

Supplementary Table 1. *Demographic and clinical characteristics of the sample.*

Demographic and clinical characteristics	N (%) / Mean (SD)
Age (in years)	32.45 (10.28)
Cannabis consumption method	
Smoke	35 (74.5%)
Vaporize	11 (23.4%)
Edibles	20 (42.6%)
Past month PTSD	
Present	28 (59.6%)
Absent	18 (40.4%)
Military or Veteran status	
Yes	10 (21.3%)
No	37 (78.7%)

Note. Past month PTSD was determined using the CAPS-5 interview (Weathers et al., 2018).

Supplementary Table 2. *Mean composite score (of adverse cannabis outcomes) at levels of the two moderators.*

Pain Interference	PTSD Symptoms	Adverse Cannabis Outcomes (Composite Score)
Low (-1SD)	Low (-1SD)	-.02
Mean	Low (-1SD)	-.11
High (+1SD)	Low (-1SD)	-.21
Low (-1SD)	Mean	-.24
Mean	Mean	-.07
High (+1SD)	Mean	.10
Low (-1SD)	High (+1SD)	-.46
Mean	High (+1SD)	-.01
High (+1SD)	High (+1SD)	.41

Supplementary Table 3. *Model 1 regression analysis results with chronic pain interference, PTSS, and their interaction predicting past month cannabis use (top panel); simple slopes across three levels of the moderator (bottom panel).*

<i>Effect</i>	<i>b</i>	<i>t</i>	<i>p</i>
Chronic Pain Interference	-2.10	-1.47	.145
PTSS	-5.67	-2.00	.052
Chronic Pain Interference x PTSS	.257	2.19	.033*
<i>Simple Slopes</i>			
Low (-1SD) PTSS	-.549	-.6435	.262
Mean PTSS	.693	1.09	.139
High (+1SD) PTSS	1.94	2.30	.013*

Notes: * $p < .05$; p -values for the simple slopes analyses are one-tailed; regression coefficients are unstandardized.

Supplementary Table 4. Model 2 regression analysis results with chronic pain interference, PTSS, and their interaction predicting CUD symptom count (top panel); simple slopes across three levels of the moderator (bottom panel).

<i>Effect</i>	<i>b</i>	<i>T</i>	<i>p</i>
Chronic Pain Interference	-.098	-1.07	.287
PTSS	-.183	-1.01	.318
Chronic Pain Interference x PTSS	.012	1.68	.099†
<i>Simple Slopes</i>			
Low (-1SD) PTSS	-.023	-.411	.342
Mean PTSS	.038	.952	.173
High (+1SD) PTSS	.099	1.84	.036*

Note. * $p < .05$; † $p < .10$; p -values for the simple slopes analyses are one-tailed; regression coefficients are unstandardized.