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Bowling for Fans: Bowl Games and Tourism

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Abstract

College football bowl games are a spectacle and cultural phenomena each year, drawing millions of viewers and putting over $450 million back to universities annually (Dosh, 2017). The original bowl games (Rose, Sugar, Cotton, and Orange) started as a means to reward high performing teams and spark tourism during traditionally a slow time of the year (Schexnayder, 2012). The purpose of this paper to explore the impact of distance from a bowl site to the university playing in the game and its impact on tickets sold. Bowl games sell blocks of tickets to participating schools, but it often not know how many of those tickets they sell which leads directly to economic impact. The findings of this study present evidence that supports the findings of prior works suggesting added distance from a bowl site, decreases the number of tickets sold and tickets sold to the local community supporting the bowl have a greater impact on attendance than tickets sold by participating schools.

Keywords: bowl games; tourism; economic impact; attendance; tickets sold

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1.Introduction

College football bowl games are unique events providing experiences for fans, typically in tourism destinations giving the fans an opportunity to see a new place and celebrate their team's accomplishments. The 2017-18 bowl season saw a total of $453 million allocated back to universities for their participation in the games (Dosh, 2017). The late 1990s early 2000s saw an expansion to the college football post-season format, with the creation of new bowl games expanding the number of bowl games and a changing format to the bowls business format.

The cable television industry saw significant growth from 1970 to 1990, seeing a second expansion in 2000 with an increased demand for live programming that was benefitted from introduction of set-top boxes (California Cable & Telecommunications Association, 2018). The 1984 Oklahoma Board of Trustees v. NCAA case opened the flood gates for live sports in an free market system, not constrained by the NCAA, leading to ESPN to pounce and meet consumer demands for live sports; leading to the creation of ESPN Events (Bodenheimer & Phillips, 2015). ESPN's ownership of bowl games brought about a different business model for bowl games, providing a new landscape for operating bowl games.

Since their inception in 1902 with a game between Michigan and Stanford and on an annual basis in 1916 with the Tournament East-West Football Game sponsored by the Tournament of the Roses Association, bowl games were established not to generate a profit, but to benefit their community (Schexnayder, 2012). Bowl games were developed in warm environments and ease of travel for the teams fanbases were driving forces for bowl games, generating support from local tourism bodies as a way to leverage the events to enhance the presence of their community (Ours, 2004). ESPN's introduction to owning and operating bowl games shifted them away from their traditional non-profit business operation, into a for-profit approach and placing bowls in non-traditional tourism markets like Boise, Idaho and Albuquerque, New Mexico, feeding the consumer demand for college bowl game programming on television (Salaga & Tainsky, 2015; Tainsky, Kerwin, Xu, & Zhou, 2014).

The purpose of this paper is to explore how proximity of participating schools from bowl game sites and the impact of team ticket sales on overall attendance of bowl games, specifically second-tier bowls that are not at the forefront of national attention. Prior studies have applied econometric modeling techniques to understand the determinants of attendance at bowl games and neutral site games, leaving questions about the applicability of the findings for pragmatic decision making (Eddy, Rascher, & Stewart, 2016; Griffith, 2010; Mirabile, 2014; Popp, Jensen, & Jackson, 2017). Influenced by earlier work and discussions with multiple Bowl Game Directors, this study focuses on two specific variables of distance of a participating school from bowl site and the impact of tickets sold by participating teams on overall attendance at bowl games. The study also focused on non-major or second-tier bowls that run contrary to the traditional bowl that was established in warm climates and tourist destina-

tions, because new bowls are being established in non-traditional markets (ie. New Era Pinstripe Bowl). The goal of this paper is to provide pragmatic insight that can directly impact managerial decision making for Bowl Game directors.

2.Literature Review

The literature base has attempted to provide insight into the motivating factors for attending bowl games. However, models produced in these studies are constructed from a theoretical perspective neglecting to provide insight that can directly be applied or controlled by bowl games. This paper is specifically seeking to provide tangible pragmatic insight that can impact the decision-making process of bowl games to produce a high-quality product for the direct consumer as well as the local stakeholders who support the bowl game in their community.

Bowl games were originally developed as an accessary to a festivals where funds were raised to support local initiatives and programs in a non-profit manner, they were viewed as a tool to drive tourism to an area (Ours, 2004). One of the major selling points of bowl games is their ability to drive tourism and economic impact to a community. Numerous instances have shown the Economic Impact mechanism to be misapplied and often a tool of politicians to explain the use of public dollars in support of an event (Crompton, 1995, 2006; Howard & Crompton, 2014). However, the positive impact to a local economy is often one of the first things cited by politicians and public figures when discussing these events as evident by the launch of the Myrtle Beach Bowl in November 2018 (Myrtle Beach Bowl, 2018). As the bowl industry has expanded, adding more bowl game that are not in traditional tourist destinations, what motivates fans from outside the geographic market to travel to the bowl game?

2.1 Attendance at Bowl Games

Popp et al. (2017) found the following variables as predicting 77.5 percent of the variance in bowl game attendance (bowl age, market population, conference affiliation, bowl game stature, season wins, home game attendance, and distance traveled). The hierarchical regression model developed is useful in the potential development of future inquiry, which is how we intend to use it in this study. One of the weaknesses of the study relates to one of its primary findings in that variables of Bowl Stature and Conference Affiliation because in the expanded field of bowl games, the variables skew results toward larger, older schools with established fan basses and older bowl games who have an established reputation.

Mirabile (2015) approached the issue of attendance at neutral site college football games through an econometric perspective. While his work went beyond specifically bowl games, at their root a bowl game is a "neutral site football game." The primary findings from the study indicate a team with a positive record of winning, positive home attendance, and that attendance falls significantly as distance increases. The findings of this study provide insight, specifically the impact of distance on attendance.

Griffith (2010) applied a geospatial methodology in trying to understand attendance during the 2007-2008 college bowl game season. The study produced two intriguing findings, attendance increased when bowl payouts increased and the

closer a school was to the bowl location, it led to an increase in game attendance. The findings were not paradigm shifting and reflected common logic surrounding bowl games. The perceived prestige (Rose Bowl v. Gasparilla Bowl) and conference affiliations of the bowl impact the bowl payouts. Autonomous Five conferences demand a larger payout over a Group of Five conference (Ours, 2004). We rely on the guidance provided from Griffith's (2010) geospatial analysis to aid in building a model to understand the impact on distance bowl game ticket sales and attendance.

Eddy et al. (2016) is potentially one of the most impactful studies we found during our review of relevant literature in relation to this study. The paper applied econometric modeling techniques leading to an intriguing finding that as school distance from a bowl site increases over a combined average of 1,715 miles, attendance decreases two people. One of the weaknesses of the paper is the same one experienced by the other models in prior papers, the quality of the attendance figure. Bachman (2018) found large discrepancies between reported attendance figures and turnstile (ticket scan) counts, leading to increased complexity in analyzing college athletics due to flaws in reporting attendance. Eddy et al.'s model is the first to provide a quantifiable figure that can be used in a pragmatic manner, however we seek to increase the accuracy of this figure, making a metric that is easily understood by bowl game administrators.

3.Research Questions

RQ1: What is the relationship between the distance from a bowl location and school participating in the bowl game and the number of tickets sold from the participating school's ticket allotment?

RQ2: What is the relationship between tickets sold from a school's ticket allotment and the overall attendance of a bowl game?

4. Methods

Due to our focus on constructing an applied and pragmatic model, we applied a mixed methods approach to develop this study. First, we leveraged personal connections to solicit input from Bowl Game executives to best understand the industry and its perception of spectator attendance at its games. The interviews were informal and open-ended. The interviews stared with the interviewers discussing the current project and allowing the Bowl Game executives to share their experience. Second, we collected data from participating institutions in a select group of bowl games through the Freedom of Information Act to obtain accurate ticket sales data, not estimates of attendance.

4.1 Industry Consultation

In order to maintain the applied focus of this project, we leveraged personal connections with multiple executive personnel of Bowl Games, including both ESPN (for-profit) and non-profit games. We informed them that we were pursing this project and they laughed giving a collective answer to the question of what are the determining factors of fan attendance at their games? Their answer could be summed up with the phrase of "it's a crapshoot." We asked if they read any of the relevant literature surrounding attracting visitors and tourism, and they all seemed to rely on

their personal intuition and the input of peers from the Football Bowl Association (trade group for Bowl Games).

One of the most Bowl Game executives we spoke with said his formula for bowl game success in picking a team rest on two factors: a school that hasn't been to a bowl game in a few years and a school that is 8 hours or less driving distance from the bowl site. While it may seem bowl game executives have a significant say in which teams play in their game, it was expressed by ESPN executives that the selection process is not in their hands, but in the hands of ESPN to give the best matchup within the confines of the bowl (conference affiliations, etc.). The non-profit bowl games appeared to have slightly more control over selecting a team but they mentioned that the system is pretty structured with internal conference sorting (ie. Big Ten 3rd place team will go to the Outback Bowl, 4th place team goes to the Citrus Bowl, etc.).

The final aspect we took away from our discussion is the bowls lack of knowledge of tickets sold from team allotments. When a team is selected to play in a bowl, they receive a cash to make up a portion of their pay-out (amount is negotiated for all schools in the conference from bowls), the rest of the pay-out is done through a team selling their allotment of tickets. Teams are given a certain amount of tickets to make up their allotment at no cost, the team then sells the tickets to make up their full allotment. The Bowl does not know how many tickets they sold, unless the school returns tickets. We found this to be a striking finding and can be useful if bowls knew the amount of tickets sold in the selection of teams.

4.2 Model Development

One of the weaknesses of prior studies examining bowl games is a lack of high-quality data relating directly to the number of tickets sold. This study approached this problem as a critical element to incorporate into the quality of the project. Also, we wanted to explore Bowl Games that were not the household names of bowl games, so we sought to explore the second tier bowls, both non-profit and for-profit games.

The bowl games we decided to examine in this study are as follows: New Mexico Bowl, Idaho Potato Bowl, Jared Birmingham Bowl, Quick Lane Bowl, Sun Bowl, Dollar General Bowl, and Bad Boy Mowers Gasparilla Bowl. The bowls were specifically chosen to give a diverse perspective of non-profit and for-profit games and an event that had representation from each conference.

Freedom of Information Act (FOIA) request were sent to schools who played in the selected bowls from 2001 to 2017 (n=70). The request included two questions to understand their ticket performance and reporting system.

Questions:

1. How many tickets were sold from the ticket allotment for given bowl games?
2. How do you report attendance at home football games?
   a. Tickets Sold
   b. Ticket Scans
   c. Estimate

We sent FOIA request to 70 schools who participated in at least one bowl from our list in the selected years. Some of the schools participated

in the same bowl game for multiple years (ie. State University playing in the Quick Lane Bowl in 2007, 2009, and 2015). We decided to treat each year as independent from the other years because often the only thing that is similar is the name of the school due to student-athlete turnover and multiple other variables. Eddy et al. (2016) applied a similar treatment to schools playing in the same bowl game in their study.

A regression analysis is utilized to attempt to answer both research questions. Two separate models will be built, one for each question, using the variable of Tickets Sold and two others unique to desired research questiont. The variables utilized in examining RQ1 are Distance from Bowl Site and Tickets sold. The Distance from Bowl Site variable was assessed using Google Maps to determine the shortest driving distance from the participating University to the Bowl Site, a method common in prior studies (Eddy et al., 2016; Griffith, 2010).

RQ2 utilizes the variables Attendance and Tickets Sold. Tickets Sold is the same variable utilized to assess RQ1. Attendance was collected from the official game statistics for each game.

5.Results

The results of this study present intriguing findings, especially in relation to RQ2. Table 1 presents the descriptive statistics of each variable. Due to skewness of data, potentially influenced by a potential outlier, but a test for outliers did not produce significant results. We chose to base our discussion on results using the Median figure, not the mean to minimize bias caused the potential outlier.

Table 1

Distance, Tickets Sold, & Attendance

	Mean	Median	Standard Deviation	Minimum	Maximum
Distance (Miles)	771.5	577	641.3	29	2868
Tickets Sold	3010.5	1505.5	3033.3	47	11269
Attendance	32250.4	29243	9840.5	16512	60624

Table 2 presents the findings of a regression analysis to answer RQ1 exploring the impact of distance on tickets sold. The tickets sold variable is a measure of the number of tickets sold by a participating school in a bowl game. The results of the analysis present a fairly strong model with 61.4% of the variance in tickets sold being explained by distance of a university from the bowl location. For each mile increase from the bowl location, a decrease in .156 tickets sold can be excepted.

.156 of a ticket is not practical because tickets are sold in whole, but when compared to the median amount of tickets sold (1,505) with the

median distance 577 miles, a school who comes from 700 miles away could potentially see a reduction of 20 tickets sold. 20 tickets is not a sizable figure, but when the tickets sold trend toward less than more, it can be a troubling trend for a university and the bowl game.

Table 2

Research Findings

	B	Standard Error	p – value
Tickets Sold	-0.156	0.055	0.037

Notes. R2=.614 (p = .037)

Table 3 presents a regression analysis to examine the impact of tickets sold on the attendance of bowl games. The research question was designed to examine one of the commonly stated rationales for developing a bowl game, tourism. The resulting model was not significant and did not explain any of the variance in attendance through tickets sold.

The results of this model provide an intriguing examination of bowl game attendance at second tier bowl games, potentially leading to a dispelling of the tourism myth for these games. The impact of tickets sold by participating universities does not appear to have an impact on the overall attendance of the game. There are multiple possible explanations for this response, two potential ones are, fans purchased tickets through other means for the game or the local community is purchasing tickets to the game over out-of-town visitors. Both topics will be discussed deeper in the next section.

Table 3

Research Findings

	B	Standard Error	p – value
Attendance	0.001	0.023	0.974

Notes. R2=.0002 (p=.974)

6.Conclusions

Ticket sales are one of the primary sources of revenues for a sport organization, especially for college football bowl games (Eddy et al., 2016). The purpose of this paper was to examine the impact of distance from a bowl game location for a university on ticket sales. We also sought to explore how tickets sold by participating universities impacted the overall attendance of bowl games. We believe the two models presented in

this paper provide applied insights that can be implement by bowl game managers.

The primary reason for this paper derived out of a conversation with an Executive Director of a bowl game. The Executive Director in listing his ideal teams to have in his bowl game were those that were an 8-hour drive or less from the bowl and a team that hasn't played in a bowl in recent years. Our findings indicate that the median distance of teams traveling to a bowl are within the 8-hour drive category, however there was an increasing trend of teams coming from greater distances.

After completing the project, we shared the results with this Executive Director and his response was "wow." His bowl in recent years has seen teams come as far as 1,500 miles away to play. When we shared the results that bowl ticket sales do not have an impact on the overall attendance of the game, he replied "we have to make it a local event, and I feel over the past 10 years, we've been able to secure the buy-in from the community to make it a marquee event for the city and state." The latter is something we hoped to explore with our second research question, and we feel it is potentially the most significant finding from this study.

It is important to have a discussion about the two possible rationales for tickets sold to not impact the overall attendance of a game. The first was fans purchasing tickets through other sources outside of their university's Athletics Department. The Bowl gives the ticket allotment to the university to sell through their own system, but people may still choose to purchase tickets through the bowl or third-party outlets. The "Tickets Sold" variable in this study also serves as a proxy for out-of-town fans who could be counted in economic impact assessments.

Congruently with the Executive Director's earlier comments focused on finally making the bowl a "local" event after 10 years, it isn't too far of a stretch to assume the local community would be purchasing tickets for the game. The tickets that a local community would purchase would not be counted in the "Tickets Sold" variable. The second-tier bowl games which are rapidly expanding thanks to ESPN Events division, means that an emphasis should be placed on drawing the local community out to the game and accompanying events. Making the bowl a local event that people feel obligated to attend takes time, but steps should be done throughout the year to build a relationship with the local community. Drawing the local community out to the game may cause friction with the local Chamber of Commerce who is focused on tourism, but it will put butts-in-seats, which enhances the in-game atmosphere and tv viewer experience (Winfree, Rosentraub, Mills, & Zondlak, 2019)

The second-tier bowl games often do not have the marquee matchups that draw sizable ratings, compared to games played during the College Football Playoff or older games like the Rose, Orange, Sugar, and Cotton bowls. While we cannot predict the future, if the College Football Playoff were to expand, the second-tier bowl games could be an ideal location for the first round of games due to timing, location, and media markets. If the bowls were included in the expanded Col-

lege Football Playoff, it could lead an increase in television ratings, revenue, and tourism for these locations.

7.Limitations & Future Directions

While no academic research study is perfect, this study has its limitations, specifically in not observing data from every bowl game in the country. The authors specifically targeted bowl gamest that would be quantified in the second-tier due to their lack of national attention and overall attendance. A future study could explore the difference between first and second tier bowl games. The present study was an exploratory approach into understanding the impact of team distance from bowl location and ticket sales. It was an attempt to utilize real figures provided by the schools that competed in the bowls, not an econometric approach that does not utilize original sourced data in its statistical models.

REFERENCES

Bodenheimer, G., & Phillips, D. T. (2015). *Every town is a sports town: Business leadership at ESPN, from the mailroom to the boardroom.* New York, NY: Grand Central Publishing.

California Cable & Telecommunications Association. (2018). History of cable. Retrieved June 6, 2019, from CCTA website: https://www.calcable.org/learn/history-of-cable/

Crompton, J. L. (1995). Economic impact analysis of sports facilities and events: Eleven sources of misapplication. J*ournal of Sport Management, 9*(1), 14–35.

Crompton, J. L. (2006). Economic impact studies: Instruments for political shenanigans? *Journal of Travel Research, 45*(1), 67–82.

Dosh, K. (2017, December 30). College football playoff payouts by conference for 2017-18. Retrieved June 5, 2019, from Forbes website: https://www.forbes.com/sites/kristidosh/2017/12/30/college-football-playoff-payouts-by-conference-for-2017-2018/

Eddy, T., Rascher, D., & Stewart, R. (2016). Where is everyone? An examination of attendance at college football bowl games. *International Journal of Sport Finance, 11,* 26–45.

Griffith, D. A. (2010). An analytical perspecitive on sporting events attendance: The 2007 US NCAA college bowl games. *Applied Geography, 30,* 203–209.

Howard, D. R., & Crompton, J. L. (2014). *Financing sport* (3rd ed.). Morgantown, WV: Fit Publishing.

Mirabile, M. P. (2014). The determinants of attendance at neutral site college football games. *Managerial and Decision Economics, 36,* 191–204.

Myrtle Beach Bowl. (2018). Myrtle Beach Bowl [Sport Organization]. Retrieved June 26, 2019, from Myrtle Beach Bowl website: https://www.myrtlebeachbowlgame.com/

Ours, R. M. (2004). *Bowl Games: College football's greatest tradition.* Yardley, PA: Westholme Publishing.

Popp, N., Jensen, J., & Jackson, R. (2017). Maximizing visitors at college football bowl games. *International Journal of Events and Festival Management, 8*(3), 261–273.

Salaga, S., & Tainsky, S. (2015). The effects of outcome uncertainty, scoring, and pregame expecations on Nielsen ratings for Bowl Championship Series games. *Journal of Sport Economics, 16,* 439–459.

Schexnayder, C. J. (2012, January 2). Rose Bowl Game history: The story of college football's most treasured stadium. Retrieved June 6, 2019, from SBNation.com website: https://www.sbnation.com/ncaa-football/2012/1/2/2668978/rose-bowl-game-2012-history-stadium-pasadena-parade

Tainsky, S., Kerwin, S., Xu, J., & Zhou, Y. (2014). Will the real fans please remain seated? Gender and television ratings for pre-game and game broadcast. *Sport Management Review, 17,* 190–204.

Winfree, J., Rosentraub, M. S., Mills, B., & Zondlak, M. (2019). *Sports finance and*

management: Real estate, media, and the new business of sport (2nd Ed.). New York, N.Y.: Routledge.