## To ticket or not to ticket: Exploring revenue generation in NCAA DI volleyball

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## Abstract

Volleyball is growing in popularity throughout the United States, both as a participatory and spectator sport. Given this spike in interest, the suggestion that women's sports may be an untapped revenue source in college athletics, and coupled with the need for athletic departments find new sources of revenue, schools sponsoring NCAA Division I volleyball may be poised to capitalize on volleyball's growing popularity to increase live attendance for their own home matches.

Considering the growing popularity of volleyball as a spectator sport, and the ever-increasing need for athletic departments to boost generated revenue, the purpose of this study is to explore the potential for revenue opportunities in the sport of volleyball for NCAA Division I athletic departments. By analyzing ticket practices from women's volleyball programs in "Power 5" conferences, we explore the relationship between ticketing and attendance, which helps to understand the extent to which volleyball may contribute to revenue generation within athletics departments. Therefore, this study utilizes volleyball attendance, ticketing, and marketing data from Power 5 institutions to answer three research questions:

- RQ1: Does ticketing at the NCAA Division I Power 5 level have a significant relationship with fan attendance for the sport of volleyball?
- RQ2: What factors are significant drivers of attendance for NCAA Division I Power Five volleyball programs?
- RQ3: Would ticketing volleyball provide a substantial source for revenue generation?

Data were collected from each Power 5 volleyball program for the 2022-2023 regular season (i.e., no post-season data were collected), a total of 859 games across 64 institutions. Data were also collected to control for performance-, team-, and market-related variables. Approximately 75% of Power 5 programs charged for admission during the season, with the balance of schools opting not to ticket. Average attendance was 1,800 fans, and institutions that sold tickets had on average higher attendance than schools that did not sell tickets. Approximately 34% of the variation in attendance was predicted by the random effects regression model, with variables such as home team ranking, visiting team ranking, distance between schools, and promotions all found to be significant predictors of attendance. The final statistical model revealed a positive relationship between ticketing and attendance, but it was not statistically significant.

We also looked into the potential for gross revenue generation for schools that do not currently ticket for home volleyball matches. Three non-ticketing schools were selected for theorized gross ticket sales revenue, with School A averaging the highest 2022 season attendance (M=1331, SD=448), School B averaging the median 2022 season attendance (M=621, SD=123), and School C averaging the lowest 2022 season attendance (M=190, SD=82). The average season ticket price (M=\$63.63) and average individual game ticket price (M=\$11.64) for adults were utilized to calculate the gross ticket sales revenue for each game. The percentage of season tickets to individual game tickets were determined

based upon the percentage of stadium capacity for season ticket holder purchases for Nebraska Volleyball (21.8%) (Arneal, 2023). Finally, schools guarantee complementary tickets to player-guests, administrators, staff, students, and other special groups for each game. An estimated 400 complimentary tickets were selected due to the 2022 NCAA participating team ticket guarantee policies for hosting championship events. The total attendance was calculated for each school for the year, then 400 fans were subtracted as complementary guests. The attendance excluding complementary tickets was then utilized to calculate gross season ticket revenue and individual sales revenue. The individual ticket sales and gross season ticket sales were then added to get the resulting overall total, with School A estimated to bring in \$136,773.59 for the 2022 season, while School B was estimated to bring in \$77,137.14, and School C was estimated to bring in no revenue because their total season attendance was lower than the estimate for complimentary tickets distributed.

Therefore, since ticketing (and by extension fan's willingness to pay) has no significant impact on overall attendance, athletic department resources should be directed toward improving team strength, marketing, and promotions. Additional findings and implications will be discussed.