

What are the health risks associated
with bullying in adolescence?
Are bully-victims at particular risk?

Lisa A. Prokop, BA
Sion Kim Harris, PhD
Lydia A. Shrier, MD, MPH
S. Bryn Austin, ScD

Division of Adolescent/Young Adult Medicine
Children's Hospital Boston

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Background

- Bullying includes physical or verbal assault, attack on personal property, or social exclusion
- 30% of 6th-10th graders report bullying involvement, either as victim, perpetrator, or both¹

1. Nansel TR, Overpeck MD, Ramani S, et al. Bullying behaviors among US youth: prevalence and association with psychosocial adjustment. JAMA 2001;285:2094-100.

Bullying Involvement and Health

- Compared to those not involved in bullying:
 - Bullies are at greater risk for substance use, physical fighting, adulthood criminality
 - Victims are at greater risk for depression, suicidality, eating disorders

Bully-Victims: At Particular Risk?

- Compared to any other group, bully-victims are at highest risk for:
 - Depressive symptoms
 - Anxiety
 - Suicidal ideation
- Further research needed to examine comparisons across a range of health indicators

Study Aim

- Identify the health risk profiles of male and female bully-victims compared to youth who are perpetrators only, victims only, or who are not involved in bullying

Study Design

- Cross-sectional
 - One-time survey administration
- Self report questionnaire
 - 131 items
 - Drawn from previously-validated instruments and population-based surveys

Sample Characteristics

- 419 students, 9th-11th grade
 - 9th grade: 33%
 - 10th grade: 35%
 - 11th grade: 30%

- Two urban high schools
 - School A: 41%
 - School B: 59%

Sample Demographics

	N=419
Sex/Gender	
Male	43%
Female	57%
Race/Ethnicity	
White, Non-Hispanic	16%
Black, Non-Hispanic	26%
Hispanic	31%
Other Race/Ethnicity	22%
Not Reported	6%

Questionnaire

- Items assessed:
 - Bullying Involvement
 - Substance use
 - Violence-related behaviors
 - Mental Health

Assessment of Bullying Involvement

- How often have you taken part in bullying or harassing others in the past 12 months?
 - Dichotomized to represent any perpetration
- How often have you been bullied or harassed in the past 12 months?
 - Dichotomized to represent any victimization

Assessment of Substance Use

Two items from the Youth Risk Behavior Survey assessed:

- Number of times binge drinking (≥ 5 drinks in one episode) in past 30 days
 - Dichotomized to represent any binge drinking
- Number of times smoked marijuana in past 30 days
 - Dichotomized to represent any use

Assessment Violence and Safety

Two items from the YRBS assessed:

- Number of days carried a weapon in school in past 30 days
 - Dichotomized to represent any weapon carrying in school
- Number of days skipped school because felt unsafe in the past 30 days
 - Dichotomized as ever skipped school because felt unsafe

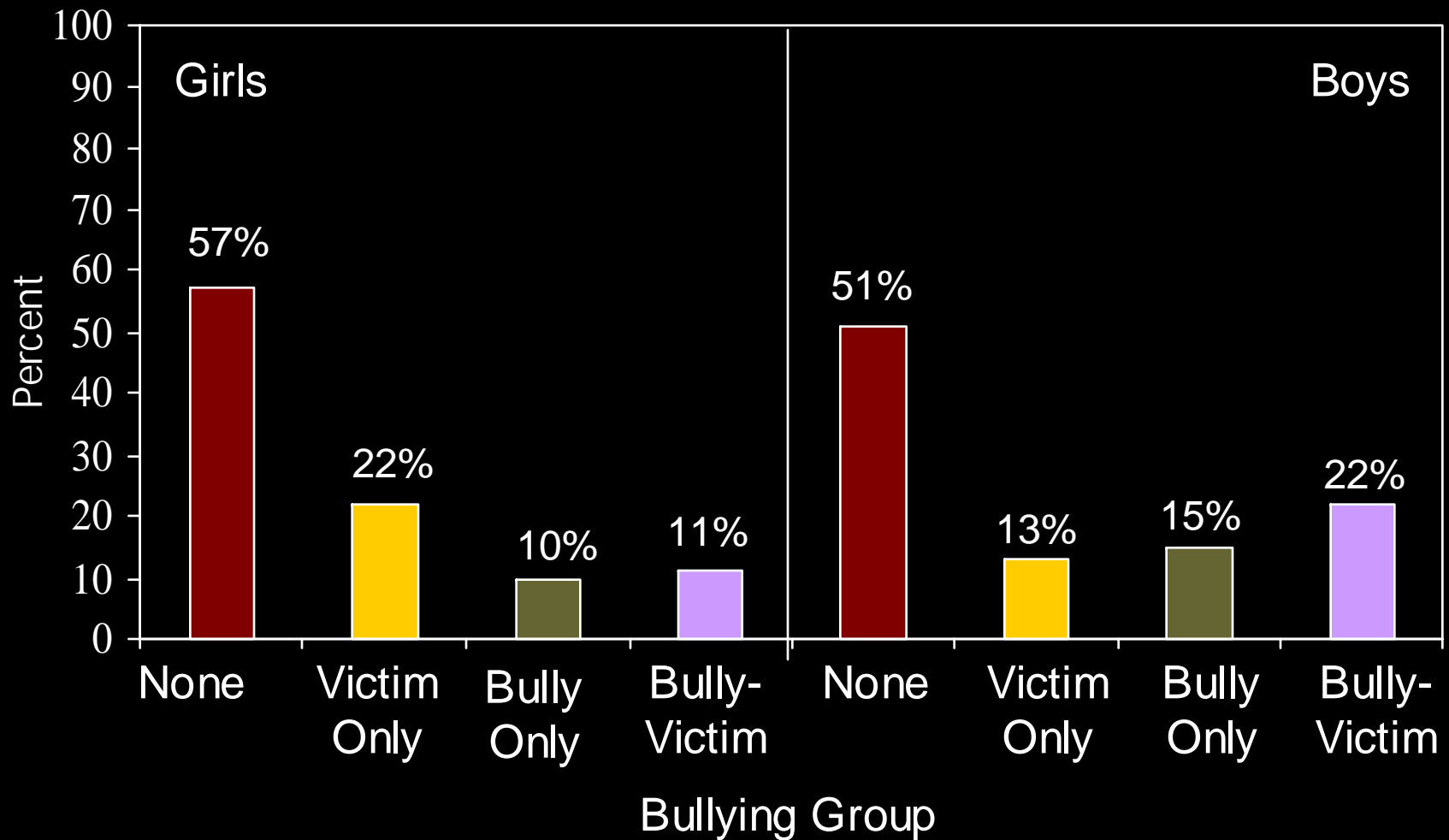
Assessment of Mental Health

- Beck Depression Inventory
 - Dichotomized by score ≥ 14 (score range: 0-21) on the 7-item scale

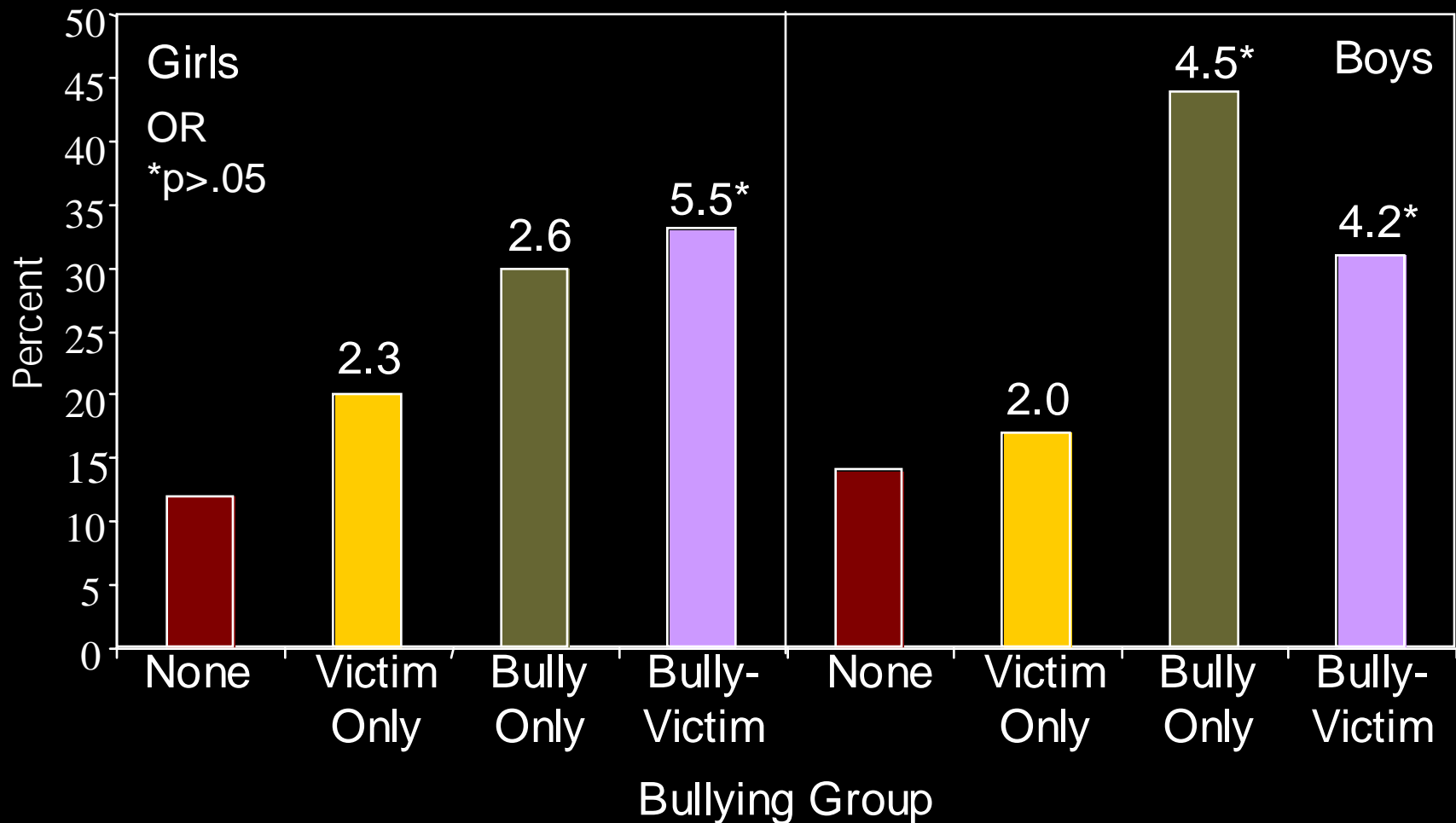
Statistical Analysis

- Students classified into four groups:
 - No bullying involvement (n=222)
 - Victim only (n=75)
 - Bully only (n=48)
 - Bully-victim (n=64)
- Multivariable logistic regression models tested differences in health indicators by bullying group
 - Models controlled for race/ethnicity, sex, and grade
 - All analyses were gender stratified
 - All outcomes dichotomous

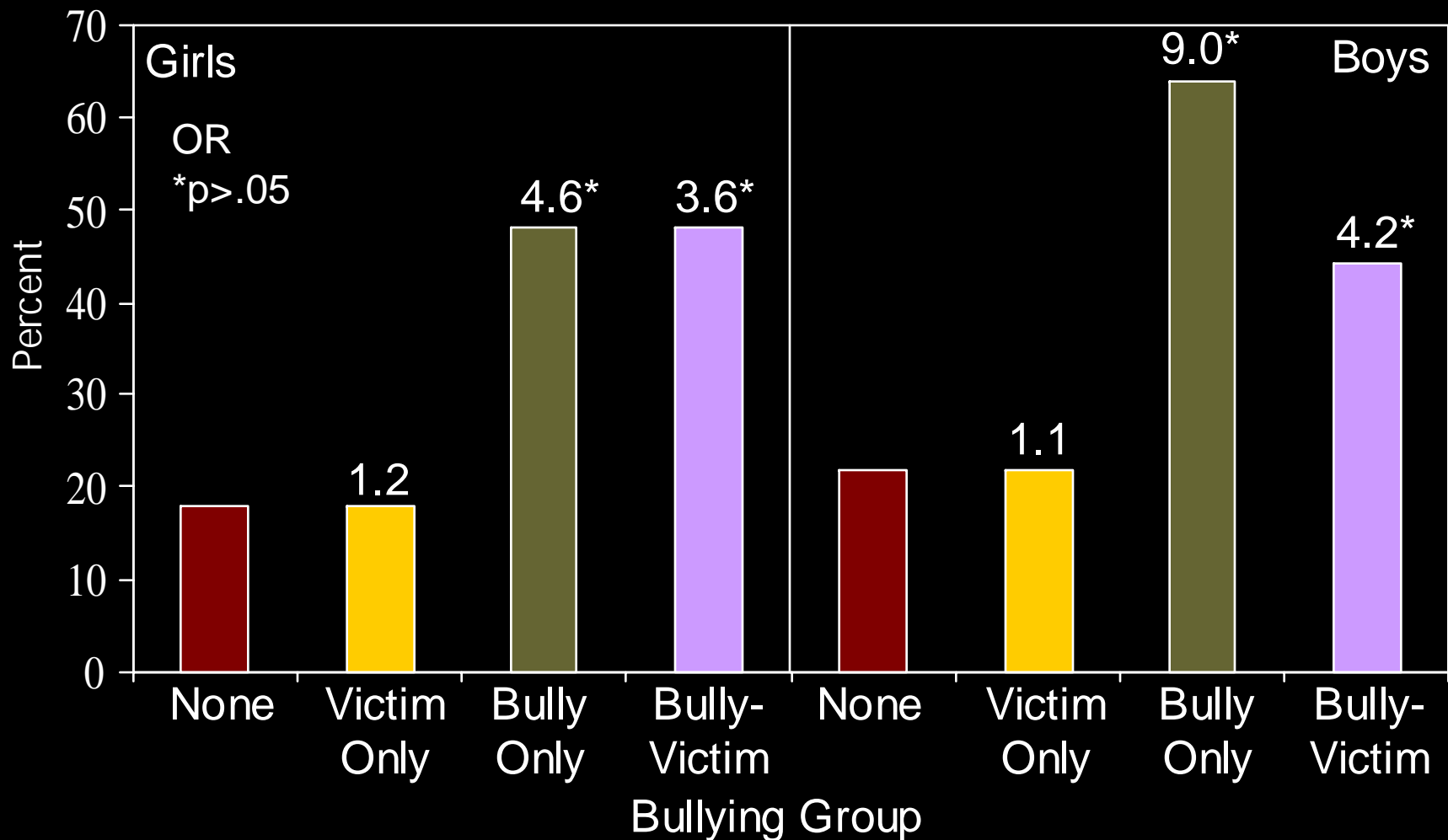
Bullying Involvement



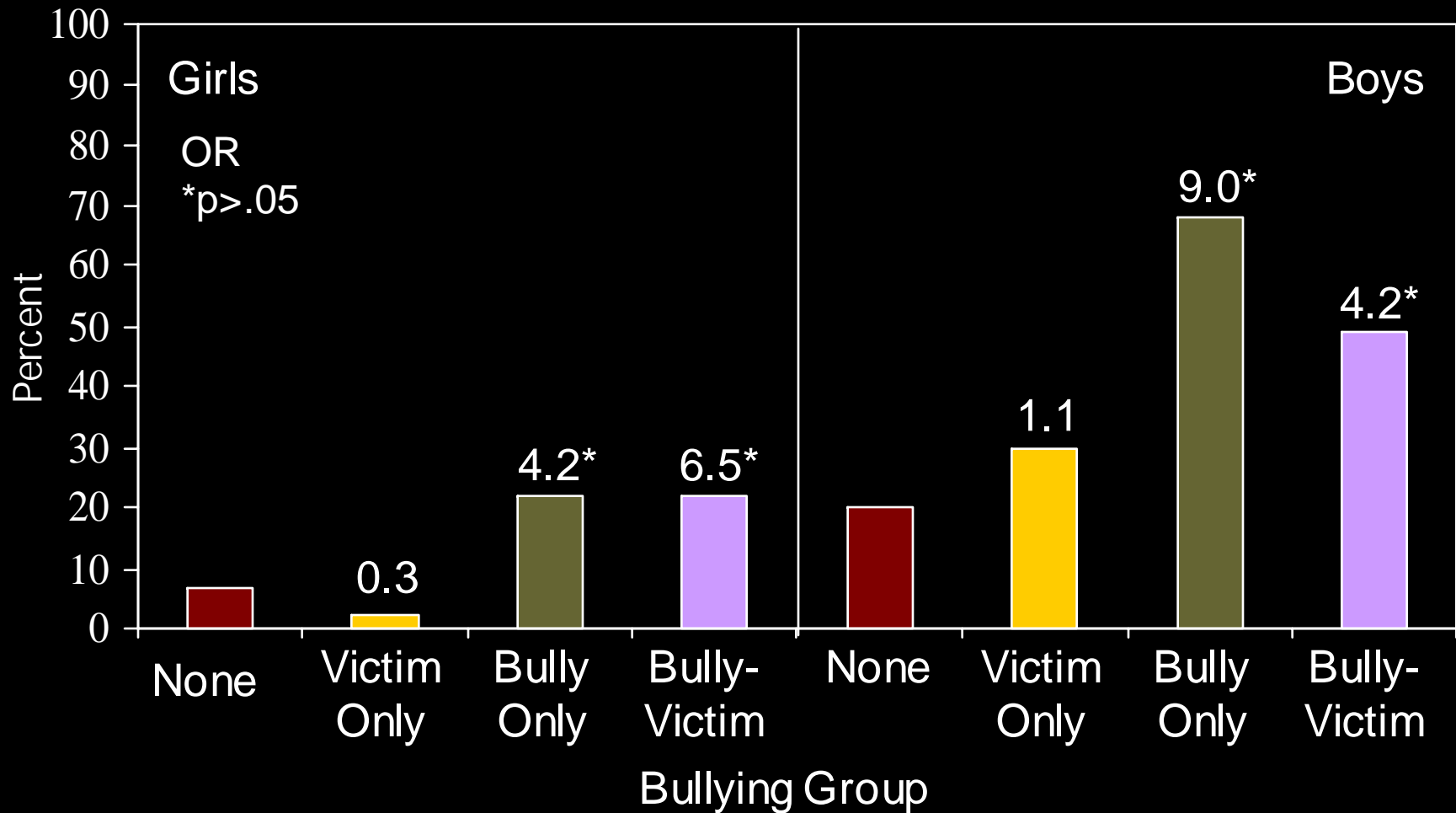
Binge Drinking by Bullying Group



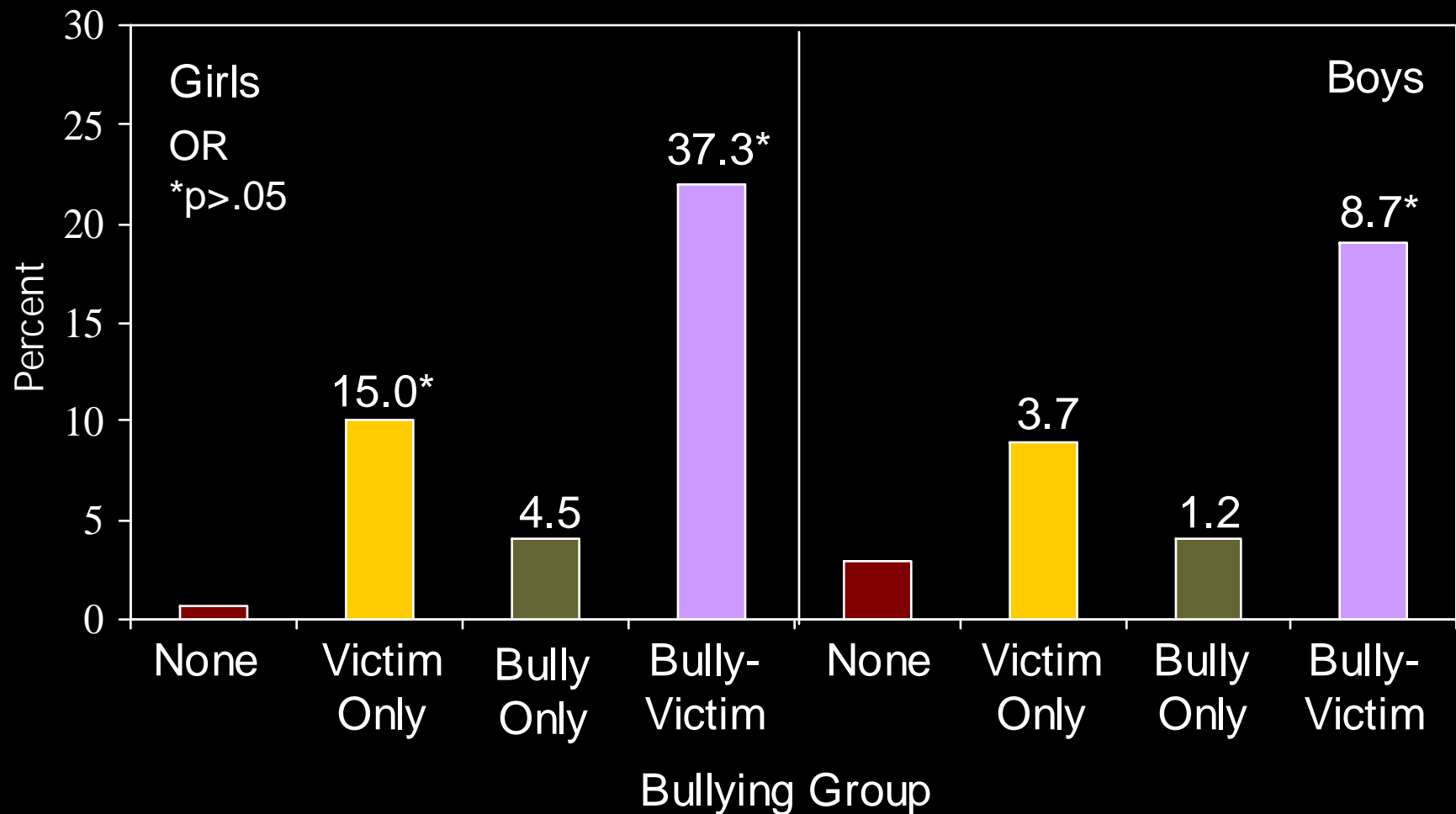
Marijuana Use by Bullying Group



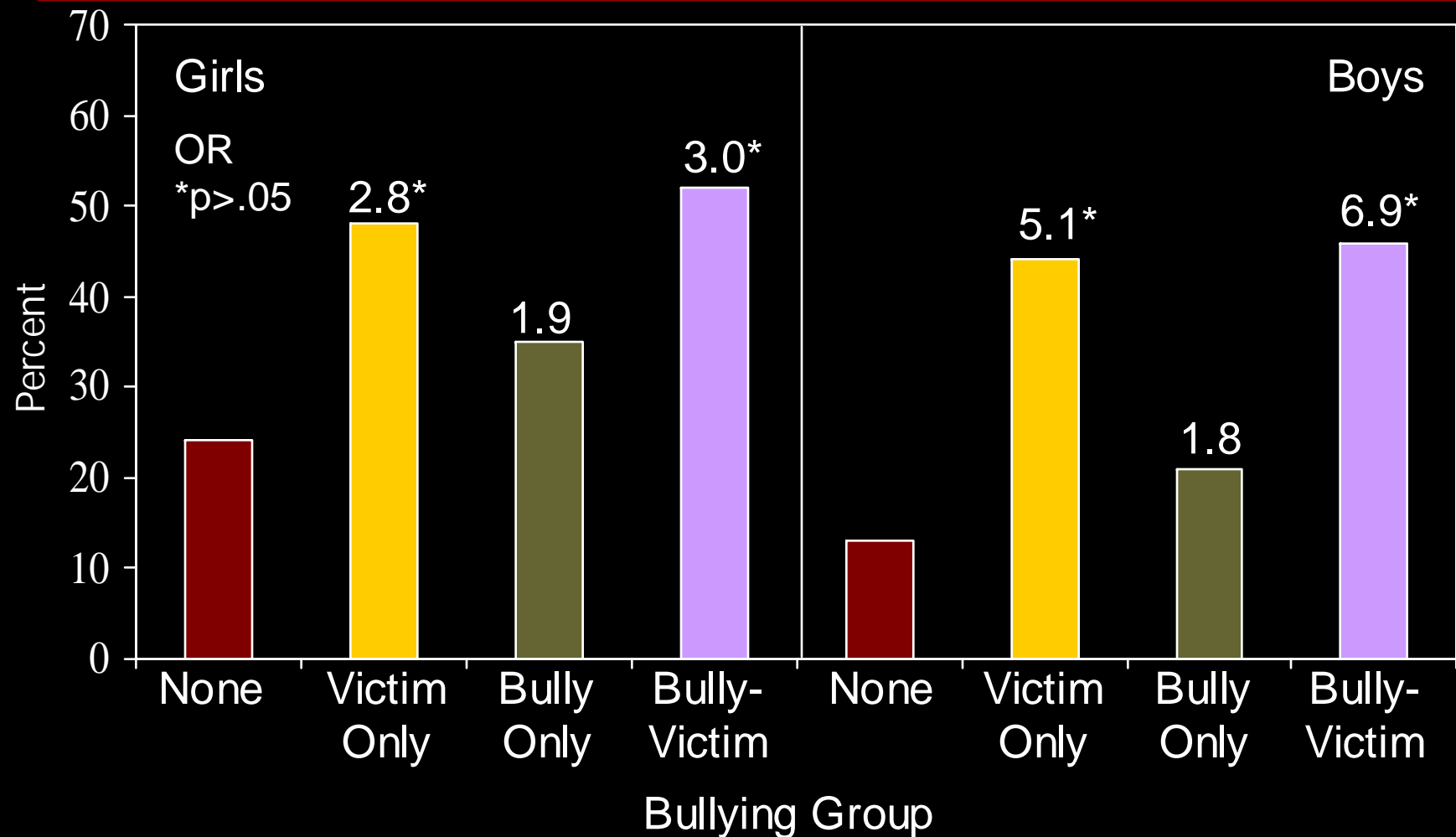
Weapon Carrying in School by Bullying Group



Skipped School because Felt Unsafe by Bullying Group



Depression by Bullying Group



Summary of Findings

- Nearly half of participants were involved in bullying
- Involvement in bullying in any role is indicative of higher health risk
- Bully-victims are a distinct subgroup of youth involved in bullying with a particularly poor health risk profile

Limitations

- Self report questionnaire
- Limited generalizability
- Cross-sectional data

Implications

- Need to identify mechanisms linking bullying involvement and health risk
- School officials need to consider particular vulnerabilities of bully-victims when developing school-based interventions
- Clinicians should be aware that bullying involvement may be indicator of increased risk