

# Gender and Race Differences in Juvenile Mental Health Symptoms: MAYSI-2 National Norm Study

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# Research Questions

- Are there differences between gender and racial/ethnic groups in the reporting of clinically significant levels of mental health symptoms on the MAYSI-2?
- Where differences exist, were these differences consistent (homogenous) across all JJ *sites* nationwide and across demographic subgroups?

# Method

- We gathered archival MAYSI-2 records and demographic information from 283 JJ facilities located in 19 states
  - Started With 155,835 youths
  - Removed cases that were:
    - 1) duplicates,
    - 2) outside of the age range, or
    - 3) from any community or treatment facility

# The National Norm Dataset

State	%	n	State	%	n
Alaska	1.7	781	Missouri	3.6	1674
California	15.7	7293	Montana	0.6	297
Colorado	1.5	679	New Jersey	0.5	247
Georgia	11.6	5367	Ohio	6.5	3022
Iowa	1.5	687	Pennsylvania	19.6	13,718
Illinois	1	339	South Carol.	6.3	2912
Louisiana	5.4	2491	Texas	30.8	21,792
Mass	3.4	1586	Virginia	3.7	1711
Michigan	5.3	2007	Washington	6.0	2962
Minnesota	2.3	1050			

# Final Sample (N = 70,423)

- **Gender:** Boys - 78% Girls - 22%
- **Age (years):** 12-14 - 29% 15-17 - 71%
- **Ethnicity/Race:**  
Black- 33% Hispanic - 24% White - 39%  
Asian - 1% AK Native/Amer Indian - >1%
- **Legal Status:** Pre-adj - 77% Post-adj - 23%
- **Time of MAYSI-2 Administration (hrs after intake):**  
First few hours - 56% =/> 48 hrs - 12%  
Within 24 hrs - 32%

# Site-Level Variables

(% of cases)

- **Gate:** Probation - 36%      Pretrial Detention - 42%  
Corrections (post-adjudicated) - 22%
- **Density:** Urban - 78%      Rural - 22%
- **Region:** West - 17%      Midwest - 44%  
South - 17%      Northeast - 22%

## Test Administration

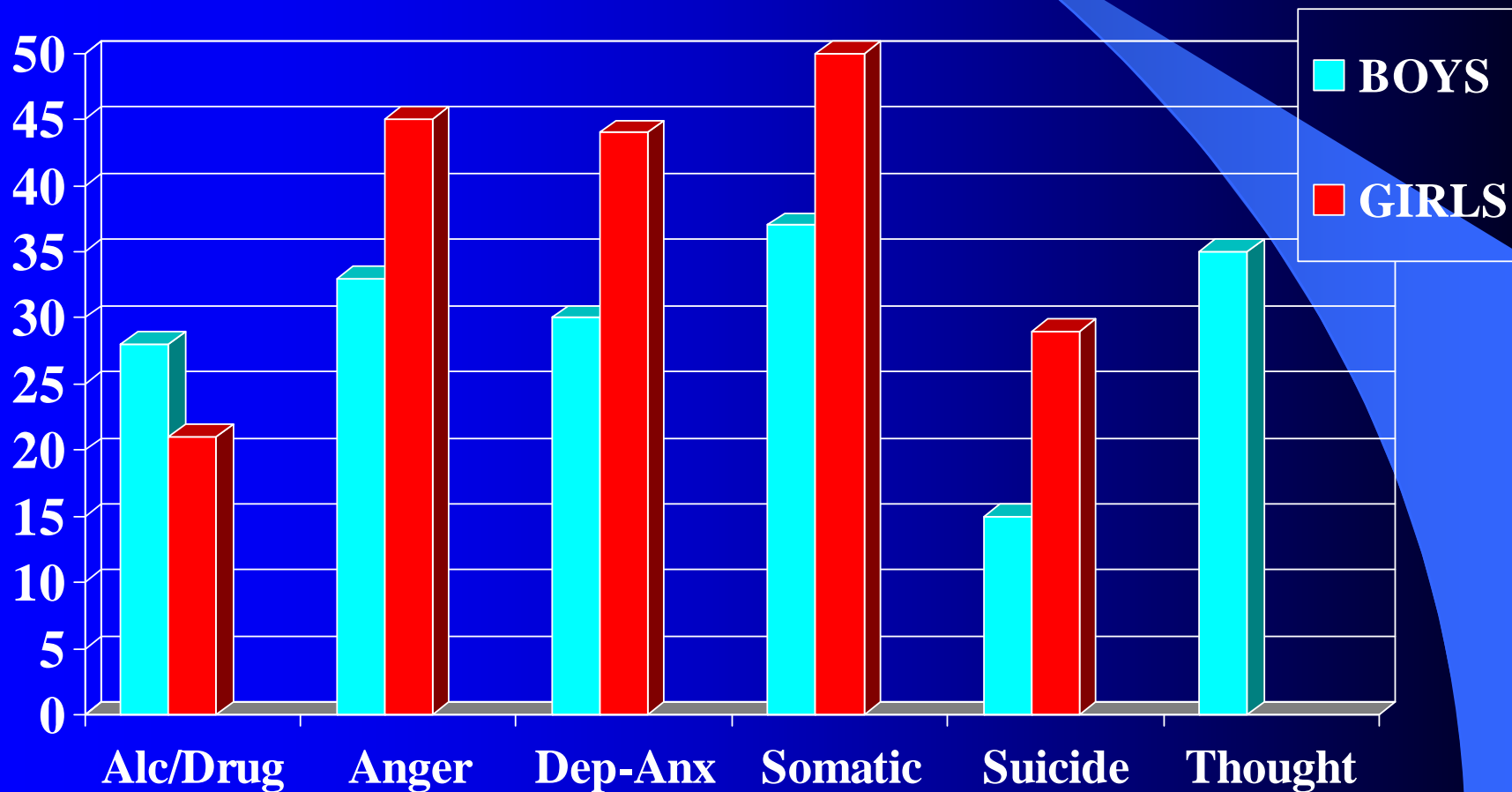
- **Staff:** Non-professional - 70%      Professional - 30%
- **Setting:** Individual - 87%      Group - 13%
- **Method:** Voice CD - 28%      Self-administer - 64%  
Staff Administer - 8%

# Meta-analytic Procedures

- Unit of Analysis – Site (JJ Facility)
- Separate Analyses for Each MAYSI-2 Clinical Scale - **TRAUMATIC EXPERIENCES not included**
- Examined Odds of Scoring > Caution Cut-offs
  - Past research was done to determine clinically significant levels of disturbance.
- Variables for Testing Interactions/Controls
  - Gender
  - Age Group (12-14, 15-17)
  - Race (White, Black, Hispanic)
  - Legal Status (pre vs. post-adjudication)
  - Time of MAYSI-2 Administration

# Overall Gender Differences (Main Effects)

## % Above "Clinical" Cut Off



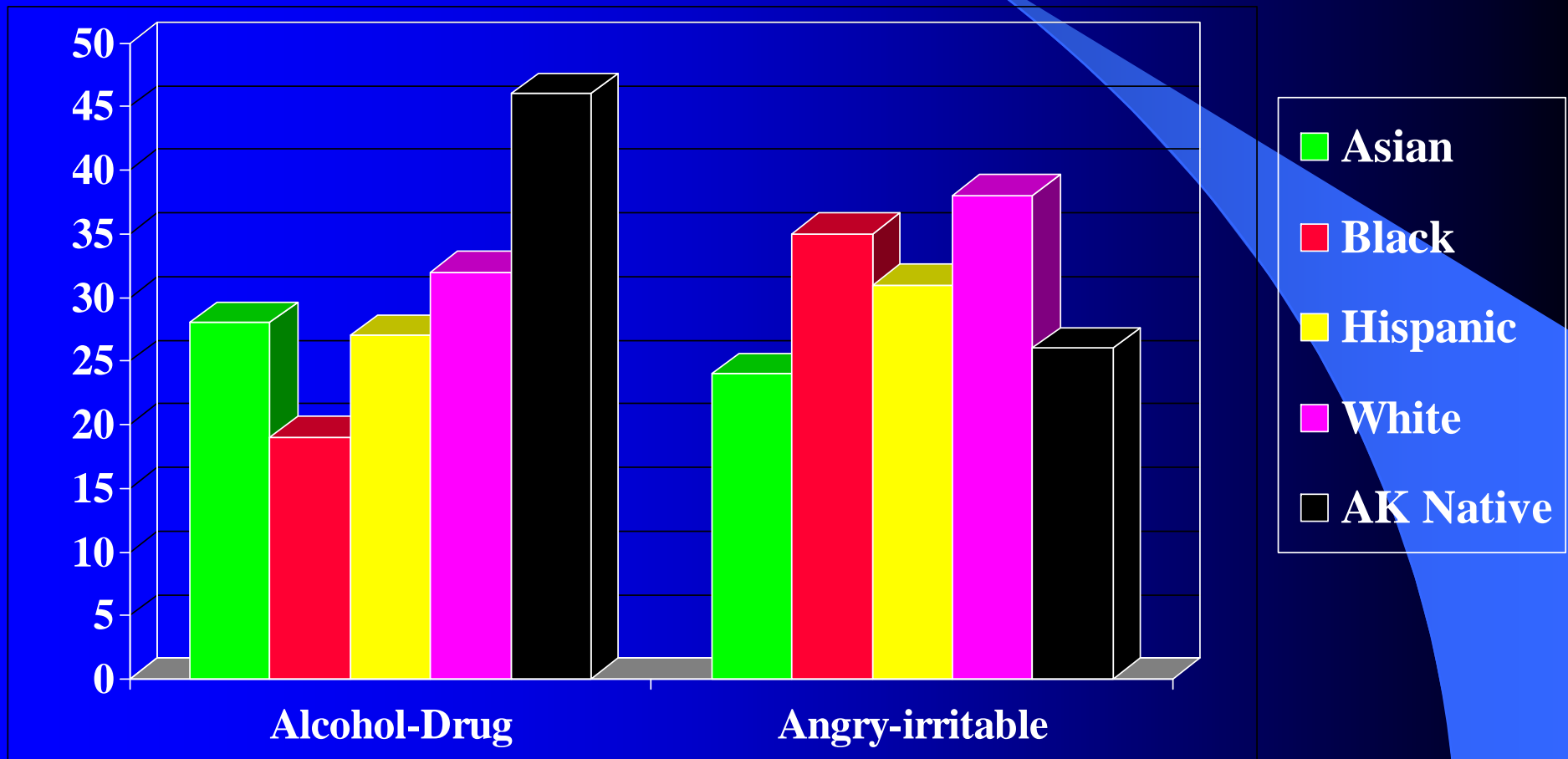
# Are Gender Differences Consistent Across Sites & Demographics?

- **Mostly** – girls at most all sites, on average, are more likely than boys to report clinically significant levels of symptoms on most MAYSI-2 scales
- **Large Effects:**
  - *Suicide Ideation* OR = 2.4
- **Medium Effects:**
  - *Angry-Irritable* OR = 1.8
  - *Depressed-Anxious* OR = 1.95 – 2.14
  - *Somatic Complaints* OR = 1.8

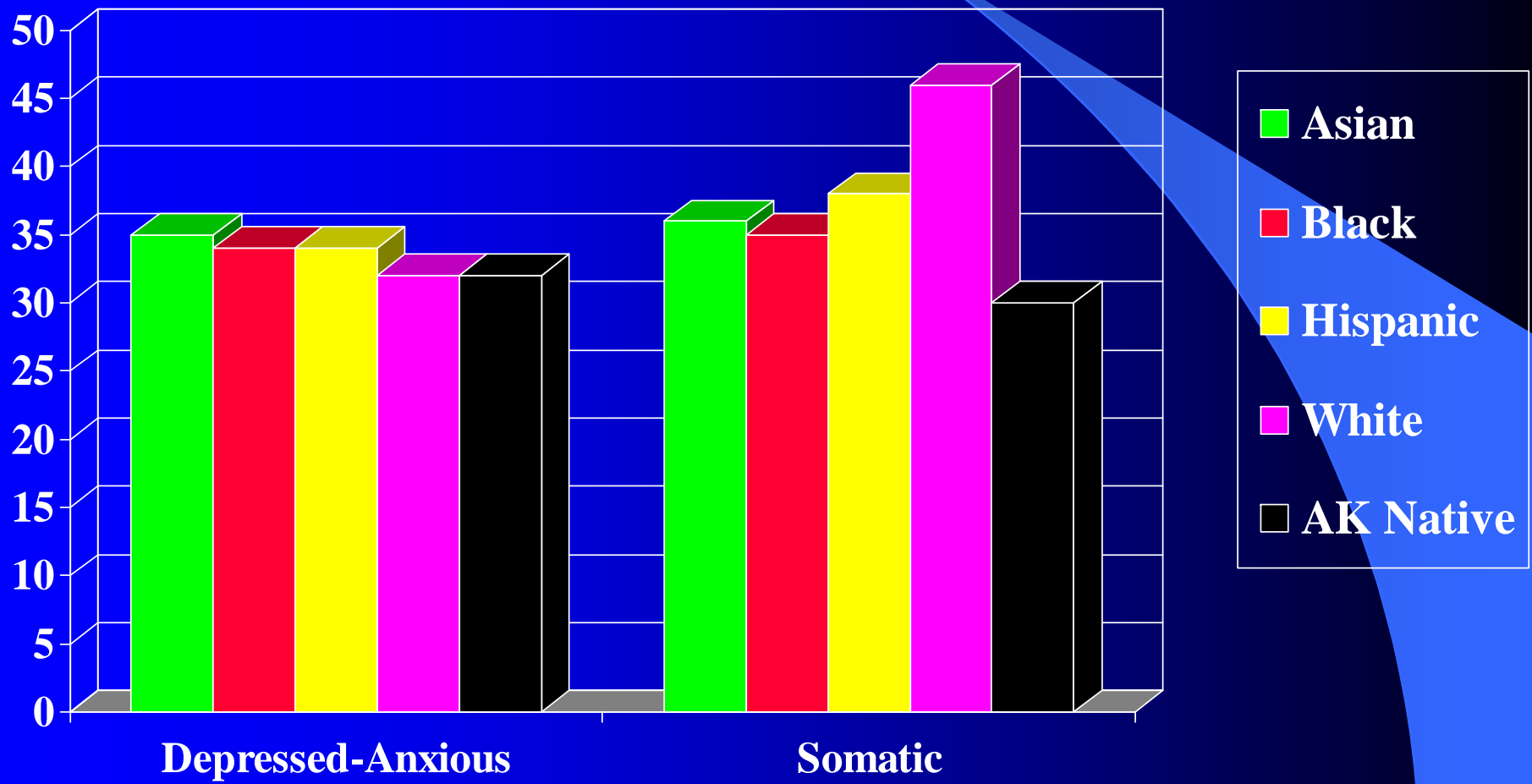
# When do Gender Differences Vary Across Youths?

- *Alcohol-Drug Scale* – gender interacts w/age consistently across sites
  - 12-14 year olds – girls > boys (OR=1.6)
  - 15-17 year olds – no gender difference

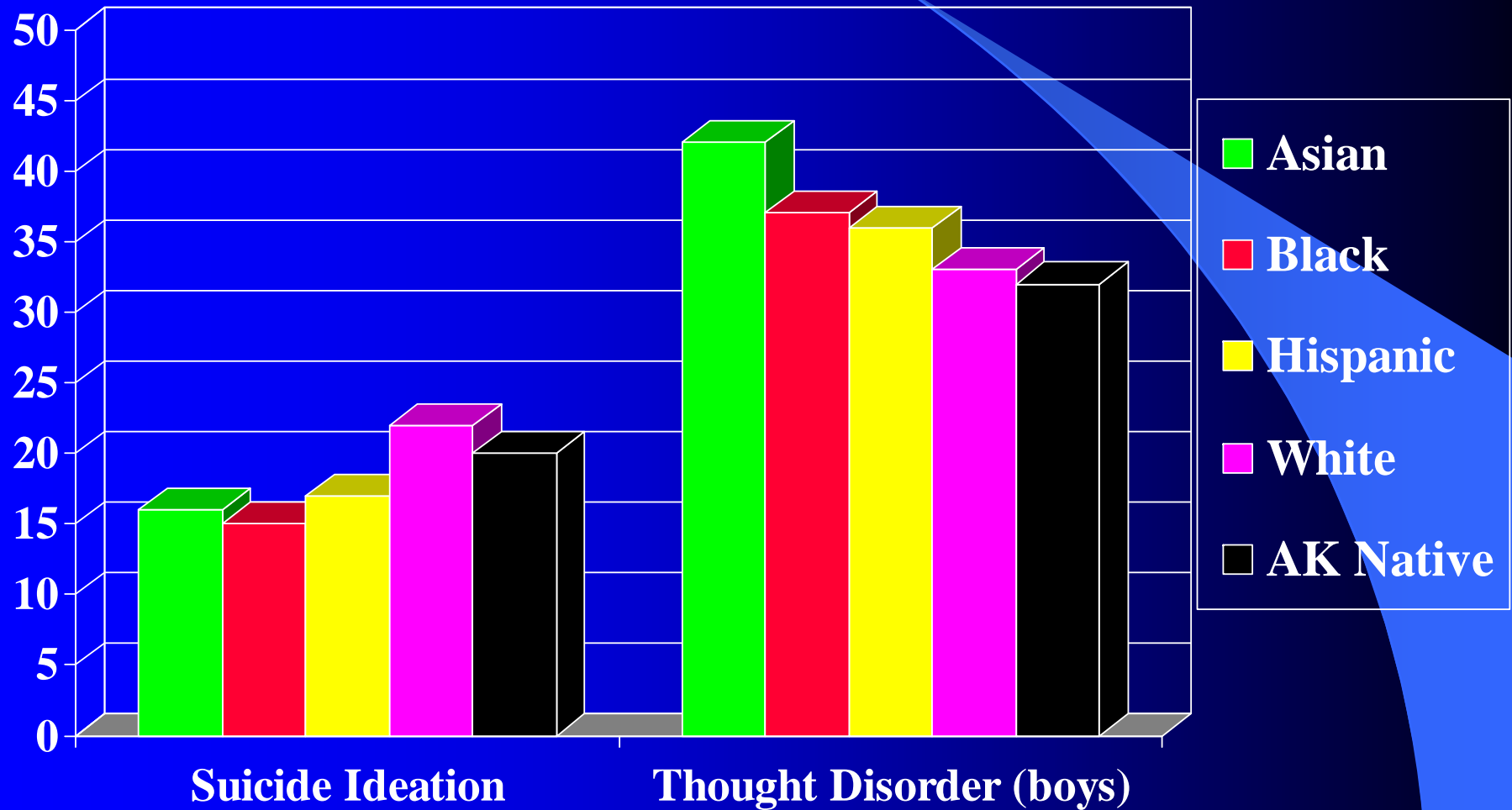
# Overall Race Differences (Main Effects) % Above "Clinical" Cut-Off



# Overall Race Differences (Main Effects) % Above "Clinical" Cut-Off



# Overall Race Differences (Main Effects) % Above "Clinical" Cut-Off



# Are Racial Differences Consistent Across Sites & Demographics?

- Some are and Some are Not. Whites, on average, were more likely to report clinically significant levels of symptoms than Blacks or Hispanics, but
- Medium to Large Effects
  - *Alcohol Drug Scale*
    - Whites > Blacks OR = 2.3 Large ES
    - Hispanics > Blacks OR = 1.7 Medium ES
- Small Effects
  - *Suicide Ideation* W v. B = 1.45; W v. H = 1.16
  - *Somatic Complaints* W v. B = 1.46; W v. H = 1.26

# When Do Racial Differences Vary Across Youths?

- **But** – Findings on the Alcohol-Drug scale and scales other than SI and SC were not consistent across sites
- Potential moderators in the variability in the magnitude of the odds ratios between Whites & Blacks:
  - Age (larger for older youths)
  - Gate (larger for pre-adjudicated youths)
  - State

# Gender Conclusions

- Girls in JJ much more likely than boys to report clinically significant symptoms
  - Generalizes across JJ sites
  - Even for alcohol-drug use, at least for younger youths

## Implication:

Higher rates of symptoms in girls than boys in JJ are not site specific findings – generalizes across the U.S.

# Race/Ethnicity Conclusions

Wide variability in racial differences:

- White youths most likely to report problem levels of *alcohol or drug use*, but the disparity varies across the US
- White youths, on average, are consistently more likely than black youths to report *suicide ideation*
- White youths, on average, are consistently more likely than Black and Hispanic youths to report *somatic complaints*

# Implications

- Many ethnic/racial differences are small or non-existent and do NOT generalize across the U.S.
- Where Whites are most likely to have symptoms (*Alcohol-Drug Use*) the magnitude varies across jurisdictions
  - Differences in Arrest Patterns in ways that interact with race?