THE AFTERMATH OF SAMMY SOSA’S CORKED BAT INCIDENT

by

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I use that bat for batting practice. It’s something that I take the blame for. It’s a mistake. I know that. I feel sorry.

Sammy Sosa
Chicago Cubs

On June 3, 2003 Sammy Sosa of the Chicago Cubs was caught using a corked bat in a ballgame against the Tampa Bay Devil Rays, a major league transgression for which Sammy served a seven-game suspension. A cork in the barrel of a baseball bat is believed to make the bat lighter and thus might improve the hitting statistics of the ballplayer using it. Sosa claimed that his use of the illegal bat was an accident and that he used this particular bat only in practice. In this brief note, we examine Sosa’s (i) hits, (ii) extra base hits, and (iii) home runs as a proportion of his total at bats before and after the corked-bat incident.

Table 1 reports selected hitting statistics for Sammy Sosa before and after June 3, 2003. (Sosa’s game-by-game statistics are from http://sports.yahoo.com/mlbpa/players/4344/gamelog.) In the categories of “Hits” and “Extra Base Hits”, there was no discernible difference in Sammy’s prowess at the plate before and after June 3rd. Surprisingly, however, a higher proportion of at bats resulted in home runs after the incident than before. Similar comparisons after the incident to Sammy’s 2002 season totals expressed as a proportion of his 556 at bats the previous season revealed no difference in any of the three hitting categories [Hits, $p = .720$; Extra Base Hits, $p = .651$; and Home Runs, $p = .934$].

Concluding Remarks

If Sammy Sosa did indeed use a corked bat throughout the first part of the 2003 season, there is no statistical evidence that he enjoyed an advantage in any of the most obvious hitting categories. Rather, the frequency with which Sammy hit home runs actually increased after the incident, perhaps because he felt the need to prove his prowess at the plate. These results should silence (put a cork in?) his critics. They suggest that the Chicago Cubs’ slugger is Slamming Sammy, not Scammin’ Sammy.
Table 1. Selected Hitting Statistics for Sammy Sosa, 2003

<table>
<thead>
<tr>
<th>Category</th>
<th>Before Incident</th>
<th>After Incident</th>
<th>p-value on difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Bats</td>
<td>138</td>
<td>379</td>
<td></td>
</tr>
<tr>
<td>Hits</td>
<td>39 (.283)</td>
<td>105 (.277)</td>
<td>.901</td>
</tr>
<tr>
<td>Extra Base Hits</td>
<td>18 (.130)</td>
<td>44 (.116)</td>
<td>.664</td>
</tr>
<tr>
<td>Home Runs</td>
<td>6 (.043)</td>
<td>34 (.090)</td>
<td>.042</td>
</tr>
</tbody>
</table>

*Numbers in parentheses represent that category’s total as a proportion of the total number of at bats.*