The Influence of Winning on Mid-Major College Football Attendance

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A strong positive correlation exists between winning percentage and attendance within a given season. Understanding this correlation is important to sports marketers and sports business managers. Considering that marketers have no impact on win-loss record, this impact can be extracted before evaluating an organization's marketing performance. Sports business managers have to consider the uncertainty of a team's performance during an upcoming season when they attempt to accurately project revenues.

BACKGROUND

The relationship between higher winning percentages and higher attendance in sports has long been a given. The naked eye can clearly see that the New York Yankees draw more than the Pittsburgh Pirates, the Los Angeles Lakers draw more than the Los Angeles Clippers, and the University of Alabama football program draws more than the University of Alabama at Birmingham football program. A complex analysis is not necessary to realize that this higher attendance is due in large part to the winning tradition of the teams with the greater attendance.

What is not as clear is the specific impact that higher winning percentages have on attendance. If we are able to quantify this impact then we would be able to extract this impact on the front end of marketing evaluations and have a much clearer picture of the effectiveness of an organization's marketing efforts.

For example, an increase in attendance may be easily attributed to a jump in a team's winning percentage. In reality the increased winning percentage may be a big part of that increase, but another important part may have been the hard work of an organization's marketing department. Without being able to accurately extract the impact of the increased winning percentage, the hard work of the marketing department would be unrecognized and unrewarded. On the other hand, attributing a drop in attendance entirely to a drop in winning percentage may be overlooking an ineffective marketing department.

PURPOSE

In this paper we will examine the impact that winning percentage has on college football at the midmajor level. The mid-major level is chosen because most of these programs rarely play before capacity crowds. The table below shows the average attendance by conference between 2005 and 2009 and how that attendance compares to the average capacity of the conference's stadiums.

TABLE 1

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Conference	2009	2008	2007	2006	2005	Average	Avg Cap.	%Capacity
SEC	76,288	76,844	75 <i>,</i> 139	75,706	74,579	75,711	77,401	97.82%
Big Ten	71,769	70,125	71,158	69,643	72,566	71,052	74,560	95.30%
Big 12	62,875	62,956	60,941	59,968	58,397	61,027	66,374	91.94%
ACC	51,249	52,737	53,787	52,936	52,242	52,590	58,690	89.61%
Pac 10	54,186	57,350	57,956	56,314	57,479	56,657	64,547	87.78%
Big East	44,804	43,145	41,456	39,043	39,400	41,570	48,984	84.86%
Moutain West	33,202	32,021	33,937	32,766	35,275	33,440	46,905	71.29%
WAC	22,749	24,475	23,014	17,696	21,595	21,906	31,675	69.16%
Sun Belt	16,463	18,584	16,374	17,097	16,881	17,080	28,093	60.80%
C-USA	26,600	27,118	27,666	26,645	25,543	26,714	46,252	57.76%
MAC	15,317	16,727	17,334	17,696	14,489	16,313	31,452	51.86%
Sources: NCAA.org, collegegridirons.com								

It is most probably no coincidence that those schools in the bottom conferences of the above chart are also those with the most limited resources (Eichelberger, 2009). Therefore it is even more crucial to programs at this level to understand what drives their attendance. A better understanding of what drives their attendance means a better understanding of what drives their revenue, which is crucial to any business but especially to those experiencing economic hardship.

By focusing on the mid-major level we are able to see large fluctuations in attendance that allows us to more accurately examine the impact of winning percentage. Examining a 5% increase in attendance of a Conference USA team will tell us more than a 0.2% increase in a SEC school's attendance. Such an increase would also mean significantly more to the bottom line of the Conference USA team's budget than the SEC team's budget. Even a 5% fluctuation in attendance at the SEC level would mean little to a SEC team's bottom line given that revenues at these schools are also driven significantly by television contracts and bowl payouts.

LITERATURE REVIEW

A study done by David C. Funk, Kevin Filo, Anthony A. Beaton, and Mark Pritchard focused on several factors that motivate fans to attend sport events (Funk, Filo, Beaton, & Pritchard, 2009). Among these factors was "esteem," which was measured by whether or not fans feel as though they win when their team wins and whether fans get a sense of accomplishment when the team wins. While this factor is very closely related to the win/loss factor we are examining, it is probable that there are still fans out there that choose to attend or not to attend games based on the quality of the team, even if the result does not have a significant impact on how they feel about themselves.

Emotional attachment has been found to be a factor that fans consider when attending games (Koo & Hardin, 2008). This emotional attachment is built over several years and often includes going to games as a young child. This emotional attachment is often even stronger when the team represents the spectator's alma-mater. Memories of one's college years and reunion with old college friends are likely to keep a significant number of people coming to games even when the team's performance may be subpar.

Several findings in Michael Davis' research on the correlation between winning and attendance in Major League Baseball will be applicable to our study as well. Davis first solved the "Chicken or the Egg Conundrum" of whether winning leads to increased attendance or increased attendance leads to winning.

A (positive) correlation was only found with the former. Davis also found that a successful season will lead to increased attendance during the following years as momentum of the previous success draws in more through a bandwagon effect (Davis, 2008).

Research done by Glen Knowles, Keith Sherony, and Mike Haupert focused upon how the uncertainty of the outcome impacted attendance in Major League Baseball. They found that attendance was maximized when the home team had a 60% chance of winning. This supports the hypothesis that sports fans want to see a winning a product (Knowles, Sherony, & Haupert, 1992).

One leading article on college football attendance factors was done by Donald Price and Kabir Sen. This article is extremely helpful in examining the many underlying factors that affect college football attendance (Price & Sen, 2003). However, most of these factors are factors that administrators have little to no control over. Our piece will hopefully prove a strong compliment to Price and Sen in future works that examine factors affecting college football attendance.

Those who know the most about college football, the coaches themselves, also agree that winning games are important for attendance. In fact, when asked to rate factors affecting attendance on a 1-7 scale, winning was found to be the most important with a 6.68 rating (Hay & Rao, 1984).

METHODS AND HYPOTHESIS

We have already established that we will focus on mid-major schools who often struggle filling their stadiums. Furthermore, since inclement weather in the late fall plays a huge role in determining attendance at cold weather schools, we will focus strictly on Conference USA and the Sun-Belt Conference. As seen in Table 1, these conferences on average only had 57.76% (CUSA) and 60.80% (SBC) capacity over the last five years.

Our first study (appendix 1) will look at how a team's performance during a season (measured by increase or decrease in winning percentage from the previous season) impacts attendance during the next season. It would be a reasonable assumption for a team to believe that an increase in winning percentage should lead to an increase in season ticket sales the next season. By the same logic, a drop-off in winning percentage should lead to a drop-off in season ticket sales.

While season ticket sales are affected by the previous season, tickets bought on a game-by-game basis should be affected minimally by the previous season. While consumers may decide to purchase tickets to the first game or two based upon the previous season, eventually the current season will become the driving factor in determining whether or not they attend the game.

The second study (appendix 2) examines the impact winning percentage has on the current season's attendance. We expect a strong correlation between these two factors. A team that is winning more than the previous year should expect to see higher attendance accordingly. More importantly, this analysis will lead us one step closer to being able to quantify the impact.

RESULTS AND ANALYSIS

The first study showed a weak correlation between improvement or decline in winning percentage and attendance the following season. This is probably due to only a small fraction of ticket sales at this level being season tickets. The bigger conferences that have a much larger season ticket as part of overall tickets sold percentage would probably show a much greater correlation in this study.

The second study that examined the effect of winning percentage on attendance during the same season showed a much stronger correlation (R Square of .189). This strongly indicates that a significant percentage of the fan base of CUSA and SBC teams decide to attend games on a game by game basis based upon how the team is performing during that season.

MANAGERIAL IMPLICATIONS

From a marketing perspective, we now have a better understanding of the impact winning percentage fluctuation has on season attendance. With this knowledge, marketing evaluators are able to extract the significant portion of the fluctuation of attendance attributed to on-field performance, which is out of the control of marketing managers.

Since attendance is directly related to revenue, it also illustrates the difficulty in accurately projecting revenue in budget forecasts. Considering that accurately projecting win-loss records is an art-form that nobody has shown any evidence of mastering, these programs are going into each fiscal year with a tremendous amount of revenue uncertainty.

This evidence also strongly indicates that discretionary resources should be invested in strengthening the on-field product given the impact illustrated in this study on attendance. This can be done by increasing recruiting budgets, allocating more resources towards attracting top-tier coaching talent, or investing in new weight room equipment.

LIMITATIONS AND FUTURE RESEARCH

This study would benefit from specific information from schools that separates season ticket sales and walk-up ticket sales. This would allow a better understanding of the effect previous success or failure has on season ticket sales, most of which are bought prior to the next season. If the success or failure of the previous season is shown to have a significant impact on season ticket sales than the increase of season ticket sales would be one avenue towards achieving more revenue certainty.

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