

Mindfulness, Self-Compassion, and Psychological Flexibility as Predictors of Reduced Alcohol Use and Burnout Among Law Enforcement Officers



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Background

- Law enforcement officers (LEOs) are at an elevated risk for negative health outcomes, including alcohol misuse and burnout.¹
- Mindfulness-based interventions, such as Mindfulness-Based Resilience Training (MBRT), have been shown to improve **mindfulness**, **self-compassion**, and **psychological flexibility**.²⁻⁴
- Increases in mindfulness, self-compassion, and psychological flexibility have been linked to reductions in alcohol use^{2, 5} and burnout.^{6, 7}
- Little is known about the relative impact of each of these mechanisms (mindfulness, self-compassion, and psychological flexibility) in MBI trials.
- Further exploration of these related constructs may help identify which specific elements of MBI may lead to the greatest reduction in negative health outcomes among LEOs.

Purpose

Examine the relative impact of improvements in mindfulness, self-compassion, and psychological flexibility on alcohol use and burnout in a sample of LEOs who completed an 8-week MBRT course.

Participants

- LEOs randomized to MBRT as part of a larger randomized controlled trial (see parent study Christopher et al., 2018 for full study details)
- $n = 28$ at pre-intervention; $n = 24$ at post-intervention
- 90% male
- Mean age = 45 years ($SD = 6.63$)
- Identified Ethnicity:

88% Caucasian	3% African American
3% Native Hawaiian/Pacific Islander	3% Asian
3% Hispanic/Latino	3% Identified as multiracial

Primary Measures

- Mindfulness: **Five Facet Mindfulness Questionnaire – Short Form (FFMQ-SF)**⁸
- Self-compassion: **Self-Compassion Scale – Short Form (SCS-SF)**⁹
- Psychological Flexibility: **Acceptance and Action Questionnaire-II (AAQ-II)**¹⁰
- Alcohol use: **PROMIS Alcohol Use – Short Form (PROMIS AU-SF)**¹¹
- Burnout: **Oldenburg Burnout Inventory (OLBI)**¹²

Table 1
Pre- and post-intervention means and standard deviations of study variables

	Pre-MBRT M (SD)	Post-MBRT M (SD)
PROMIS AU-SF	46.44 (7.99)	44.04 (6.29)
OLBI	2.36 (0.35)	2.20 (0.29)
FFMQ-SF	17.54 (3.85)	19.07 (3.09)
SCS-SF	39.93 (6.59)	40.95 (5.70)
AAQ-II	14.45 (6.69)	11.70 (6.52)

Note. M = Mean. SD = Standard Deviation. MBRT = Mindfulness-Based Resilience Training, PROMIS AU-SF = Patient-Reported Outcomes Measurement Information System – Alcohol Use Short Form. OLBI = Oldenburg Burnout Inventory. FFMQ-SF = Five Facet Mindfulness Questionnaire Short Form. SCS-SF = Self-Compassion Scale Short Form. AAQ II = Acceptance and Action Questionnaire II.

Statistical Analyses

- Residualized change scores for mindfulness, self-compassion, and psychological flexibility by regressing each variable at post-course on the variable at baseline.
- Two, four-step regression models
 - Baseline PROMIS AU-SF or OLBI entered into first step, and residualized change in FFMQ-SF, SCS-SF, and AAQ-II entered in the second, third, and fourth steps respectively.

Results

- In the *alcohol use model*, only improvements in **mindfulness** significantly predicted post-MBRT problematic alcohol use relative self-compassion and psychological flexibility in step four ($\beta = -.388, p = .006$).
- In the *burnout model*, only improvements in **self-compassion** significantly predicted post-MBRT burnout relative to mindfulness and psychological flexibility ($\beta = -.327, p = .04$).

Table 2
Regression outcomes for problematic AU-SF use and burnout

		ΔR^2	B	SEB	β	95% CI		p
						LL	HL	
Post-intervention PROMIS AU-SF	Step 4	.04						
	Pre PROMIS AU-SF		.89	.17	.63	.52	1.25	<.001
	Δ FFMQ-SF		-5.43	1.66	-.39	-8.00	-1.86	.006
	Δ SCS-SF		5.83	2.82	.28	-.22	11.87	.06
	Δ AAQ II		3.28	1.73	.25	-.42	6.98	.078
Post-intervention OLBI	Step 4	.02						
	Pre OLBI		.04	.01	.74	.02	.06	<.001
	Δ FFMQ		-.08	.10	-.11	-.29	.14	.46
	Δ SCS-SF		-.28	.13	-.33	-.54	-.01	.040
	Δ AAQ II		-.10	.09	-.16	-.28	.09	.292

Note. PROMIS AU-SF = Patient-Reported Outcomes Measurement Information System – Alcohol Use-Short Form. OLBI = Oldenburg Burnout Inventory. FFMQ-SF = Five Facet Mindfulness Questionnaire Short Form. SCS-SF = Self-Compassion Scale Short Form. AAQ II = Acceptance and Action Questionnaire II.

Discussion

- Depending on the targeted outcome (reduced alcohol use or burnout), different mechanisms of change may be more impactful.
- Mindfulness may increase the ability to be nonreactive when faced with triggers and cravings for alcohol.²
- Increased self-compassion may increase LEO ability to cope positively with job stressors, reducing the risk for burnout.¹³
- LEOs rely on split-second nervous system reactivity, which may limit the utility of psychological flexibility.