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# Washington State Recreational Marijuana Legalization: Parent and Adolescent Perceptions, Knowledge, and Discussions in a Sample of Low-Income Families

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## **Abstract**

**Background**—In November 20012, Washington State and Colorado became the first states in the United States to legalize recreational marijuana use for adults, and Uruguay became the first country to allow the cultivation, distribution, possession, and use of marijuana. One possible consequence of these changes is increased adolescent marijuana use. Parents may mitigate this adverse consequence; however, whether parents and adolescents have accurate knowledge about the laws and are discussing marijuana use in light of the law changes is unknown.

**Objective**—We examine perceptions, knowledge, and parent-child discussions about Washington State's recreational marijuana law in a sample of low-income families.

**Methods**—Participants were a subset of families (n = 115) in an ongoing study that originally recruited parents and adolescents from middle schools in Tacoma, Washington. In summer 2013, when students were entering the  $11^{th}$  grade, students and their parents were asked questions about the recreational marijuana law.

**Results**—Participants perceived that their marijuana-related attitudes and behaviors changed little as a result of the law, and displayed uncertainty about what is legal and illegal. Most parents reported discussing the new law with their children but only occasionally, and conversations emphasized household rules, particularly among parent lifetime marijuana users compared to non-users.

**Conclusions/Importance**—Results suggest that there should be a public health campaign focused on families that provides clear information about the recreational marijuana laws.

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Declaration of Interest

The authors have no conflicts of interest.

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# **Keywords**

marijuana use; law; legalization; parent; adolescent

In November 2012, Washington State and Colorado legalized the use of marijuana for nonmedical, recreational purposes. Other states in the United States may follow suit. Uruguay recently became the first country to pass legislation that allows the cultivation, distribution, possession, and use of marijuana for adults (Room, 2013). One possible consequence of these changes is that adolescent marijuana use might increase due to greater exposure to and availability of marijuana (von Sydow, Lieb, Pfister, Höfler, & Wittchen, 2002). This is disconcerting, because regular adolescent marijuana use is associated with adverse health and psychosocial outcomes (Brook, Balka, & Whiteman, 1999; Hall & Degenhardt, 2014; Juon, Fothergill, Green, Doherty, & Ensminger, 2011). Parents may mitigate the potential adverse impact of recreational marijuana legalization on adolescents through communication of expectations for non-use and monitoring of their children's behavior (Bohnert, Anthony, & Breslau, 2012; Lac, Alvaro, Crano, & Sigel, 2009; Lac & Crano, 2009). However, it is unknown if parents and adolescents have accurate knowledge about recreational marijuana laws and if parents are discussing marijuana use with their adolescent children in light of the law changes. Drawing on a sample of low-income families in Washington State, we provide a snapshot of parents' and adolescents' perceptions, knowledge, and discussions about recreational marijuana use legalization in the summer of 2013. Variability in the ratings was expected, and comparisons between lifetime parent marijuana-users and non-users were conducted (Ennett, Bauman, Foshee, Pemberton, & Hicks, 2001).

# Method

## **Participants and Procedures**

Participants were a subset of families enrolled in an ongoing prevention trial. Each family includes a parent and an adolescent who attended one of five middle schools in Tacoma, Washington. Recruitment occurred over two academic years, when adolescents were in the eighth grade, including 122 families in 2010/2011 (Cohort 1) and 199 families in 2011/2012 (Cohort 2). Of the 321 families enrolled (taken from a list of 615 eligible families), 108 were assigned to the control condition and 215 were assigned to one of two parenting intervention conditions (Mason, Fleming, Thompson, Haggerty, & Snyder, in press). Intervention outcomes are not the focus of this report; however, supplemental analyses were conducted to examine the potential role of the interventions in the pattern of findings reported below and the results were similar across the three experimental conditions.

Analyses used data collected from 115 Cohort 1 families who completed a two-year follow-up assessment in summer 2013 (94% retention as of September 2013) when students were entering Grade 11 (i.e., approximately age 16 years). At this time, questions were added about Washington State's recreational marijuana law. These questions were not asked of Cohort 2 families in summer 2013 at their 1-year follow-up to ensure that the 1-year follow-up survey remained standardized across cohorts. Most parents are female (80%), whereas the sample of adolescents is approximately gender balanced (52% female). Families are

diverse (e.g., 51% Caucasian, 21% African American) and low-income (e.g., 75% of students received free\reduced price school lunch). Assessments were conducted via computer-assisted interviews in families' homes. Study procedures received Institutional Review Board review and approval.

#### Measures

**Parent marijuana use**—Parents reported whether or not they had ever used marijuana and were categorized into lifetime users (n = 54, 47%) and non-users (n = 61, 53%).

**Perceptions about the law change**—Four items in the parent and adolescent surveys asked participants to indicate the degree to which they perceive recreational marijuana legalization has impacted their marijuana-related attitudes and behaviors on a scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree."

**Knowledge about the law change**—Three items asked parents and adolescents about the legal age limit, the amount of marijuana that can be possessed, and whether homegrown marijuana is allowed. Responses were coded to indicate the percentage of participants with a correct answer. In Washington State, the legal age limit is 21 years, adults can possess up to one ounce, and homegrown marijuana is not allowed.

**Discussions about the law change**—Parents were asked how often (1 "Never" to 5 "Very Often") they have discussed the recreational marijuana law with their participating adolescent child. Five dichotomous (Yes/No) follow-up questions determined the content of conversations.

## Results

Results for the perceptions and knowledge items are reported in Table 1. Both parents and youth indicated that the recreational marijuana law resulted in relatively little change in their attitudes about the favorability of marijuana use or the likelihood they will use marijuana; however, parent lifetime marijuana users reported becoming more favorable to adults using marijuana and an increased likelihood of using themselves than parent non-users.

Participants displayed uncertainty about what is legal and illegal under the new law. For example, only about 57% of parents selected the correct legal age limit. None of the parent marijuana use group differences were statistically significant.

Results for the discussion items are reported in Table 2. Overall, 70.4% of parents indicated discussing the marijuana law with their adolescent child, although the frequency of having such discussions was low (M = 2.47). The frequency of endorsing specific topics of conversation ranged from 35.8% (what is legal and illegal) to 50.6% (marijuana-related household rules); 32.1% of parents reported discussing other issues (e.g., medical marijuana use). Parent lifetime marijuana-users were significantly more likely to discuss household rules and other issues compared to parent non-users.

Group comparisons further distinguished parent ever users from current users in supplemental analyses. The findings were similar to those reported above.

# **Discussion**

As the legal market for recreational marijuana use expands in countries like the United States and Uruguay (Room, 2013), questions about the potential impact of these changes on families and adolescents arise. This study is among the first to examine parents' and adolescents' perceptions, knowledge, and discussions about recreational marijuana legalization in Washington State. Results suggested relatively little perceived change in participants' attitudes and behaviors, which may have already been well established or may take more time to shift. Importantly, both parents and adolescents displayed uncertainty in their understanding of core aspects of what is legal and illegal under the new law. Parentchild discussions about recreational marijuana legalization were not uncommon, as expected given media attention focused on the issue, but did not occur at a high frequency. Research indicates that parent-child discussions about substance use may reduce children's likelihood of use (Ennett, Jackson, Bowling, & Dickinson, 2013). Household rules about marijuana use were discussed most often, significantly more so for parent lifetime marijuana users versus non-users. This is potentially a concern, because discussions that over-emphasize rules and consequences to the exclusion of other considerations, such as the natural harmful consequences of use, can increase substance intake among adolescent substance initiators (Ennett et al., 2001).

The study has some noteworthy limitations. Data were collected from a regional sample of parents and adolescents, and the sample size is relatively small. Expanded analyses are planned, such as linking ratings about the law to changes in subsequent adolescent marijuana use as forthcoming data collection efforts are completed on the project. Still, this study provides a first look at perceptions, knowledge, and parent-child discussions about an emerging and critically important issue: recreational marijuana legalization. Given the links between regular marijuana use and adverse outcomes among adolescents (Brook, Balka, & Whiteman, 1999; Hall & Degenhardt, 2014; Juon, Fothergill, Green, Doherty, & Ensminger, 2011), implications of the findings are that there should be a strong and consistent message about the dangers of youth marijuana use and a public health campaign focused on parents and adolescents that provides clear information about the laws (Frieden, 2010). Although parent-child discussions about marijuana legalization may help mitigate potential increases in adolescent marijuana use, studies suggest that caution is needed to avoid emphasizing rules and disciplinary consequences over other topics of conversation, such as beliefs and harms (Ennett et al., 2001).

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# References

Bohnert KM, Anthony JC, Breslau N. Parental monitoring at age 11 and subsequent onset of cannabis use up to age 17: Results from a prospective study. Journal of Studies on Alcohol and Drugs. 2012; 73:173–177. [PubMed: 22333324]

- Brook JS, Balka EB, Whiteman M. The risks for late adolescence of early adolescent marijuana use. American Journal of Public Health. 1999; 89:1549–1554. [PubMed: 10511838]
- Ennett ST, Bauman KE, Foshee VA, Pemberton M, Hicks KA. Parent-child communication about adolescent tobacco and alcohol use: What do parents say and does it affect youth behavior? Journal of Marriage and the Family. 2001; 63:48–62.
- Ennett ST, Jackson C, Bowling JM, Dickinson DM. Parental socialization and children's susceptibility to alcohol use initiation. Journal of Studies on Alcohol and Drugs. 74:694–702. [PubMed: 23948528]
- Hall W, Degenhardt L. The adverse effects of chronic cannabis use. Drug Testing and Analysis. 2014; 6:39–45. [PubMed: 23836598]
- Juon HS, Fothergill KE, Green KM, Doherty EE, Ensminger ME. Antecedents and consequences of marijuana use trajectories over the life course in an African American population. Drug and Alcohol Dependence. 2011; 118:216–223. [PubMed: 21514749]
- Lac A, Alvaro EM, Crano WD, Sigel JT. Pathways from parental knowledge and warmth to adolescent marijuana use: An extension to the theory of planned behavior. Prevention Science. 2009; 10:22–32. [PubMed: 18989783]
- Lac A, Crano WD. Monitoring matters: Meta-analytic review reveals the reliable linkage of parental monitoring with adolescent marijuana use. Perspectives on Psychological Science. 2009; 4:578– 586. [PubMed: 26082797]
- Mason WA, Fleming CB, Thompson RW, Haggerty KP, Snyder JJ. A framework for testing and promoting the expanded dissemination of promising preventive interventions that are being implemented in community settings. Prevention Science. in press.
- von Sydow K, Lieb R, Pfister H, Höfler M, Wittchen HU. What predicts incident use of cannabis and progression to abuse and dependence? A 4-year prospective examination of risk factors in a community sample of adolescents and young adults. Drug and Alcohol Dependence. 2002; 68:49–64. [PubMed: 12167552]

Table 1

Perceptions and Knowledge about Washington State's Recreational Marijuana Law

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Variable	Total Sample (n=115)  M (SD) or %	Parent Groups		
		Non-Users (n=61)	Lifetime Users (n=54) M (SD) or %	Group Comparison
		M (SD) or %		
Parent Perceptions				
More favorable to adults using	2.46 (1.25)	1.95 (1.15)	3.04 (1.12)	p < .05
More favorable to teens using	1.46 (0.84)	1.38 (0.71)	1.56 (0.97)	n.s.
I am more likely to use	1.71 (1.13)	1.36 (0.78)	2.11 (1.32)	p < .05
My child is more likely to use	1.76 (1.08)	1.66 (1.00)	1.89 (1.17)	n.s.
Adolescent Perceptions				
More favorable to adults using	2.59 (1.24)	2.47 (1.39)	2.72 (1.07)	n.s.
More favorable to teens using	2.14 (1.09)	2.12 (1.21)	2.15 (0.96)	n.s.
I am more likely to use as teen	1.83 (1.05)	1.82 (1.11)	1.83 (1.01)	n.s.
I am more likely to use as adult	2.11 (1.28)	2.07 (1.27)	2.17 (1.30)	n.s.
Parent Knowledge				
Homegrown marijuana illegal	63.5%	68.9%	57.4%	n.s.
Legal age 21 years	57.4%	52.5%	63.0%	n.s.
Possess and use up to 1 ounce	72.2%	70.5%	74.1%	n.s.
Adolescent Knowledge				
Homegrown marijuana illegal	60.9%	58.3%	63.0%	n.s.
Legal age 21 years	71.3%	70.0%	72.2%	n.s.
Possess and use up to 1 ounce	48.7%	46.7%	51.9%	n.s.

n.s. = Not significant.

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 Table 2

 Parent-Child Discussions about Washington State's Recreational Marijuana Law

Variable	Total Sample (n=115)  M (SD) or %	Parent Groups		
		Non-Users (n=61) M (SD) or %	Lifetime Users (n=54)  M (SD) or %	Group Comparison
Frequency of discussions	2.47 (1.61)	2.42 (1.38)	2.54 (1.11)	n.s.
Topics of Conversation:				
What is legal and illegal	35.8%	25.6%	45.2%	p < .10
Whether the law is a good idea	46.9%	48.7%	45.2%	n.s.
Concerns about consequences of the law	44.4%	41.0%	47.6%	
Household rules about marijuana	50.6%	38.5%	61.9%	p < .05
Other issues about the law	32.1%	20.5%	42.9%	p < .05

n.s. = Not significant.