

Accepted Manuscript

Technological innovations in monitoring and evaluation: Evidence of performance impacts among Major League Baseball umpires

Brian Mills

PII: S0927-5371(16)30218-4
DOI: doi: [10.1016/j.labeco.2016.10.004](https://doi.org/10.1016/j.labeco.2016.10.004)
Reference: LABECO 1505

To appear in: *Labour Economics*

Received date: 26 July 2015
Revised date: 10 October 2016
Accepted date: 25 October 2016



Please cite this article as: Mills, Brian, Technological innovations in monitoring and evaluation: Evidence of performance impacts among Major League Baseball umpires, *Labour Economics* (2016), doi: [10.1016/j.labeco.2016.10.004](https://doi.org/10.1016/j.labeco.2016.10.004)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Technological Innovations in Monitoring and Evaluation:
Evidence of Performance Impacts among Major League Baseball Umpires**

Brian Mills

Tourism, Recreation, and Sport Management, University of Florida, P.O. Box 118208, 32611-8200, Gainesville, FL

“The owners basically see them like bases. They say, ‘We need a base, we need an umpire, same thing. We’ve got to pay them, they’re human beings, but they’re basically bases.’”

-Fay Vincent (pp. 10, *As They See ‘Em*)

1 Introduction

This paper uses Major League Baseball (MLB) umpire ball and strike calls—a measure of performance for one portion of an umpire’s duties—as an empirical setting to identify performance changes associated with implementation of, and innovation in, monitoring and evaluation. Umpires are well-monitored agents that experienced identifiable changes in the use of monitoring and evaluation throughout their labor history with MLB. This provides a useful context for examining the effects of these activities on measureable performance output among employees with low turnover rates. Using pitch-level data on ball and strike calls, I find evidence that the use of monitoring and evaluation substantially improved umpire performance when implemented across the league.

I estimate changes in umpire behavior taking place at two separate points where new monitoring and evaluation was introduced. The observed changes are consistent with publicly mandated league expectations with respect to the size and shape of the MLB Rulebook strike zone when monitored. Under the initial use of technology to monitor ball-strike calls in 2001, there was some evidence of a one-time, short-term, upward shift in line with these expectations, with similar impacts across the entire distribution of umpires. However, after the addition of

Download English Version:

<https://daneshyari.com/en/article/5102084>

Download Persian Version:

<https://daneshyari.com/article/5102084>

[Daneshyari.com](https://daneshyari.com)