

Promotions and Attendance in Minor League Baseball

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Variables normally included in an analysis of attendance in major league baseball (like winning percentage) have little to no effect on attendance in minor league baseball, where local community interest in professional baseball's simple roots supersedes team performance. Although fans prefer winning clubs to losing teams, promotions are shown to have a significant effect on attendance at minor league games.

The data consist of 66 observations on home games for the 2004 Trenton Thunder, the AA minor league affiliate of the New York Yankees. The dependent variable (*ATTEND*) is total paid attendance. Average home attendance in 2004 was 6118 fans with a standard deviation of 1014 (*2005 Trenton Thunder Media Guide*). The (all binary) independent variables are *WEEKEND* (equal to 1 for Friday, Saturday, or Sunday games), *SUMMER* (equal to 1 for games played during the summer months of June, July, and August), *DAY* (equal to 1 for day games), *FIREWORKS* (equal to 1 for post-game fireworks), *GUEST* (equal to 1 for special guest appearances), and *BOBBLEHEAD* (equal to 1 for bobblehead and nesting doll giveaways). Since almost all home games included a promotional event, a category for *OTHER GIVEAWAYS* (hats, mini-bats, and visors, for examples) was excluded from the following regression:

$$\begin{aligned}
 \text{ATTEND} = & 4887.7 + 471.9 \text{ WEEKEND} + 405.1 \text{ SUMMER} + 475.4 \text{ DAY} \\
 & (22.79) \quad (2.42) \qquad \qquad (2.03) \qquad \qquad (2.07) \\
 & + 1462.2 \text{ FIREWORKS} + 1192.3 \text{ GUEST} + 662.6 \text{ BOBBLEHEAD} \\
 & (5.92) \qquad \qquad (3.84) \qquad \qquad (2.36) \\
 & \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad R^2 = .502
 \end{aligned}$$

where *t*-ratios are in parentheses.

The results in general show the strong positive effect promotions have on attendance. Firework shows (on typically Thursdays and Saturdays) increase attendance the most ($p < .001$).

Special guest appearances (including celebrity autograph signings and “Group Sleepover Nights” which give fans the opportunity to camp out overnight in the outfield watching movies on the video-board) are predictably positive and also highly significant ($p < .001$). Giveaways that include bobbleheads are limited in quantity, usually 1500-2000, and fans who want one must line up at least an hour before the gates open. In 2004, two of the most popular bobbleheads were Derek Jeter and Bernie Williams, both in Thunder uniforms during their 2003 rehab stints. Bobblehead and nesting dolls more favorably affect attendance than other giveaways ($p = .02$). A variable interacting weekend games with summer months was not significant ($p = .34$), largely because weekend games in the spring do not conflict with school nights and Sunday games are played in the afternoon. Two additional interaction terms indicated that bobblehead giveaways and day games are not more attractive in the summer than at other times ($p = .97$ and $p = .22$, respectively).

Of the variables thought to affect baseball attendance at minor league games, it is clear that promotion activities are critical.