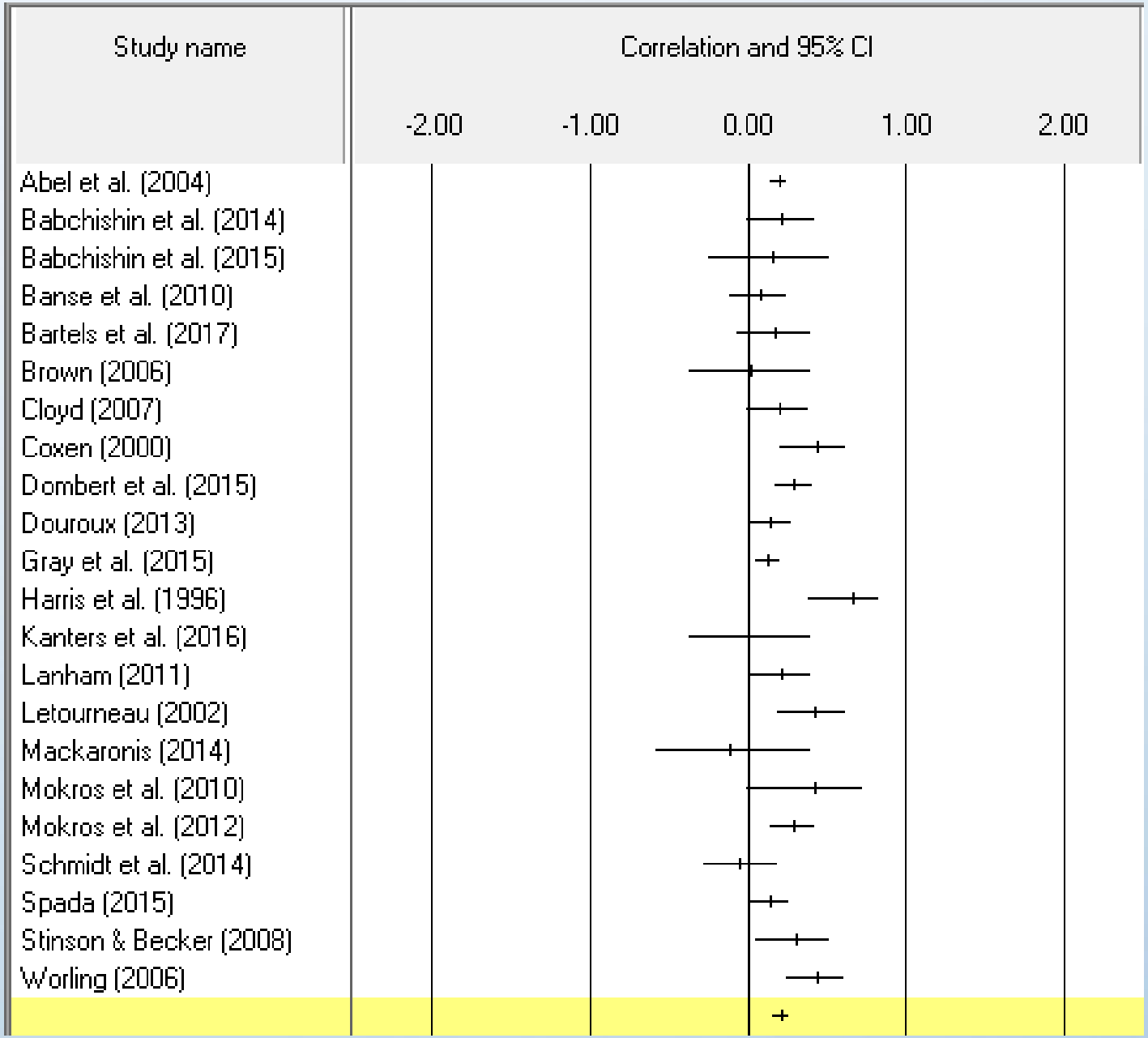
- ✗ Publication Status (Q_b = 1.95, p = .163)
  - Published d = 0.54 (k = 28)
  - Unpublished d = 0.39 (k = 8)

2. Convergent Validity Evidence

Are indirect measures correlated with independent indicators of pedophilic interest?

Independent indicators

- Screening Scale for Pedophilic Interest (SSPI)
- Phallometric arousal (PPG)
- Self-report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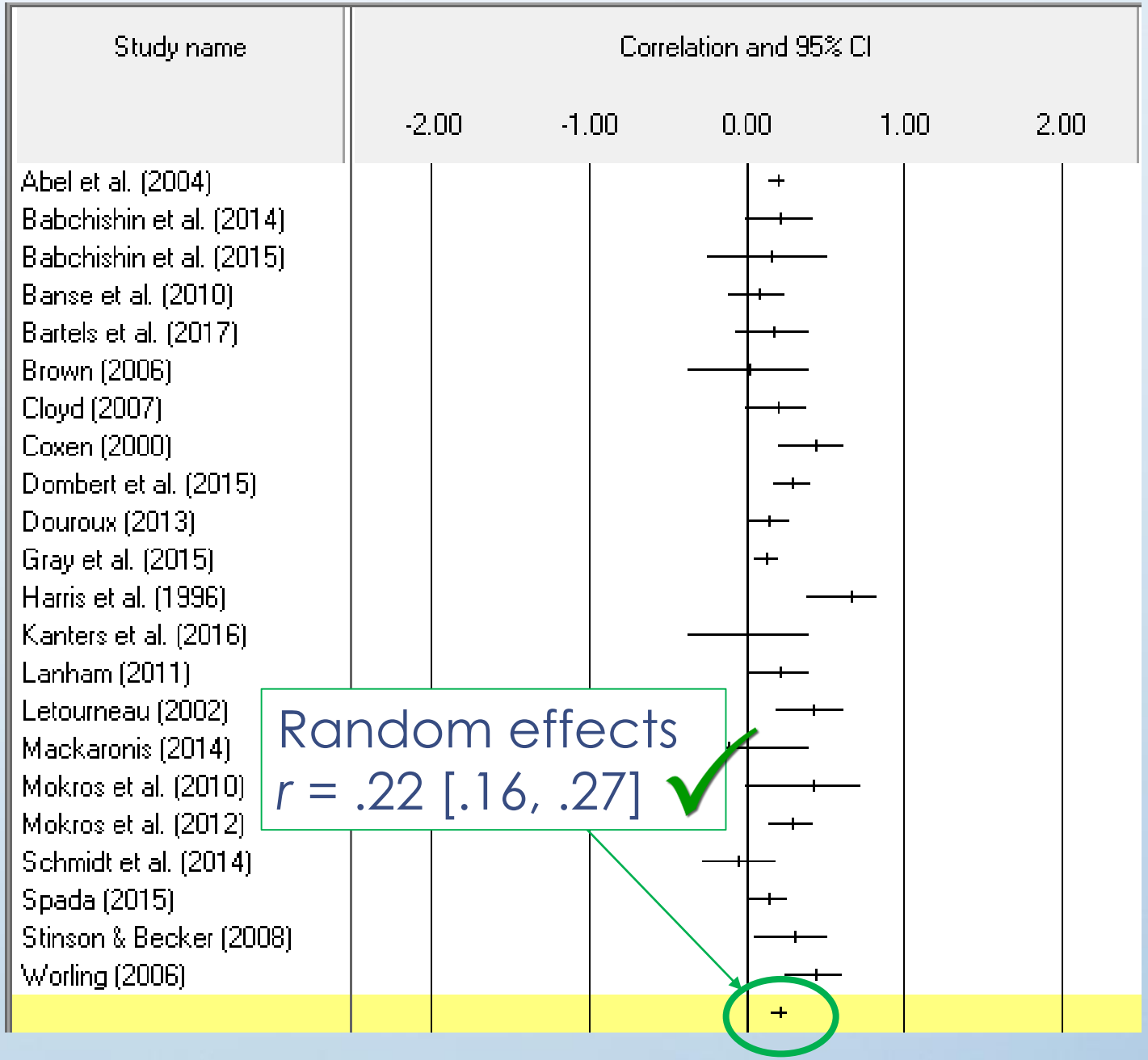
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Worling (2006)
Random effects
r = .22 [.16, .27]

Moderator Results

- Sample Age (Q_b = 0.50, p = .478)
  - Adults r = .19 (k = 19)
  - Adolescents r = .22 (k = 3)

Moderator Results

- Indirect Measure ($Q_b = 3.81$, $p = .149$)
  - IAT $r = .07$ ($k = 4$)
  - VT $r = .21$ ($k = 14$)
  - Task-irrel. $r = .23$ ($k = 3$)

Moderator Results

- Publication Status (Q_b = 0.48, p = .491)
  - Published r = .21 (k = 15)
  - Unpublished r = .18 (k = 7)

Additional findings…

- Small to moderate correlations between indirect measures and SSPI (r = .19), PPG(r = .25) and self-report (r = .27).
- VT measures (r = .38) more strongly associated with self-report measures than IAT (r = .09)and task-irrelevant paradigms (r = .24).
- No sig. differences between indirect measures for the SSPI or PPG.

Discussion

- Moderately good discrimination between SOCs and NON-SOCs

  + may be sensitive to indicators of sexual deviance

  + variability across types of indirect measures??

  - may not be as valid for adolescents

Discussion

- Small to moderate correlation between indirect measures and independent indicators of pedophilic interest

  + may suggest measures assess different but related constructs

  - Few studies/ indicator

Limitations

- Big picture approach
  - underestimates precision of effects
  - prevents examination of more specific moderators
- Moderator analyses underpowered

Conclusion and Future directions

- Attempt at integrating construct validity evidence, not the end of the road
- Need more research on relationship with sexual reoffending
- Are indirect measures reliable enough to assess change in pedophilic interest?
- Are indirect measures resistant to dissimulation?

Thank you!

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https://carleton.ca/acbrlab/

Pedneault, C., Nunes, K. L., White, K., Pettersen, C. & Hermann, C. A. (2018, October). How well do indirect measures assess pedophilic interest? A meta-analysis. In C. Pedneault (Chair). Measures of pedophilic interest: How valid are they? Symposium conducted at the 37th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, Vancouver, BC.