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Fan Perceptions of Selling Alcoholic Beverages at a College Football Stadium

BY

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Recreation and Sport Management

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Introduction

Starting over 35 years ago, Colorado State University was the first school to start selling alcoholic beverages at their football stadium (Muret, 2011). Being in the middle of the Rocky Mountains and only an hour away from the Coors Light headquarters made the stadium an ideal location for alcohol sales. Over the past five years, more colleges have been introducing the idea of selling alcohol to spectators at their sporting events, namely football. As of the 2014 season, 21 colleges sold alcohol at their on-campus football stadiums, and an additional 11 colleges sold alcohol at their off-campus football venues (Olson, 2014). The stadiums that have implemented alcoholic beverage sale policies have found the alcohol sales to be beneficial to the revenue of the stadium, but have seen mixed results with the safety of those attending the events.

Consuming alcohol while watching a sporting event has become a tradition within the sport community. Almost one in ten sports fans leave major league stadiums with a blood alcohol level over the legal limit, with 40% of spectators consuming alcohol during the game (Lopatto, 2011). Due to this tradition, many colleges and universities have struggled to answer the question, should alcohol be sold at our athletic events? To answer this question research has been done on many factors including binge drinking, violence and safety, alcohol control policies, tailgating and attendance.

Binge Drinking

Alcohol consumption among college students and athletic fans is a topic that has been a concern for college campuses and society as a whole. One of the main concerns of consuming alcoholic beverages is the idea of binge drinking. Binge drinking is defined by the National

Institute on Alcohol Abuse and Alcoholism (NIAAA) as a pattern of drinking that brings the blood alcohol concentration (BAC) level to 0.08 g/dL. This is usually defined as four or more drinks for women and five or more drinks for men within a two hour period. In a 2012 study conducted by the NIAAA found that 87.6% of people ages 18 years of age or older reported drinking alcohol at some point in their life, with 24.6% reporting they had engaged in binge drinking in the last month.

In the sport industry, a larger concern among athletic departments is the theory of extreme ritualistic alcohol consumption. Extreme ritualistic alcohol consumption is defined as consuming ten or more drinks for a male, and eight or more drinks for a female on game day (Glassman, Dodd, Sheu, Rienzo, & Wagenaar, 2010). One study found that at a particular Southeastern college, 16% of the student population engaged in this type of drinking behavior (Glassman et al., 2010). Game day drinking is a concern for athletic departments because it affects not only the person who is excessively drinking, but it can potentially cause an unsafe environment for other spectators.

H1: If sold, spectators will purchase at least one alcoholic beverage at Brooks Stadium.

Violence and Safety

The consumption of alcohol has been known to create unsafe health conditions among the consumer including interfering with brain communication pathways, strokes, liver complications, heart problems, cancer, and even death. In the United States, nearly 88,000 people are killed by alcohol-related incidents annually. Of these 88,000 deaths, approximately 1,800 are college students. One of the leading causes of death involving alcohol is motor vehicle

accidents. In 2012, 10,322 deaths by drinking-and-driving were accounted for which made up 31% of all vehicular accidents for that year (National Institute of Alcohol Abuse and Alcoholism [NIAAA], 2015). An international study conducted by Steptoe, Wardle, Bages, Sallis, Sanabria-Ferrand, and Sanchez (2004), found that 27% of people reported driving while under the influence of alcohol. Although people report using designated drivers in order to create a safer environment, one study suggests that 12% of designated drivers reported having five or more drinks and 25% of them being involved in a motor vehicle accident (Dejong & Winsten, 1999).

Binge drinking can also lead to what is commonly known as drug induced amnesia or commonly known as 'blacking out' which is when the alcohol consumer is capable of salient actions, but loses the ability to form new memories during this state of intoxication (White, 2004). A study published by Wechsler, Lee, Kuo, Seibring, Nelson, and Lee (2002), found that 51% of college students who reported drinking alcohol, also reported having at least one blackout in their lifetime, and 36% reported having at least one blackout in the past year.

These episodes of non-remembrance create a concern about fans' safety both inside and outside of the sports venue. A study conducted in 2006, researched the percentage of alcohol-related incidents reported to alcohol beverage control (ABC) agencies and local law enforcement of cities where major league sporting venues existed. From this study, the results found the most common complaints received were fighting and excessive intoxication, with 74-80% of agencies receiving these calls occasionally. Other common complaints included property damage and tailgating complaints with 63% and 38% of agencies receiving these calls respectively (Lenk, Toomey & Erickson, 2009).

A supporting study conducted at the University of Colorado at Boulder found that after eliminating alcohol at their football games, the number of incidents reported to police personnel on game day produced significant and dramatic decreases in all incident categories except detoxification transport rates. In the study, ejection rates and arrests decreased by half, from 121 to 61 and from 20 to 11 respectively (Bormann & Stone, 2001).

H2: Fans perceive that alcohol will create unsafe conditions following football games.

Alcohol Control Policies

To deter students from binge drinking on game days, colleges have put into effect various policies limiting students' ability to consume alcohol. A study done by USA Today's Wieberg and Hanashiro (2005) found that 96% of university athletic departments have implemented at least one type of preventative alcohol consumption policy. The study found the most common types of alcohol control policies among colleges to be designated tailgating areas (71%) and time restrictions on tailgating prior to football games. In stadiums where alcohol is being sold to spectators, alcohol control policies include underage compliance checks, a limit of two beers per sale and designated alcohol-free sections.

Tailgating

A tailgate party or tailgating is when crowds of sport enthusiasts gather to eat, drink and socialize near their cars before a sporting event at the place of where the game is being played (Drenten, Peters, Leigh & Hollenbeck, 2009; Longman, 2015). Tailgating is a common tradition among collegiate football fans. A majority of colleges have designated tailgating areas for fans to gather before the event. A study revealed 10% of college campuses nationwide do not allow

alcohol at tailgating. Colleges who allow alcohol at tailgates were found to have higher rates of binge drinking on game day. One study suggests that people who tailgate before games were significantly more likely to report binge drinking than non-tailgaters (Lawrence, Hall & Lancey, 2012). The odds of someone classified as a tailgater to binge drink is 3.07 times that of someone classified as a non-tailgater (Lawrence, Hall & Lancey, 2012). Glassman, Braun, Reindl and Whewell conducted a study in 2009 found 20% of tailgating participants had blood (breath) alcohol concentrations over the legal limit and only 10% of participants had not been drinking. A conflicting study found when a college allowed alcohol consumption for fans 21 years of age and older at their tailgating events, drinking rates and prevalence of problems were not affected (Oster-Aaland & Neighbors, 2007).

H3: Alcohol consumption throughout the day will increase as a result of selling alcohol at football games.

Attendance

In today's society, the attendance at sporting events is slowly declining mainly resulting from fans' ability to watch games on the television and stream them live on the internet. One theory college athletic departments have begun to rely on to stop the trend in declining attendance rates is that selling alcohol at sporting events will encourage more people to attend. In a study, when students at tailgating events were asked about the relationship of allowing alcohol consumption at tailgating and their attendance at the sporting event, students responded positively answering alcohol at tailgates would encourage them to go to games, in return increasing attendance. However, when this same university decided to start allowing alcohol in

designated tailgating areas, reports show there was no increase in the amount of fans who attended the games (Oster-Aaland & Neighbors, 2001).

A supporting study conducted at a minor league baseball venue in Rome, Georgia during 2005 tested the previously stated attendance theory as well. A law was passed allowing for beer sales on Sundays, enabling the venue to begin selling alcohol at games on Sundays. When this occurred, there was no significant evidence that beer availability had an effect on minor league baseball game attendance (Chupp, Stephenson, & Taylor, 2007).

H4: The selling of alcohol at Brooks Stadium will not increase attendance at football games.

The factors affecting management's decision to sell alcoholic beverages has been a topic researched by many. However, research involving consumer thoughts and opinions on alcohol sales is a topic that has been studied by very few. Universities' decisions cannot always be made based on what is best for the university and their athletic department; the opinions of the fans have to be taken into account as well to ensure they have the best possible game day experience. The purpose of this study is to determine consumer perceptions of alcohol consumption at Coastal Carolina University's on-campus football stadium.

Methods

Participants

The participants of this research consisted of 100 collegiate football game attendees at Coastal Carolina University, a school of 10,000 students located in the Southeastern region of the United States. The game took place at 2:00 PM on a Saturday during a conference game. Based

on our data, more males (57%; $n=57$) participated in the survey than females (40%; $n=40$). The average age of the participants was 53 years old. In order to understand who our demographic was, the participants chose how they classified themselves in relation to the University. When classifying themselves, research participants were allowed to choose all responses that applied to them. Seven participants were alumni, six were students, four were CCU Employee, 16 were a relative of an athlete, 62 were local fans or residents and five people selected "other".

Instrumentation

The instrument used in this research was developed based on the topics discovered in the literature review. The survey was two pages long with one section of nine items, relating to the research topic and three additional questions of importance relating to participant demographics. The survey developed was reviewed by an expert in the field of sport research for face validity. The nine questions pertaining to this research used a six-point Likert Scale rating with anchors from 1 equaling "strongly disagree" to 6 equaling "strongly agree". Of the nine items, five of the items referred to how alcohol affected the enjoyment of the game for fans. These five items were then labeled as the 'Game Enjoyment' construct. The other four items referred to the amount of alcohol consumption, fan safety, attendance, and tailgating habits. The demographic questions inquired the participants' age, gender and relationship to the University. The question asking for the relationship to the University required the participants to choose from a list of options. The additional two demographic questions were open ended.

Procedures

In gathering the data, forty university students from Recreation and Sport Management research classes were used as research assistants to hand out the survey at a home football game.

The research assistants used purposeful sampling to conduct the research. The students approached attendees individually and had the participants fill out the surveys in their presence. The surveys were passed out starting an hour before the game and lasting until the end of the first quarter. The methods of collecting data consisted of walking through the home team's section and approaching people who were seated in the student section of the stadium. The surveys were then collected by the research students after each participant had finished theirs.

Data Collection Analysis

To determine football game attendee's perception of selling alcohol in Brooks Stadium, summated averages were calculated for the nine items related directly to the research hypotheses. When using the six-point Likert scale, items with a summated average equal to or greater than three indicated a level of agreement. Contrary, items with summated averages below three indicated a level of disagreement. Along with summated averages, an analysis of variance (ANOVA) test was run to determine if gender affected participant's answers.

Results

Data on the questions related to the research topic, consumption and selling of alcohol at Brooks Stadium, are shown in Table 1. In reference to Hypothesis 1, the survey data revealed if alcohol was sold at Brooks Stadium spectators would purchase at least one beverage ($\mu=3.99$, $SD=2.093$). Additionally, participants revealed they felt a great degree of safety when attending football games at Brooks Stadium ($\mu=5.65$, $SD=0.821$). The data in reference to Hypothesis 3 showed the effects of alcohol on attendance ($\mu=2.38$, $SD=1.768$) exposed the selling of alcohol would not have an effect on the attendance at Brooks Stadium. In relation to Hypothesis 4 data showed selling alcoholic beverages would not affect fans' behavior prior to the football game ($\mu=2.91$, $SD=1.760$).

The remaining five questions were found to be related through factor analysis and thus grouped into Game Enjoyment construct. This construct provided data on spectators' feelings during the game and how the selling of alcoholic beverages would affect them. The average mean of this category was 2.50, showing disagreement to the construct. The questions within the Game Enjoyment construct were written in a negative connotation making participants' responses agree with the selling of alcoholic beverages at the stadium. When analyzing the individual questions of Game Enjoyment, data concluded attendees would not be bothered by other spectators drinking ($\mu=2.49$, $SD=1.687$), the selling of alcohol would not affect the attendance of children at the stadium ($\mu=2.38$, $SD=1.689$), and enjoyment would not be decreased if alcoholic beverages were sold ($\mu=2.23$, $SD=1.646$). Two of the questions one inside the construct address how perceptions of safety inside and outside of the stadium would change if alcohol were sold. Findings concluded spectators do not think the selling of alcohol would create an unsafe environment ($\mu=2.47$, $SD=1.514$) and unsafe actions will be created after the game ($\mu=2.92$, $SD=1.762$).

When analyzing the demographics of the research participants to find a relationship between age and/or gender and the answers selected by these groups of demographics there were not significant findings. Gender exhibited no significant relationship to the agreement or disagreement towards the selling of alcoholic beverages at the stadium.

Discussion

This research sought to explore the perceptions of fans regarding the possible selling of alcoholic beverages at a college football stadium. This study utilized a customized survey instrument in response to previous research studies in the field of college football game day drinking. Researchers administered the instrument to fans prior to the second quarter of a home

football game. Data was obtained from local residents, alumni, athlete's parents, students, and faculty and staff of the university. The results indicated a positive perception to the selling of alcoholic beverages at the stadium. The results revealed attendees would purchase at least one alcoholic beverage if the stadium offered them for sale. Data showed fans felt safe while attending the games and if alcohol was sold the safe environment would not be affected. The results also found alcohol consumption habits before the game would not change. Overall the findings revealed attendance would not be affected by alcohol sales.

The study exposed data consistent with previously stated studies in all constructs except for violence where the hypothesis was rejected. The data from all nine questions related to alcohol consumption showed possible positive outcomes for a college athletic department. The first question on the survey asked participants if they would purchase an alcoholic beverage if sold at the stadium. The participants responded positively in this manner stating they would purchase alcohol if sold at the stadium. Although participants did not strongly agree with this statement, they still showed some agreement providing the athletic department with the possibility of a new stream of revenue. A large majority of college athletic departments do not operate solely on the athletic budget, they are forced to use money from the university educational budget. For the 2008 fiscal year, only 25 of the 333 Division 1 athletic programs reported a net revenue. The other 308 athletic programs had to use money allocated to them from their institutions or state governments (Fulks, 2009) Knowing that people would buy at least one alcoholic beverage at a football game could increase the amount of revenue for the athletic department which they could utilize to pay off expenses and become closer to being self-operating.

A major problem on college campuses, especially on game days, is binge drinking; also known as extreme ritualistic alcohol consumption. Based on previous research we hypothesized that the selling of alcohol would increase alcohol consumption throughout the day. To test this hypothesis, we asked if the sale of alcohol at Brooks Stadium would affect participants before game (tailgating) habits. The responses to this question revealed participants would continue the same habits before the game. The responses to the question could become a concern to university personnel. The data validates my hypothesis showing that attendees would continue to drink the same amount before the game and would also purchase an alcoholic beverage at the game leading to increase drinking throughout game day. Universities need to take this into consideration when they are considering safety during and after events.

Although many of the research participants felt the selling of alcohol would not affect their perceptions of safety in the stadium, previous studies have shown alcohol to create violent and unsafe conditions inside of a stadium (e.g. Lenk, Toomey & Erickson, 2009; Bormann & Stone, 2001). If the university decided to sell alcoholic beverages, they would need to implement many new security measures. The safety precautions that are most used in stadiums include underage compliance checks and limited number of alcoholic drinks per person for each transaction (e.g. Wieberg & Hanashiro, 2005).

One of the factors that did not favor the university were the responses to game attendance. At the particular university where the surveys were administered, getting people to attend football games has been an issue. The survey data revealed attendance would not be affected by the selling of alcohol in the stadium, as such attendance should not be large deciding factor for universities in whether or not to sell alcoholic beverages. If athletic departments do not

control the stadium properly, alcohol sales could actually deter people from attending games and results for the university would be opposite from their initial goal of increasing revenue.

The last construct observed in the study was Game Enjoyment which asked questions about how the selling of alcohol would affect football games for the fans. Questions of this construct included the effects of overall game enjoyment, bringing children to football games, unsafe environment and others drinking alcohol bothering the participant. When analyzing the construct as a whole, it was found the selling of alcoholic beverages would not change the enjoyment of the game for the participants. The participants would still relish their time spent at the football games with their families.

After analyzing all of the data collected, and receiving positive results towards the selling of alcohol, statistics show it would be a beneficial for the athletic department to sell alcoholic beverages at home football games. The university should be considerate of the safety of the fans if they implement this new policy. If the right procedures are implemented, the selling of alcohol could have a large positive affect on the university. However, it might be beneficial for the athletic department to conduct a trial season of alcohol sales to gather additional data. If the department does not get the wanted response, i.e. not enough revenue was collected or safety becomes an issue, then they can stop the sale of alcohol after the end of the season. Naming it as a trial season, fans who were purchasing alcohol will not become as disappointed if the decision to stop selling alcohol is applied. By selling alcoholic beverages, the university can keep the same loyal fans and keep a family environment all while collecting extra revenue.

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Appendix

Table 1. Reveals the mean and standard deviation for each construct related to the alcohol consumption and selling of alcohol at Brooks Stadium.

Question	Mean	Standard Deviation
I would purchase at least one (1) alcoholic beverage if they were sold at CCU football games.	3.99	2.093
I feel safe at CCU football games	5.65	0.821
The selling of alcohol would influence my decision to attend CCU football games.	2.38	1.768
I would drink less alcohol before the game if alcohol was sold during the game.	2.91	1.760
Game Enjoyment	2.50	1.428
The consumption of alcohol would decrease my overall enjoyment of CCU football games.	2.23	1.646
Other spectators drinking alcoholic beverages in Brooks Stadium would bother me.	2.49	1.687
I would not bring children to CCU football games if alcoholic beverages were sold.	2.38	1.689
Selling alcoholic beverages at a football game would create an unsafe environment.	2.47	1.514
I believe selling alcohol will lead to unsafe actions after games	2.92	1.762