



Juvenile Justice Severity and Youth Marijuana Use and Related Beliefs: Does the Stick Get Results?

Yvonne M. Terry-McElrath¹, Duane C. McBride²,
Mark D. Boward²

¹University of Michigan; ²Andrews University

Supported by grants from The Robert Wood Johnson Foundation (#032769) and the National Institute on Drug Abuse (DA01411)

131st Annual Meeting of the American Public Health Association
San Francisco, CA November 17, 2003



Purpose

To investigate the relationship between local prosecutor-reported juvenile marijuana possession offender adjudication severity and reported use of marijuana (and related beliefs) among students

- How does the distribution of adjudication severity vary between prosecutors with discretion over juvenile marijuana possession cases? (from minimal reaction to community outcomes that can include treatment, to punitive actions such as out-of-home placement)
- Is there a relationship between adjudication severity and the following American 8th, 10th, and 12th grade student self-reported measures:
 - Perceived risk and disapproval of marijuana use
 - Prevalence and consumption of marijuana
- What are the policy implications of both severity distribution and observed relationships with marijuana use and related beliefs?



Background

- Research showing significant variation between states in marijuana policy and associated penalties (ImpacTeen Illicit Drug Team, 2002) indicates that there may be significant differences in the application of drug policy at the local level
- No prior research available examining policy application at the local level and corresponding youth substance use in a national context
- Marijuana may provide the best opportunity to examine relationships between policy and youth perceptions and behavior, as it is
 - ✓ The primary illicit drug used by American youth (Johnston et al., 2003)
 - ✓ The substance most likely to be used by juvenile detainees (ADAM 2003)
 - ✓ The focus of major policy debate

Background, cont.

- Rational choice and classical deterrence theories predict that increased penalties would be associated with decreased use (Bartollas, 1997)
- Both labeling theory (Bernburg, 2003) and the financial costs of detention (Irwin et al., 2000) support lessening extended contact with the justice system; thus, policy emphasizing non-placement outcomes would be desirable, if no significant increases in substance use or community harm were associated
- Prosecutor reports of juvenile case processing provide an opportunity to investigate associations with adjudication severity
 - ✓ Considerable prosecutorial discretion to dismiss, prosecute, or divert cases
 - ✓ Prosecutors play a major role in police enforcement practices as well as judicial decisions

Sampling and Methods

- Year 2000 student substance use data from Monitoring the Future (MTF) study: nationally-representative samples of 8th, 10th, and 12th grade students in the coterminous US
- ImpacTeen sample of 173 communities determined by location of public schools in MTF sample
- Identification of prosecutorial office handling the majority of youth cases in sampled communities
- CATI interviews with 135 prosecutors knowledgeable about youth substance offenses (78% response rate)
 - Adjudication practice distribution for juvenile marijuana possession offenses
 - All respondents instructed to answer for juveniles “with no prior record of adjudications or convictions for any offense”

Sampling & Methods, cont.

- 43 Prosecutors (32%) reported following some type of mandated minimum sentencing for marijuana possession (removed); 4 additional sites removed due to missing control data or extreme values on outcomes
- Of 94 remaining cases, 84 (91%) had valid data on items needed to create marijuana possession processing severity scale, representing the following communities and weighted student respondents:
 - 31 Eighth grade communities; 4,112 students
 - 27 Tenth grade communities; 3,314 students
 - 26 Twelfth grade communities; 2,830 students
- Student data aggregated to school level for analysis
- Log-transformed outcomes used in OLS regressions (SAS v.8); weights included to account for the proportion of grade-level national representation in MTF survey, and normalized to N of 84

Sampling & Methods, cont.

- Independent variable: Overall Community Severity Level (OCSL) for marijuana possession
- Dependent marijuana-related variables (recognizing non-causal nature of analyses):
 - ✓ Personal disapproval (any) and perceived risk (great)
 - ✓ Prevalence of use
 - ✓ Consumption rates: general consumption and consumption among users only
- Control variables:
 - ✓ School-level: grade, race/ethnicity
 - ✓ Community-level: income, race/ethnicity, age distribution (2000 U.S. Census), population density (National Center for Education Statistics), region of US

Sampling & Methods, cont.

- Overall Community Severity Level (OCSL): 4-level ordinal measure indicating the most severe and most frequently used adjudication severity level for marijuana possession
 - Level 1 Dismissal
 - Level 2 Minimal Community Reaction: informal probation, fine, community service, mediation
 - Level 3 Community-Based Corrections: court-ordered probation with treatment, court-ordered probation without treatment, home detention
 - Level 4 Placement: detention, residential facility, other out-of-home placement



Sample Characteristics

(N=84; standard errors in parentheses for continuous variables)

- Grade
 - 39% 8th
 - 34% 10th
 - 27% 12th
- School race/ethnicity
 - 14% African American (2.6)
 - 11% Hispanic (1.9)
 - 11% Other (1.2)
- Community race/ethnicity
 - 83% White (2.0)
- Community age distribution
 - 9% age 12-17 (0.2)
 - 10% age 18-24 (0.6)
- Community population density
 - 67% urban/suburban
- Community median household income
 - \$46,640 (\$2,091)
- Region of U.S.
 - 17% West
 - 31% Midwest
 - 20% Northeast
 - 32% South

Marijuana Possession OCSL: Processing Severity for Juvenile Offenders (% of target population)

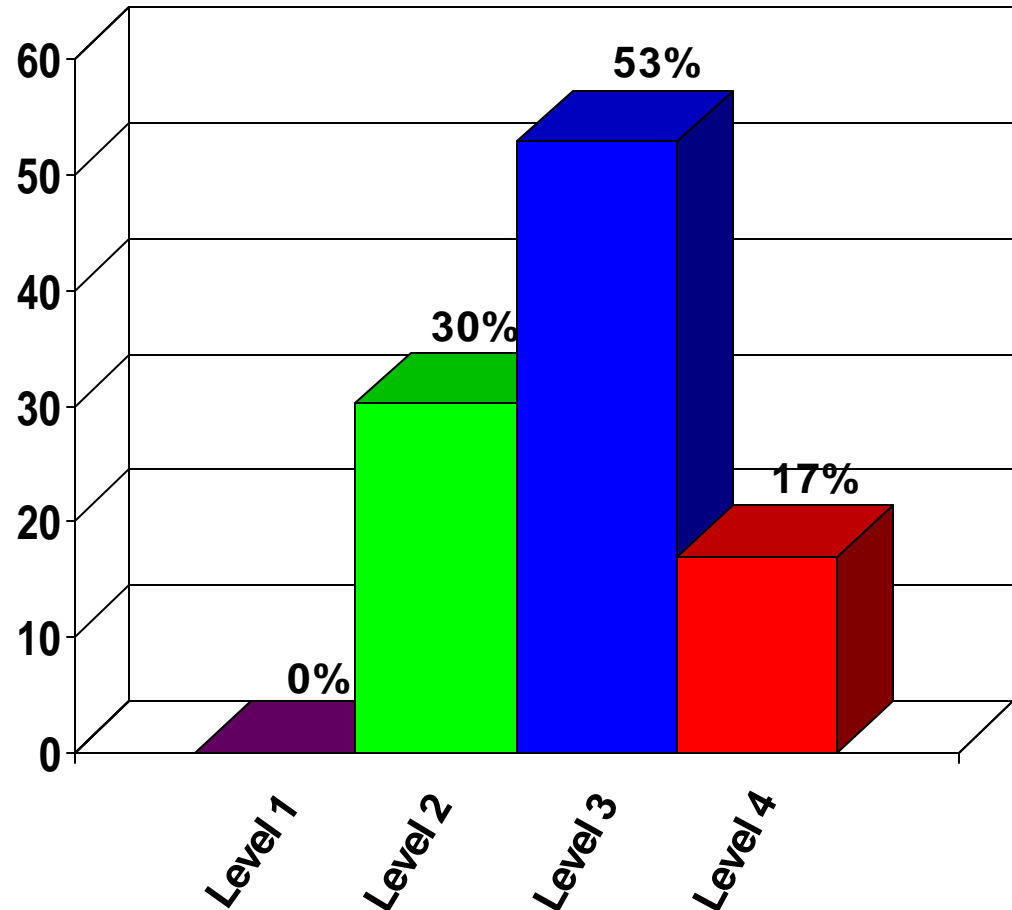
Level 1: Dismissal

Level 2: Minimal reaction

**Level 3: Community-based
corrections**

Level 4: Placement

**Percent of Level 3 driven by
court-ordered probation with
treatment: 72.0%**



Marijuana Possession OCSL and Disapproval/Risk of Marijuana Use

<u>Disapproval (Any)</u>	Mean School Disapproval	p ^a
Trying once or twice		
Level 2	52.8%	**
Level 3	60.3%	*
Level 4	68.1%	(ref)
Using occasionally		
Level 2	64.1%	**
Level 3	72.0%	*
Level 4	78.0%	(ref)
Using regularly		
Level 2	75.8%	**
Level 3	83.1%	
Level 4	83.4%	(ref)

<u>Perceived Risk (Great)</u>	Mean School Great Risk	p ^a
Trying once or twice		
Level 2	17.2%	
Level 3	20.7%	
Level 4	24.4%	(ref)
Using occasionally		
Level 2	30.1%	
Level 3	35.7%	
Level 4	40.9%	(ref)
Using regularly		
Level 2	60.3%	**
Level 3	69.3%	
Level 4	69.2%	(ref)

^aSignificance levels from multivariate OLS regression using log-transformed outcomes, controlling for grade, school race/ethnicity, community race/ethnicity, age distribution, median household income, population density, and region.

*p<.05; **p<.01

Marijuana Possession OCSL and Marijuana Prevalence

<u>Marijuana Use Prevalence</u>	Mean School Prevalence	p ^a
Lifetime prevalence		
Level 2	45.2%	**
Level 3	32.1%	
Level 4	29.7%	(ref)
Past 12-month prevalence		
Level 2	35.3%	***
Level 3	25.0%	*
Level 4	20.2%	(ref)
Past 30-day prevalence		
Level 2	22.3%	*
Level 3	15.2%	
Level 4	11.9%	(ref)

^aSignificance levels from multivariate OLS regression using log-transformed outcomes, controlling for grade, school race/ethnicity, community race/ethnicity, age distribution, median household income, population density, and region.

*p<.05; **p<.01; ***p<.001

Marijuana Possession OCSL and Marijuana Consumption^a

<u>General Consumption</u>	Mean School Consumption	p ^b
Lifetime		
Level 2	8.64	**
Level 3	5.60	*
Level 4	4.74	(ref)
Past 12 months		
Level 2	5.54	*
Level 3	3.51	
Level 4	2.76	(ref)
Past 30 days		
Level 2	2.61	
Level 3	1.59	
Level 4	1.62	(ref)

<u>Consumption among Users</u>	Mean School Consumption	p ^b
Lifetime		
Level 2	18.11	
Level 3	16.38	
Level 4	13.89	(ref)
Past 12 months		
Level 2	5.48	
Level 3	4.64	
Level 4	4.46	(ref)

^aConsumption measured using original scale of 0, 1-2, 3-5, 6-9, 10-19, 20-39, 40+, with mean values used for analyses

^bSignificance levels from multivariate OLS regression using log-transformed outcomes, controlling for grade, school race/ethnicity, community race/ethnicity, age distribution, median household income, population density, and region

*p<.05; **p<.01

Summary

- As of 2000, significant variation existed in how prosecutors with discretion over juvenile cases reported usually processing first-time marijuana possession offenders
- Majority of prosecutors reported primarily using community-based corrections (53%), and the majority of those reported court-ordered probation with treatment to be the driving outcome; however, 17% reported out-of-home placement, and 30% reported minimal community reaction
- Compared to communities using placement, in communities where prosecutors reported using primarily minimal community reaction, students reported:
 - ✓ Lower disapproval for using marijuana at any level, and lower perceived risk of using marijuana regularly
 - ✓ Higher prevalence of lifetime, annual, and 30-day marijuana use
 - ✓ Higher general consumption rates among the general student population for lifetime and annual marijuana use

Summary, cont.

- Compared to communities using placement, in communities where prosecutors reported using community-based corrections, students reported:
 - ✓ Lower disapproval for trying marijuana or using occasionally
 - ✓ Higher prevalence for annual marijuana use
 - ✓ Higher lifetime general consumption rates

Limitations

- Single year cross-sectional data, and small N
- Part of a nationally-representative sample of students, but not nationally representative sample of prosecutors
- Prosecutor-reported usual processing vs. examination of case records
- Observed results may indicate enforcement of community norms regarding perceived deviance, rather than substance-specific policy enforcement outcomes

Implications

- Policy is clearly associated with differences in behavior
- Such differences were most strongly observed between communities with very little reaction vs. those with strongly punitive reactions
- Communities that focus on community-based corrections (predominantly probation with treatment) may be associated with increased treatment access, lowered financial costs, and decreased incarceration time (and associated problems) while not engendering a corresponding increase in use or decrease in perceived risk
- Policy may act more as a significant deterrent to those considering marijuana use (or in the early experimental stages of use) than as a deterrent to those already using marijuana