



THE COST OF UNDERAGE DRINKING IN GEORGIA

A REVIEW OF RESEARCH BRIEFING

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Overview

This literature review explores the negative consequences (i.e., economic costs) of underage drinking for small towns and communities in Georgia. In general, a literature review is a report on the “state of the field” that goes beyond mere information-gathering to analyze relevant research, introduce contemporary findings, synthesize themes, point out gaps in research, and issue recommendations for practice and future research. From this perspective, a literature review on the costs of underage drinking in small towns and cities will review research on the costs of underage drinking in contexts comparable to Georgia (i.e., appropriate for Georgia substance abuse prevention providers). This literature review will offer tools for providers to become knowledgeable in foundational, as well as current, research on the costs of underage drinking in Georgia, with the purpose that they will use this knowledge to support the public health goals of Georgia communities.

Author Information

Benjamin Gleason is the Director of Applied Research for the Prospectus Group. He is a PhD candidate in Educational Psychology & Educational Technology at Michigan State University, researching how to best support communities of learners through educational technology. Before academia, Benjamin has worked in youth-serving learning spaces for almost fifteen years, from youth development and teaching high school in Richmond, California, to working as a university instructor in Guatemala. Benjamin is also a founder of the Prospectus Group.

An Introduction to Underage Drinking

Underage drinking is a widespread problem in the United States, with underage drinkers consuming around 20 percent of all alcoholic beverages, and spending roughly \$23 billion out of \$116 billion that Americans spend on alcohol (Foster et al, 2003). In addition, underage drinkers routinely

engage in “binge drinking,” drinking an average of five drinks six days out of every month. In the state of Georgia, 74 percent of high school students have reported drinking alcohol at least once in their life, while almost 40 percent noted that they currently drink alcohol. Of course, there are many consequences to underage drinking, including increased likelihood of unintentional injury, being a victim of homicide or suicide, having high-risk sexual activity, engaging in violence, and possible injury to the still-developing adolescent brain (Powell, 2009). While consequences that individuals face are serious, this literature review focuses on the *societal costs of underage drinking in Georgia*. That is, this review attempts to provide information about how harmful and costly underage drinking is for towns and communities in Georgia.

Organization of this Literature Review

This review will first present a table that displays all the articles found in this review at a glance. All relevant data is included in this table, including bibliographic information, the major findings, and pertinent methodological information. Following the table will be the review itself, which presents fuller descriptions of the articles reviewed in the table. Finally, there is a section titled *Information for Key Stakeholders* that provides “bite-sized” information that is accessible and engaging for key stakeholders who may prefer information in a most compact form. Finally, references are listed for those who wish to consult the original sources for additional information.

Method

A review of articles in the top public health journals in the United States revealed that while there is much research on the effects of alcohol, including the economic costs to the nation, there is far less research on the *societal costs of underage drinking in the state of Georgia*. Therefore, relevant literature from two main concentrations was included: research on the costs of underage drinking, and research on underage drinking in Georgia more generally. Research from top, peer-reviewed public health journals (American Journal of Public Health; American Journal of Preventative Medicine; Health Affairs) was included in this review, provided it had been published in the last fifteen years (from 2000-2015). In addition to these selected journals, the “snowball method” was used to gather relevant research from similar journals, databases, or sources. Search terms were limited to “alcohol” and “cost,” and a total of sixty-seven articles were found. The most relevant articles are listed below.

Table 1 Relevant Research Articles

Bibliographic Information	Purpose of Article	Key Finding	Take-Away for Providers
<p>Bouchery, E. E. (2011). Economic Costs of Excessive Alcohol Consumption in the US, 2006. <i>American Journal of Preventative Medicine</i> , 516-524.</p>	<p>Excessive alcohol consumption is costly, but has not been measured since 1998. This article presents current economic consequences (e.g., costs) of underage alcohol use.</p>	<p>The estimated cost of excessive drinking was \$224 billion in 2006; of that, underage drinking cost \$27 billion. On a per capita basis, this amounts to \$750 per person.</p>	<p>Majority of cost comes from binge drinking activities. Evidence-based strategies (including environmental strategies) will reduce excessive drinking.</p>
<p>Nelson, T. F. (2013). Efficacy and the Strength of Evidence of US Alcohol Control Policies. <i>American Journal of Preventative Medicine</i> , 19-28.</p>	<p>To evaluate the effectiveness of 47 different alcohol-control policies & provide ratings of their efficacy.</p>	<p>Most effective policies included alcohol taxes, compliance checks, sobriety checkpoints, bans (or restrictions) on alcohol sales, and restricting administrative licenses (e.g., driver's license).</p>	<p>Providers can select from a wide variety of effective policies, based on knowledge of local problem, understanding key stakeholders, and the efficacy of alcohol control measures.</p>
<p>Powell, J. A. (2009). Factors Associated with the Illegal Sales of Alcohol to Underage Persons in Georgia.</p>	<p>To evaluate the characteristics associated with illegal sales of alcohol to underage people in Georgia.</p>	<p>Counties with a high concentration of alcohol outlets are much more likely to sell alcohol to underage customers.</p>	<p>Law enforcement should increase monitoring of areas with high density of alcohol outlets & environmental strategies like RBS may be implemented.</p>
<p>Sacks, J. J. (2006). State Costs of Excessive Alcohol Consumption. <i>American Journal of Preventative Medicine</i> , 474-485.</p>	<p>Excessive alcohol consumption is responsible for over 80,000 deaths in the US each year, yet few national surveys have provided state-by-state estimates of total costs of alcohol use.</p>	<p>In Georgia, the total cost to society of alcohol consumption was \$6.34 Billion, with a per capita cost of around \$700, and a cost to state government of \$2.65 billion.</p>	<p>More than 70 percent of the total costs are caused by binge drinking, and about \$2 of every \$5 is paid for by the government (i.e., for treatment costs).</p>

Summaries of Significant Articles

BOUCHERY ET AL (2011)

This article presents a quantitative account of how much excessive alcohol consumption costs U.S. society, though it only focuses on direct costs (e.g., healthcare costs, lost productivity) and not indirect costs (i.e., pain and suffering). Total cost to the US was \$224 billion, costing each person \$746. Overall, 76 percent of the costs were associated with binge drinking and 12 percent from underage drinking. However, this report acknowledges that the economic models used to account for the costs *underreport* the total costs associated with alcohol consumption and that the societal costs drastically outweigh the revenue and taxes collected on alcohol.

NELSON ET AL (2013)

Though alcohol is responsible for causing many health and societal problems in the US and around the world, few studies have examined which policies are effective in curbing its use. A panel of ten experts found that the most effective policies for curbing underage alcohol use included price controls (e.g., state excise taxes on alcohol, retail price restrictions, bans on alcohol sales); compliance checks by law enforcement; loss of driver's license; and minimum drinking age.

POWELL (2009)

This manuscript evaluated the economic costs of underage drinking in Georgia, finding that negative consequences (including alcohol-related traffic crashes, violence, injuries, and pain and suffering) cost Georgia over \$1.2 billion per year. For each drink consumed by someone underage, the cost to Georgia is \$3.35. In addition, the study found that underage drinkers could buy alcohol in 25 percent of alcohol outlets, and that these purchases happened in areas with a high density of alcohol outlets.

SACKS (2006)

While excessive drinking is very costly to the U.S., federal, state, and local governments bear the brunt of the costs. For Georgia, the total cost was estimated to be \$6.3 billion, while the cost to the government was \$2.6 billion. Of that amount, around \$4.5 billion was due to a loss in productivity, nearly \$600 million from associated healthcare costs, and \$1.2 billion from other costs (e.g., criminal justice system costs, car crashes, property damage). Underage drinking costs the state roughly \$650 million. Finally, the authors recognize the likelihood that these figures *underreport* the total costs of underage drinking.

Information for Key Stakeholders

<p>17.5% of young people in Georgia have reported binge drinking in the previous year, which is lower than the US average. In addition, the CDC recommended that increasing commercial liability for “dram shops” would likely lead to fewer car crashes and injuries.</p> <p>Source: (Centers for Disease Control and Prevention, 2014)</p>	<p>Underage drinking costs Georgia residents \$1,450 per youth per year, or over \$1.4 billion every year. Of that amount, youth violence costs the state over \$700 million per year, while youth traffic crashes amount to over \$180 million per year. In 2009, underage customers accounted for over 13 percent of all sales in Georgia (\$548 million in sales).</p> <p>Source: (Pacific Institute for Research and Evaluation, 2015)</p>
<p>Enforcing the minimum drinking age of 21 is a highly effective way to prevent and reduce underage drinking. To that end, Powell recommended that compliance checks be ongoing, as effectiveness diminishes within two weeks. One of the benefits of compliance checks is that even the mere threat of the checks decreased the likelihood of alcohol sales.</p> <p>Source: (Powell, 2009)</p>	<p>Many of the costs associated with underage drinking in Georgia are intangible, and come from lost productivity and pain and suffering. For example, since each drink consumed by someone underage costs around \$3.35, over \$1 is spent on healthcare costs, property damage, and other costs. In addition, the true cost to the state may be as much as <i>twice as high as estimated</i>, which for Georgia may reach as high as \$12 billion.</p> <p>Source: (Sacks, 2006)</p>

BIBLIOGRAPHY

Bouchery, E. E. (2011). Economic Costs of Excessive Alcohol Consumption in the US, 2006. *American Journal of Preventative Medicine* , 516-524.

Centers for Disease Control and Prevention. (2014). *Excessive Alcohol Use - Georgia*. Atlanta: US Department of Health and Human Services.

Cook, P. J. (2002). The Economics of Alcohol Abuse and Alcohol-Control Policies. *Health Affairs* , 120-133.

Nelson, T. F. (2013). Efficacy and the Strength of Evidence of US Alcohol Control Policies. *American Journal of Preventative Medicine* , 19-28.

Pacific Institute for Research and Evaluation. (2015, March 1). *Underage Drinking in Georgia: The Facts*. Retrieved April 1, 2015, from Underage Drinking Enforcement Training Center: <http://www.udetc.org/UnderageDrinkingCosts.asp>

Powell, J. A. (2009, April 27). *Public Health Theses*. Retrieved March 31, 2015, from ScholarWorks @ Georgia State University: http://scholarworks.gsu.edu/iph_theses/67/

Sacks, J. J. (2006). State Costs of Excessive Alcohol Consumption. *American Journal of Preventative Medicine* , 474-485.