

## Addressing Youth Marijuana Use

### Time-varying Effects of Parents and Peers on Adolescent Marijuana Use: Person-environment Interactions Across Development

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#### MISSION of SDRG

To understand and promote healthy behaviors and positive social development among diverse populations, we:

- ◆ Conduct research on factors that influence development
- ◆ Develop and test the effectiveness of interventions
- ◆ Study service systems and work to improve them
- ◆ Advocate for science-based solutions to health and behavior problems
- ◆ Disseminate knowledge, tools, and expertise produced by this research

#### Community Need

As more states pass legislation to allow marijuana use for adults, concerns arise that legalization may lead to an increase in use among youth. In order to formulate an effective strategy to prevent a rise in youth use, we need to know 1) what types of prevention programs are effective for youth, 2) who should receive prevention programs, and 3) at what ages the programs should be administered.

This study examines two factors known to be associated with youth marijuana use: family management and antisocial peers. Family management, which includes guidelines, monitoring, and consequences, is a protective factor that decreases the likelihood of marijuana use. On the other hand, having antisocial peers is a risk factor associated with greater likelihood of use. This study examines the effect of

parents and peers on adolescent marijuana use and tests whether the relationship between parents and peers and youth marijuana use is equally strong from age 12 to age 19, and whether it differs for different types of youth. Specifically, we looked at differences by gender and by levels of behavioral disinhibition (impulsivity).

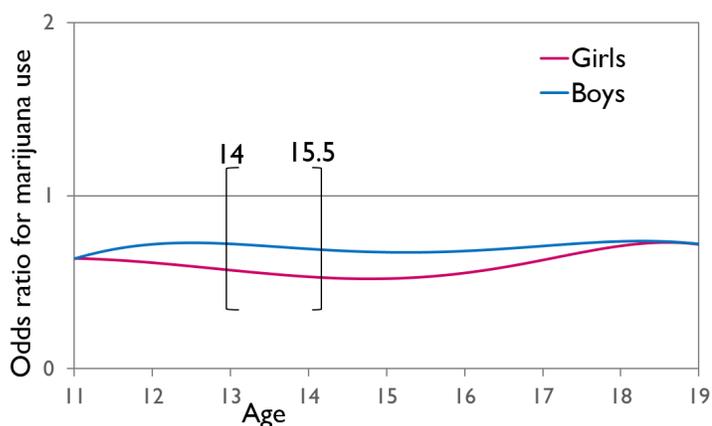
#### Methods

Data came from the Raising Healthy Children study, a longitudinal panel of 1,040 youth followed from age 6 to age 25. Participants provided information about having clear rules in the family, parents' monitoring of their activities, and consequences for misbehavior. They also were asked how many of their peers engaged in antisocial activities such as getting into trouble with teachers or the police. Participants reported whether they used marijuana in the past month. Time-varying effect modeling (TVEM)

#### Key Messages

- *Developing effective programs to prevent youth marijuana use is an important public health effort.*
- *Programs focused on promoting family management and reducing contact with antisocial peers are likely to be effective at reducing adolescent marijuana use.*
- *All youth are likely to benefit from such programs, which can be administered throughout adolescence (age 12–19). However, boys and youth with more behavioral disinhibition may need additional programming.*

**Figure 1.** The effect of family management on adolescent marijuana use: Girls are **more** influenced by family management than boys at age 14–15.5.

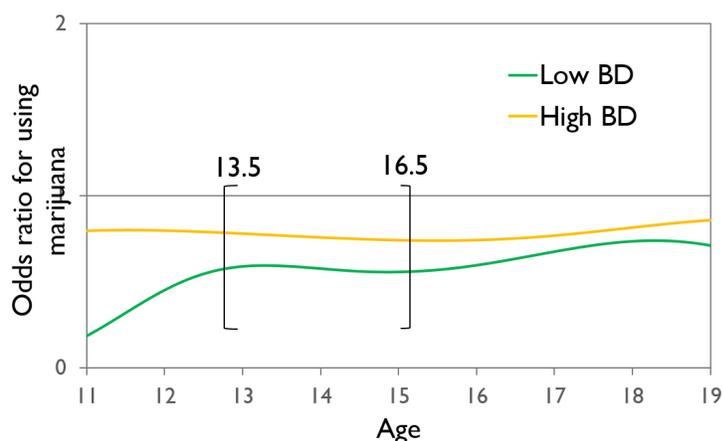


was used to examine whether the influence of parents and peers was stronger for boys or girls and for youth with more behavioral disinhibition. TVEM models track change in the strength of the association between risk and protective factors (parents and peers) and an outcome (marijuana use) over time. This innovative method makes full use of rich longitudinal data and allows us to examine differences between groups at specific ages.

## Results

Family management was related to lower marijuana use throughout adolescence (age 12–19). This was true for all youth, including boys and girls and those youth who had higher and lower levels of behavioral disinhibition. Having antisocial peers was related to more marijuana use. This also was true for all youth in the study throughout adolescence.

**Figure 2.** The effect of family management on adolescent marijuana use: Youth with more behavioral disinhibition (BD) were **less** influenced by family management than less disinhibited youth at age 13.5–16.5.



We found, however, that girls were more susceptible to the influence of parents and peers. Family management was more protective for girls than boys age 14–15.5 (**Figure 1**), and antisocial peers were more damaging for youth age 17.5–19 (not shown). We also found that youth who were less disinhibited (showed less impulsivity) were also more susceptible to the influence of parents (at age 13.5–16.5, **Figure 2**) and peers (at age 14.5–19, not shown).

## Conclusion

Prevention programs that seek to improve family management and reduce adolescents' contact with antisocial peers are likely to be effective. Universal programs that are delivered to all youth are likely to be successful. Boys and disinhibited youth could use additional programming, however, as they are less susceptible to parental and peer influences.

For additional information on this topic, please refer to the original article:

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