## Sports Participation \& Alcohol-Related Behaviors Among Adolescents in Southwest Georgia

Darren Mays, M.P.H., Ph.D. , Nancy Thompson, M.P.H., Ph.D., Howard Kushner, Ph.D., David Mays, M.D., Derrick Farmer, B.A., Michael Windle, Ph.D.

## Author Disclosures

- The following personal financial relationships with commercial interests relevant to this presentation existed within the past 12 months:
- No relationships to disclose


## Adolescent Alcohol Use

- Adolescent alcohol use is a major public health problem
- Alcohol use is associated with the leading causes of injury and death among adolescents
- Early drinking increases the risk for alcohol-related problems
- Heavy or "binge" drinking is also associated with many other health risk behaviors and alcohol-related problems


## Alcohol \& Sports

- Sports represent important contexts of development
- Research suggests that sports participation is associated with adolescent alcohol use
- Many factors may influence this relationship:
- Sports-specific factors
- Differences between males \& females
- Research on sports participation and alcohol use is hindered by several limitations


## Objectives

- Examine the associations between sports-specific factors and alcohol-related behaviors among adolescents who participate in school-based sports
- Assess whether these relationships differ between male and female sports participants


## Methods

- Conducted with the Institute of Athletic Health Care and Research, Inc., Hughston Orthopedic Hospital
- Administered an anonymous, cross-sectional survey to a convenience sample of adolescents
- Setting required very brief measures (5-10 min)
- Measures included items assessing:
- Sports participation (Add Health index, original item)
- Alcohol-related behaviors (YRBS)
- Perceived peer drinking (MTF)
- Demographics (YRBS)


## Variables

- Alcohol-related behaviors (6 items):
- Treated as dichotomous variables
- Summed as a continuous variable, range 0-6 (KR-20 $=0.72$ )
- Sports-specific factors:
- Different sports (e.g., basketball, football, cheerleading)
- Level of participation (varsity, JV, freshman/other)*
- Team only, individual only, both team and individual
- "Collision" sports
- Fall sports


## Sample

| Characteristic ( $\mathbf{n}=\mathbf{3 7 8}$ ) | Mean (SD)/Percent |
| :--- | :--- |
| Male | $76.3 \%$ |
| Non-Hispanic Black | $70.0 \%$ |
| Alcohol-Related Behaviors | $0.82(1.22)$ |
| Perceived peer drinking | $1.85(1.92)$ |
| Sports reported | $2.53(1.28)$ |
| Varsity sports | $65.4 \%$ |
| Most frequent sports | Football (63\%), track \& field (35\%), |
|  | basketball (23\%), and soccer (17\%) |
| Collision sports | $79.5 \%$ |
| Both team \& individual sports | $48.9 \%$ |

## Analyses

- Bivariate tests (t-tests, $X^{2}$, etc.)
- Regression models examining:
- Relationships between sports-specific factors and alcoholrelated behaviors (5 logistic, 3 linear)
- Associations between participation in different sports and alcohol-related behaviors (10 logistic \& 2 linear)
- Stratified some models by sex to examine differences between males and females


## Bivariate Results

- Males and females differed significantly based on:
- Different sports (soccer, tennis, other sports)
- Participation in both team and individual sports
- Varsity sports
- Among males, varsity sports participation associated with:
- More alcohol-related behaviors
- Greater perceived peer drinking
- Among females, softball participation was associated with early drinking, driving after drinking, and riding with a driver who had been drinking ( $p \leq 0.10$ )


## Regression Results

- Varsity sports participants were more likely to report:
- Ever drinking (OR 1.9, CI 1.1-3.2)
- Drinking in the past month (OR 3.5, CI 1.4-8.5)
- Among females:
- Softball participants more likely to report ever drinking, early drinking, drinking in the past month, and more total alcohol-related behaviors
- Volleyball participants more likely to report ever drinking
- The regression models were not significant overall


## Discussion

- The prevalence of alcohol-related behaviors was strikingly low
- Differences in sports participation between males and females
- Relationships between varsity sports and alcoholrelated behaviors may be due to sports-specific motives, social contexts of varsity sports
- Perceptions of female sports participants may explain the relationships between specific sports and alcohol-related behaviors among females


## Limitations

- Convenience sample of adolescents
- Small sample size, particularly females
- Cross-sectional study design
- Self-reported assessments of sports participation and alcohol-related behaviors


## Conclusions

- Sports-specific factors may be associated with alcohol-related behaviors
- Future research is needed to explore the factors underlying these relationships, in particular to inform intervention efforts

