Underage Binge Drinking & Mental Health-Related Consequences

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Abstract
The purpose of this study is to describe the correlation between underage binge drinking and mental health-related consequences. I wondered how the age at which adolescents begin to drink, peer influences, and parental supervision affect their level of mental health issues.

I created a survey composed of quantitative and qualitative questions, and questions from three screening questionnaires for anxiety, depression, and suicide sensitivity. I surveyed 40 students at the University of Hawai'i at West Oahu (UHWO) by conducting three in class data collections and several in person collections.

Introduction & Research Question

Introduction
On my home island, the island of Kauai, underage drinking is an epidemic. Underage drinking has become a social norm. You will see adolescents drinking at the beach, parking lots, and family gatherings. Police officers tend to turn a blind eye, and parents often encourage their children to drink. In fact, some parents offer their children alcoholic beverages despite being underage. Since adolescents are not punished for drinking under the age limit of 21 years, they continue to drink and at higher quantities. Binge drinking can have consequences, such as traffic fatalities and poor school performance. Other consequences include mental health-related issues.

Research Question
How does the age at which adolescents begin to binge drink, peer influences, and parental supervision affect their level of mental health issues?

Hypothesis
If adolescents binge drink at earlier ages, they are easily influenced by peers, and lack parental supervision, then they will have higher levels of mental health issues.

Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Age of First Alcoholic Drink</th>
<th>Mental Health</th>
<th>Peer Influences</th>
<th>Parental Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child (3 to 11 years)</td>
<td>Anxiety</td>
<td>Peer Pressure</td>
<td>Protection</td>
</tr>
<tr>
<td>Teenager (12 to 17 years)</td>
<td>Depression</td>
<td>Confinement</td>
<td>Guidance</td>
</tr>
<tr>
<td>Legal Adult (18 years &amp; up)</td>
<td>Suicide Sensitivity</td>
<td>Confinement</td>
<td>Provisioning</td>
</tr>
</tbody>
</table>

Research & Design Data Collection
I created a survey on google forms, which included a screenshot of my consent form and 33 questions. My survey had quantitative and qualitative questions, and questions from three screening questionnaires for anxiety, depression, and suicide sensitivity. I surveyed 40 students at the University of Hawai'i at West Oahu (UHWO) by conducting three in class data collections and several in person collections.

Analysis
Demographics
I divided the 40 respondents into three cohorts: adolescents (18 to 20 years old), young adults (21 to 35 years old), and middle-aged adults (36 to 65 years old). There are 12 adolescents, 19 young adults, and nine middle-aged adults. 22 respondents are males, 17 respondents are females, and one respondent did not specify his or her gender. Most of the respondents are Asian, Caucasian, European, and Hawaiian/Pacific Islander.

Independent Variables
The respondents had their first alcoholic beverage between the ages of 4 to 21 years. The average age is 15.18 years. 32 respondents have binge drank (consumed five or more drinks on one occasion). A majority of respondents did not feel pressured by their peers to drink alcohol, did not drink alcohol in order to fit in with their peers, were monitored by their parents, was offered guidance about alcohol consumption by their parents, and was not protected from drinking alcohol before reaching the legal age of 21.

Dependent Variable
A majority of respondents did not have anxiety, had minimal depression, and did not have the desire to end their life.

Table 1: Age of First Alcohol Consumption

<table>
<thead>
<tr>
<th>Age Cohort</th>
<th>Range (years)</th>
<th>Average (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents</td>
<td>12 to 20</td>
<td>16.6</td>
</tr>
<tr>
<td>Young Adults</td>
<td>4 to 21</td>
<td>12.4</td>
</tr>
<tr>
<td>Middle-Aged Adults</td>
<td>7 to 19</td>
<td>15.8</td>
</tr>
<tr>
<td>Total</td>
<td>4 to 21</td>
<td>15.18</td>
</tr>
</tbody>
</table>

Table 2: Binge Drinking

<table>
<thead>
<tr>
<th>Age Cohort</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Young Adults</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Middle-Aged Adults</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>8</td>
</tr>
</tbody>
</table>

Results

Adolescents
Adolescents that first binge drank when they were teenagers (12 to 17 years old), were not influenced by their peers, and were supervised by their parents have higher levels of anxiety, depression, and suicide.

Young Adults
Young adults that first binge drank when they were teenagers (12 to 17 years old), were not influenced by their peers, and were supervised by their parents have higher levels of anxiety. Young adults that first binge drank when they were legal adults (18 years & up), were influenced by their peers, and were supervised by their parents had higher levels of depression and suicide sensitivity.

Middle-Aged Adults
Middle-aged adults that first binge drank when they were legal adults (18 years & up), were influenced by their peers, and were supervised by their parents had the highest levels of anxiety and depression. Middle-aged adults did not have the desire to end their life.

Conclusions
My hypothesis is disproven. Adolescents that first binge drink when they are 12 to 17 years old, are not influenced by their peers, and are supervised by their parents have higher levels of anxiety, depression, and suicide sensitivity. Among the three age cohorts, young adults had the highest levels of anxiety, depression, and suicide sensitivity. As adolescents become young adults, their mental health worsens. As young adults become middle-aged adults, their mental health improves. Their levels of anxiety and depression return to their levels during adolescence, and they do not have the desire to end their life.

References