

Year-to-year increases in cannabis arrests predict increased risk perception but have no bearing on actual cannabis use.

Increasing cannabis arrests alter perceptions of penalties but not use

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Introduction

- Deterrence models suggest that arrests from cannabis possession should decrease consumption and discourage use (Arazan et al., 2015)
- Considerable changes in cannabis policy warrant an updated examination of relations between penalty and cannabis consumption
- Current Study: Examine if arrests resulting from cannabis possession alter cannabis consumption, perceptions of use, and likelihood and severity of related penalties

Methods

Data Sources

- National Survey on Drug Use and Health
 - Past Year Cannabis Use
 - Past Year Initiates
 - Risk Perception
 - Penalty Perception
- FBI Uniform Crime Report (2002-2013)
 - Arrest Rates for Cannabis Possession

Model

- Series of fixed effect (FE) regression models estimating the effect of cannabis arrest rates on the indicators of cannabis prevalence within states over time (2002-2013)

Results

*= p<.05, **=p<.01, ***=p<.001

Descriptives

	Mean	Sx _b	Sx _w	Min	Max
Possession Arrest Rate	2.17	0.96	0.40	0.00	5.63
Annual Usage Self-Report	11.42	2.67	1.35	5.30	21.40
Past Year Initiates	1.58	0.36	0.31	0.50	3.90
% Reporting 'no risk'	12.74	2.47	3.59	4.90	28.40
% Reporting 'great risk'	34.06	5.63	4.57	14.00	53.00
% Reporting no punishment	4.47	3.96	3.62	0.50	58.20
% Reporting Fine	32.26	7.95	4.91	15.50	66.80
% Reporting Mand. Prison	5.66	1.33	1.11	0.70	11.70
% Reporting Community Service	8.24	1.55	1.47	2.40	19.20
% Reporting Probation	17.17	3.50	1.98	5.80	28.40

b – between states; w – within-state

Regression

FE estimates of various outcomes regression on possession rate; N=592		
Outcome	B	SE
Self-Reported Use		
Annual Usage Self-Report	-0.25	0.14
Past Year Initiates	-0.02	0.03
Perceived Risk		
% Reporting 'no risk'	-0.95*	0.37
% Reporting 'great risk'	0.95*	0.48
Perceived Penalty for Possession		
% Reporting no punishment	-2.79***	0.43
% Reporting Fine	-1.34***	0.51
% Reporting Mand. Prison	0.25*	0.11
% Reporting Community Service	0.54***	0.15
% Reporting Probation	0.81***	0.21

Conclusion

- Yearly increases in cannabis-related arrests predicted heightened perceptions of risk from use
- Changes in arrests led to greater perceptions of the severity of potential penalties, but no changes in cannabis use or the proportion of initiates
- Punitive approaches might not effectively deter cannabis use

References

Arazan, C., Costelloe, M., & Hall, T. (2015). The Effect of Marijuana Legalization on Anticipated Use: A Test of Deterrence Theory. *International Journal of Criminology and Sociology*, 4, 181-191.



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