Sports Participation and Alcohol Use among Adolescents: The Impact of Measurement and Other Research Design Elements

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Author Disclosures

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  – No relationships to disclose
Background

• Sports participation among adolescents is associated with alcohol use
• There remains considerable debate surrounding this association
• Strengthening the evidence-base in this area is important to improve our knowledge
Objectives

• Examine the scientific evidence surrounding sports & alcohol use among adolescents
• Focus on the impact of research design elements, such as methodology, sampling, and measures
Search Strategy

• Literature review, conducted 2008-2009
• Searched Google Scholar, PubMed, OVID Medline, and OVID PsychInfo
• Search term combinations were used to exhaust databases
• Review included studies published up to May 2009
Inclusion Criteria

• Published in peer-reviewed literature
• Sample comprised of U.S. adolescents, age 12-18 years
• Measure of sports participation
• Measure of alcohol use/alcohol-related behaviors
• Multiple papers from single study were excluded
# Coding

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure of sports participation</td>
<td>1. Categorical</td>
</tr>
<tr>
<td></td>
<td>2. Index</td>
</tr>
<tr>
<td></td>
<td>3. Other</td>
</tr>
<tr>
<td>Study design</td>
<td>1. Cross-sectional</td>
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<td></td>
<td>2. Longitudinal</td>
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<td></td>
<td>3. Other</td>
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<tr>
<td>Sampling method</td>
<td>1. Convenience</td>
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<tr>
<td></td>
<td>2. Purposive</td>
</tr>
<tr>
<td></td>
<td>3. Random</td>
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<td></td>
<td>4. Other</td>
</tr>
<tr>
<td>Sample Size</td>
<td>1. Number of participants</td>
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</tbody>
</table>
Supplementary Data

• Comparison of data collected among sports participants in GA to YRBS data
• Subsamples in the YRBS of sports participants and non-Hispanic black sports participants
• Six alcohol-related behaviors
55 Published Studies

- 8 Non-U.S.
- 8 College Students
- 7 Multiple papers from one study
- 2 Other Reasons

30 Studies Included in Review

Exclusions
Results

Sports Participation

- Categorical: 53.0%
- Index: 23.3%
- Other: 23.3%

Alcohol-Related Behaviors

- Categorical: 60.0%
- Frequency: 20.0%
- Quantity: 3.0%
- Multiple: 10.0%
- Other: 7.0%
Results

Research Design

• 63.3% used a cross-sectional study design
• 33.3% used a longitudinal design
• One study (3.3%) was an intervention
Supplementary Data

- Ever: Hughston 36.6, GA 73.8, National 73.4
- Early: Hughston 10.1, GA 24.7, National 24.5
- Past Mo.: Hughston 14.3, GA 40.9, National 42.7
- Binge Drink: Hughston 6.2, GA 21, National 26.3

Mo.: Month, Binge Drink: Binge Drinking
Discussion

• Predominantly cross-sectional studies
• Most used YRBS data
  – Influenced measures, sampling method
• YRBS sports measure lacks specificity
• Few longitudinal studies
• Strong measures of alcohol-related behaviors are lacking
Conclusions

• Evidence of the relationship between sports and alcohol use among adolescents may be influenced by predominant research methods.

• Measures of sports in particular need to be clarified.

• Stronger measures of alcohol use and longitudinal studies are needed.

• Adequate methodological details should be published.