PROBLEMATIC HEALTH BEHAVIOR: EXPERIENTIAL AVOIDANCE AS A COMMON FUNCTION

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SUPPORT

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PROBLEMATIC HEALTH BEHAVIOR

- Problematic health behaviors tend to co-occur, and previous work has proposed a common higher order factor that may help to account for this covariation (Cooper, Wood, Orcutt, & Albino, 2003; Donovan & Jessor, 1985; Kingston, Clark, Ritchie, & Remington, 2011)

EXPERIENTIAL AVOIDANCE

- Any attempt to alter or change the form, frequency, or intensity of unpleasant internal experiences (thoughts, emotions, physical sensations, urges)

HEALTH BEHAVIOR

CHILDHOOD TRAUMA AND PROBLEM BEHAVIOR

SYSTEMATIC REVIEW AND META-ANALYSES

1

2

STUDY 1

CHILDHOOD TRAUMA AND PROBLEM BEHAVIOR: EXAMINING THE MEDIATING ROLES OF EXPERIENTIAL AVOIDANCE AND MINDFULNESS PROCESSES

- Childhood trauma has been shown to be associated with engagement in problematic health behavior in adulthood (Felitti et al., 1998).
- Trauma-exposed individuals may be particularly likely to use avoidance strategies in an attempt to control or suppress internal experiences (Follette, Palm, & Pearson, 2006).
- Previous work has shown experiential avoidance to fully mediate the association between childhood trauma and problem behavior in a clinical sample (Kingston, Clark, & Remington, 2010) and to partially mediate the same association in a nonclinical college sample (Lewis & Naugle, 2017).

STUDY 1

- To what extent does experiential avoidance mediate the association between childhood trauma and problem behavior?
- Does mindfulness mediate the association between childhood trauma and problem behavior?
  - Observe
  - Describe
  - Act with Awareness
  - Nonjudgment
  - Nonreactivity

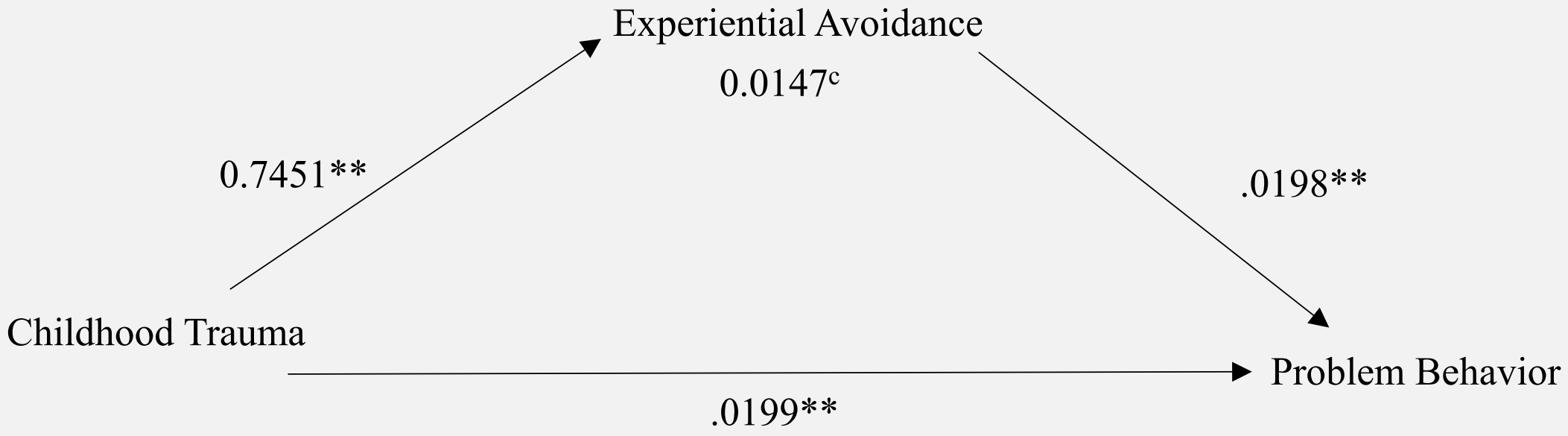
STUDY 1

- *N* = 414 college-age students
- % Female: 64.0%
- % White, Non-Hispanic: 68.1%
- % Heterosexual: 88.1%

STUDY 1

- Completed self-report measures of:
  - Childhood Trauma (Early Trauma Inventory Self Report-Short Form)
  - Experiential Avoidance (Acceptance and Action Questionnaire-II)
  - Mindfulness (Five-Facet Mindfulness Questionnaire)
    - observe, describe, act with awareness, nonjudgment of experience, nonreactivity
  - Problem Behavior (Composite Measure of Problem Behaviors)
    - deliberate self-harm, binge eating, excessive alcohol use, drug use, nicotine use, sexual promiscuity, excessive internet/computer use, aggression

MEDIATION

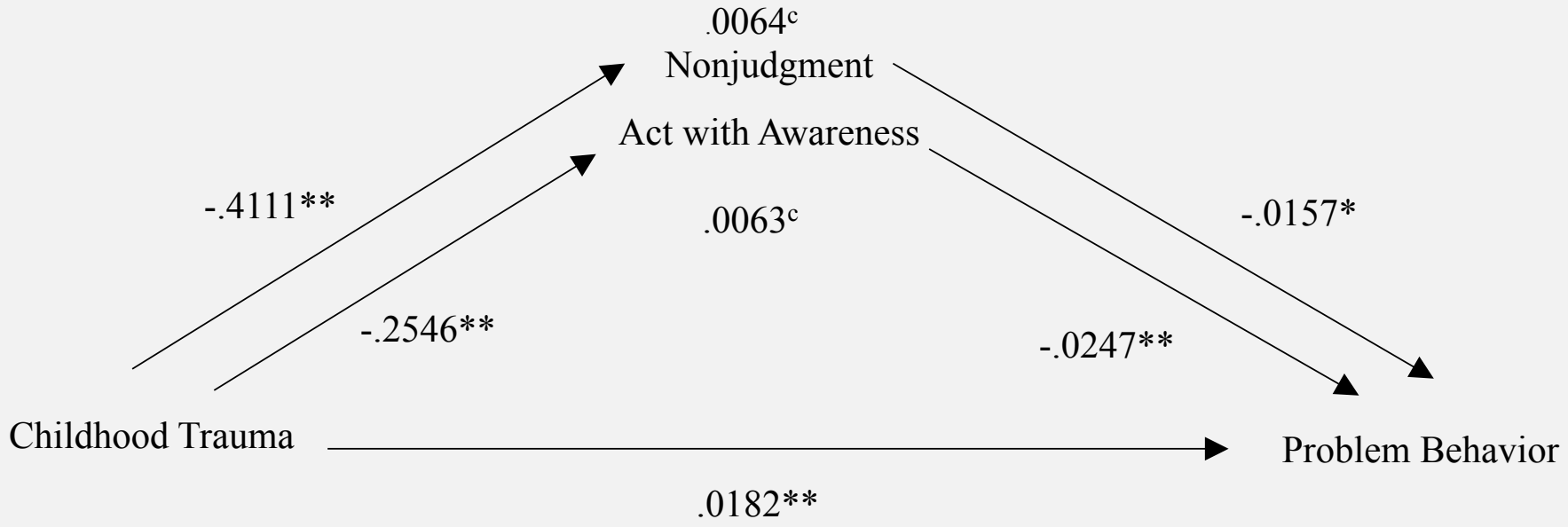


P_M = .43

Note: Unstandardized coefficients
* = p < .05, ** = p < .01, c = CI does not include zero

Adapted from: Roche, Kroska, Miller, Kroska, & O'Hara, 2018 (in press)

MULTIPLE MEDIATION



Nonjudgment P_M = .19
Act with Awareness P_M = .19

Note: Unstandardized coefficients
* = p < .05, ** = p < .01, c = CI does not include zero

Adapted from: Roche, Kroska, Miller, Kroska, & O'Hara, 2018 (in press)

PROCESS-BASED MECHANISMS

- Topographically different behaviors may serve a common function
- These processes may be important in the development and maintenance of problematic behaviors
- These processes may be important to target in health behavior change intervention work

HEALTH BEHAVIOR

CHILDHOOD TRAUMA AND PROBLEM BEHAVIOR

1

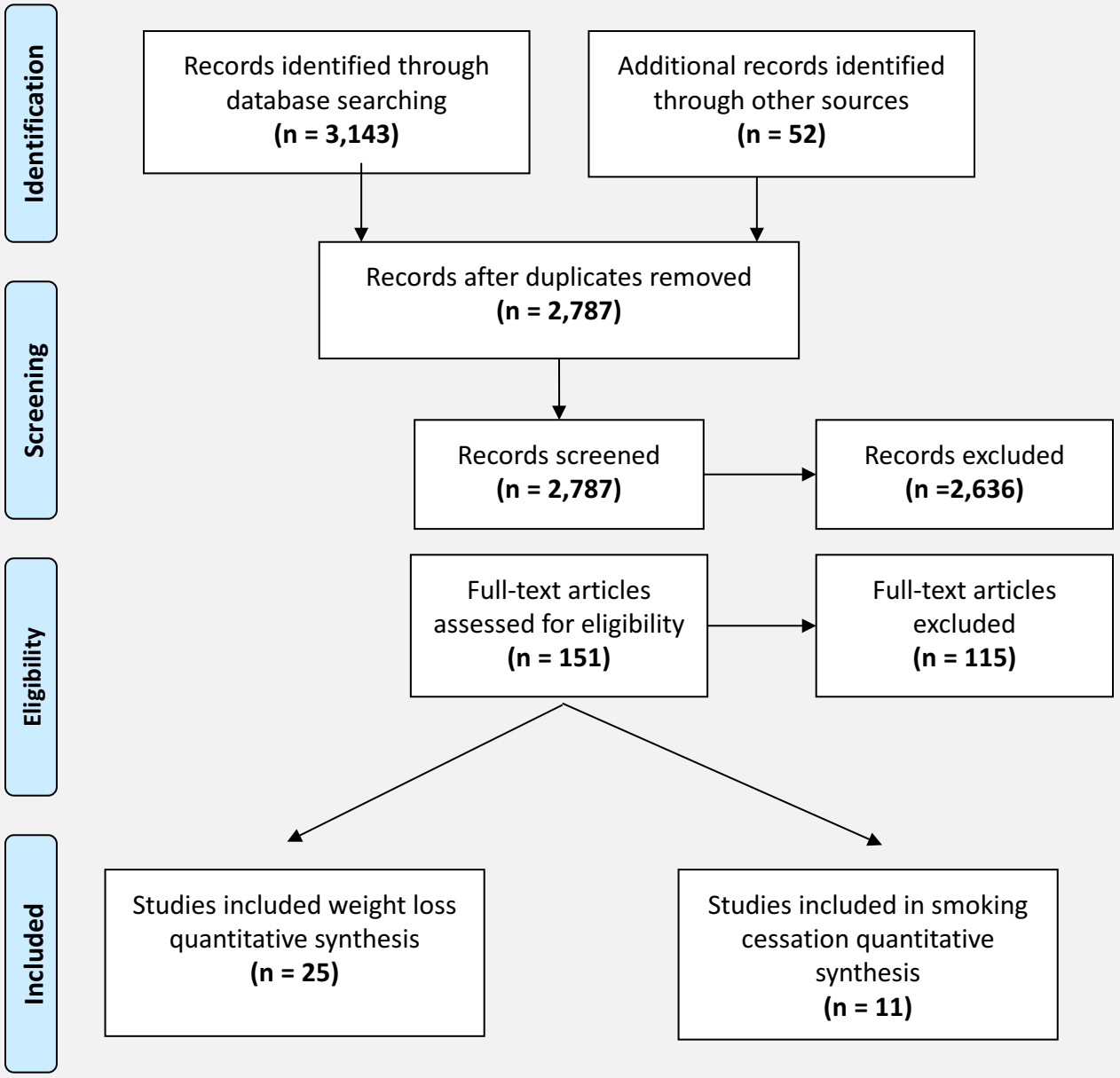
SYSTEMATIC REVIEW AND META-ANALYSES

2

STUDY 2

ACCEPTANCE- AND MINDFULNESS-BASED INTERVENTIONS FOR SMOKING CESSATION AND WEIGHT LOSS: META ANALYSES

- Review the state of the literature examining the efficacy of acceptance- and mindfulness-based interventions targeting smoking cessation and weight loss
- Quantitatively synthesize the existing evidence for the utility of these interventions for the important public health outcomes of smoking cessation and weight loss

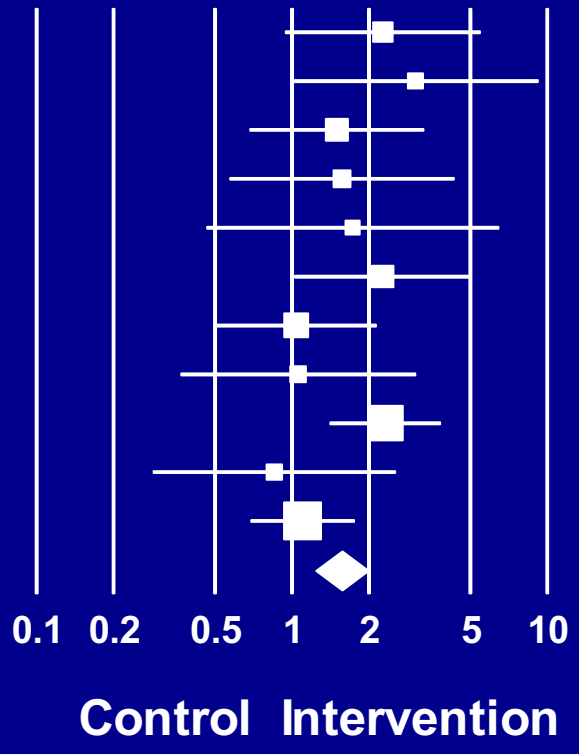

Identification
Screening
Eligibility
Included
Records identified through database searching (n = 3,143)
Additional records identified through other sources (n = 52)
Records after duplicates removed (n = 2,787)
Records screened (n = 2,787)
Records excluded (n =2,636)
Full-text articles assessed for eligibility (n = 151)
Full-text articles excluded (n = 115)
Studies included weight loss quantitative synthesis (n = 25)
Studies included in smoking cessation quantitative synthesis (n = 11)

SMOKING CESSATION

Study name	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value
Brewer_2011	2.270	0.938	5.495	1.818	0.069
Bricker_2013	3.050	1.004	9.265	1.967	0.049
Bricker_2014a	1.500	0.681	3.306	1.006	0.315
Bricker_2014b	1.571	0.567	4.352	0.870	0.384
Brown_2013	1.730	0.461	6.493	0.812	0.417
Davis_2014a	2.270	1.018	5.061	2.004	0.045
Davis_2014b	1.040	0.502	2.155	0.106	0.916
Gifford_2004	1.059	0.365	3.070	0.105	0.916
Gifford_2011	2.322	1.402	3.847	3.271	0.001
Russell_2013	0.853	0.284	2.558	-0.284	0.776
Vidrine_2016	1.102	0.687	1.769	0.402	0.688
	1.562	1.234	1.978	3.707	0.000

Statistics for each study

Odds ratio and 95% CI

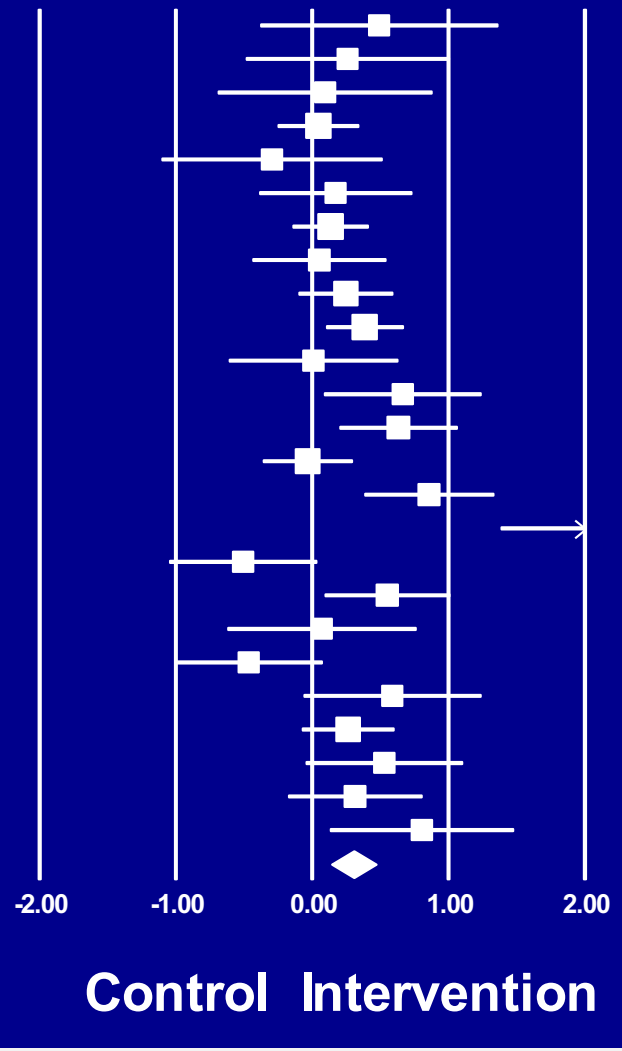


Meta Analysis

Odds Ratio = 1.562

WEIGHT LOSS

Study name	Hedges's g	Standard error	Variance	Lower limit	Upper limit	Z-Value	p-Value
Alberts_2010	0.491	0.446	0.199	-0.383	1.366	1.101	0.271
Alberts_2012	0.260	0.383	0.146	-0.490	1.010	0.680	0.497
Blevins_2008	0.095	0.403	0.162	-0.694	0.884	0.236	0.813
Butryn_2017	0.045	0.153	0.024	-0.256	0.346	0.293	0.769
Corsica_2014	-0.295	0.414	0.172	-1.107	0.517	-0.713	0.476
Daubenmier_2011	0.172	0.287	0.083	-0.391	0.735	0.598	0.550
Daubenmier_2016	0.135	0.143	0.021	-0.146	0.416	0.941	0.347
Fletcher_2011	0.052	0.251	0.063	-0.440	0.545	0.209	0.835
Forman_2013	0.247	0.179	0.032	-0.103	0.597	1.384	0.166
Forman_2016	0.386	0.146	0.021	0.100	0.672	2.643	0.008
Frisvold_2009	0.009	0.318	0.101	-0.614	0.632	0.028	0.977
Katterman_2014	0.664	0.295	0.087	0.085	1.243	2.247	0.025
Lillis_2009	0.633	0.222	0.049	0.198	1.068	2.854	0.004
Lillis_2016	-0.033	0.169	0.029	-0.365	0.299	-0.197	0.844
Mantzios_2014	0.858	0.244	0.059	0.380	1.336	3.517	0.000
Mantzios_2015	2.080	0.357	0.127	1.381	2.780	5.828	0.000
Miller_2012	-0.507	0.278	0.077	-1.052	0.037	-1.825	0.068
Palmeira_2017	0.552	0.236	0.056	0.089	1.015	2.337	0.019
Parswani_2013	0.072	0.355	0.126	-0.625	0.768	0.202	0.840
Raja-Khan_2017	-0.466	0.278	0.077	-1.011	0.080	-1.673	0.094
Richards_2015	0.588	0.334	0.111	-0.066	1.242	1.763	0.078
Sairanen_2017	0.264	0.174	0.030	-0.077	0.605	1.516	0.129
Spadaro_2008	0.529	0.295	0.087	-0.049	1.108	1.793	0.073
Tapper_2009	0.315	0.252	0.064	-0.180	0.810	1.248	0.212
Timmerman_2012	0.804	0.345	0.119	0.128	1.481	2.330	0.020
	0.301	0.084	0.007	0.137	0.465	3.593	0.000



Hedge's $g = 0.301$

FUNCTIONAL SIMILARITY?

- Previous work has shown that reductions in avoidance mediate smoking cessation and weight loss outcomes post acceptance-based intervention (Gifford & Lillis, 2009).
- Current meta-analyses:
  - **Smoking Cessation**:
    - standardized difference in means = **0.25**, 95% CI = 0.12, 0.38, $z = 3.71$, $p < .001$, $k = 11$
  - **Weight Loss**:
    - standardized difference in means = **0.31**, 95% CI = 0.14, 0.47, $z = 3.60$, $p < .001$, $k = 25$

IMPLICATIONS

- Targeting transdiagnostic processes
- Groups?
- Efficacious
  - importance of behavior change interventions

THANK YOU!

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