Like Americans themselves, baseball players are gaining height, weight

By Noah Larsen

In 1911 to 1921, George Burns was an outfielder for the New York Giants (credit: Library of Congress). Derek Jeter, right, is the starting shortstop for the New York Yankees (credit: Keith Allison, http://keithallisonphoto.com).

In 1921, the New York Giants beat the New York Yankees in the World Series. The leadoff hitter for the Giants that year was George Burns, an outfielder, who was 5′7″ and 160 pounds. When compared to the current Yankee shortstop, Derek Jeter (6′3″ and 175 pounds), Burns was giving up 8 inches, and 15 pounds. Is Jeter just bigger, or do these numbers indicate a larger trend?

University of Colorado sociology Professor Richard Rogers wanted to find out and has co-authored a study which provides an intriguing look inside the height, weight and body mass of Major League Baseball players as it relates to public trends.

The study, titled “Historical trends in height, weight, and body mass: Data from U.S. Major League Baseball players, 1869-1983,” was researched and written with Jarron Saint Onge at the University of Houston and Patrick Krueger at the University of Texas.

The study acknowledges that historical trends in height, weight and body mass have been well-documented, but provides an important and interesting look inside the Major League Baseball subset of data.

According to Rogers, “Not only has baseball been a central sport for Americans, but it also provides a rich source of statistics and data. We were able to analyze data from the publication, ‘Total Baseball,’ which provides a detailed source of data that spans over a century.”

Two reasons for the importance of the MLB subset in the study of historical height, weight and body mass trends are made clear. First, MLB players are an extremely physically fit subpopulation.

Second, while in many cases basketball players are selected for height, and football players based on weight, MLB players are selected at an ideal intersection of height and weight.

Over the duration of the study, the average increase for height, weight, and BMI (body mass index), was 3 inches, 27.0 pounds, and 1.6 units, respectively.

Rogers explains, “There is great national concern about the growing obesity epidemic. Most evidence of the increasing risk of obesity over time is based on a few selected sources of data and is relatively recent. We were intrigued to find that, similar to the general population, there is a long-term trend among MLB players toward increasing height, but also increasing weight and body mass.”

When comparing the average height of a baseball player to studies of the general population, it was found that, on average, baseball players were taller. A difference of 3 inches was noted when comparing the heights of baseball players to the general population of the early 1930s.

That being said, the overall temporal tends between the two groups remained similar. At times, when minor deviations in trends were noted, the addition of free agency, advancements in sports medicine, the inclusion of African Americans (who had a tendency to be shorter) after racial integration and changes in game strategy were cited as potential factors.

Rogers has also examined other aspects of the Major League Baseball player data. “I have been fortunate to work with a variety of current and former graduate students on a variety of research projects. Our research team for the baseball research included former graduate students Jarron Saint Onge, Patrick Krueger, and Bill Witnauer. In addition to examining height, weight, and body mass, we have also investigated MLB player career length and life expectancy,” says Rogers.

These additional articles are titled, “Major League Baseball Players’ Life Expectancies,” and “Major League Baseball Career Length in the 20th Century.”

Rogers has been a professor at the University of Colorado since 1985. He directs the Population Program, IBS, and the NICHD-funded University of Colorado Population Center. He has received numerous awards, including the Otis Dudley Duncan Book Award in 2002 and the Excellence in Research Award from the CU Boulder Faculty Assembly in 2006.

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