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A 'MARQUEE' BIAS CAN INFLUENCE WHICH 'BUBBLE' TEAMS GET INTO MARCH MADNESS

ALEXANDRIA, VA, FEBRUARY 24, 2015 – As hundreds of men's college basketball teams near the end of the regular season, each points to playing in the NCAA championship tournament as its ultimate goal. When their season ends, many teams will find themselves "on the bubble" regarding tournament inclusion. But does each "bubble" team have an equal probability of being selected for the "March Madness" tournament?

A new statistical analysis conducted by four Virginia Tech University statisticians confirms the existence of an unacknowledged factor that can influence the NCAA Selection Committee's decision making: a team's marquee potential.

"To make the field of 68 teams, current 'bubble teams' need to start winning to improve their case for inclusion with the selection committee or win their conference tournament to guarantee their place in the March Madness tournament. Of course, if they're 'marquee,' they might get in any way!" said Scotland Leman, a statistician involved in the study.

The analysis was prompted by then-Virginia Tech coach Seth Greenberg's question in 2010 after his team was excluded from the NCAA Men's Tournament: "If the University of North Carolina (UNC) had Virginia Tech's record this season (22–12 [9–7 ACC]), would UNC have been in [the NCAA tournament]?"

Greenberg likely focused on UNC because, in 2010, despite having one of its worst seasons since 1994 (20–17 [5–11 ACC]), it was and still today is well accepted as one of the top, consistently strong men's basketball programs in the country.

The statisticians expanded on Greenberg's question to determine if a team is "marquee" and therefore has a higher probability of receiving an at-large tournament bid than a non-marquee team with similar season statistics. They examined historical data as far back as the 1993–1994 season to define and identify teams by season that are bubble and/or marquee and analyzed the potential influence of the marquee factor in tournament selection for these teams. Marquee teams are defined as those programs that have historical success and are considered a top team and so-called "pedigree" in the sport.

Their analysis identified 12 bubble teams out of 50 observations of teams since 1997 that received an at-large bid and had the poorest NCAA tournament seeds or did not receive a bid and had the highest National Invitational Tournament seeds. These dozen teams were judged as marquee (only one of these teams was not selected for the NCAA tournament).

After determining the existence of the marquee factor, the statisticians sought to answer Greenberg's question. They found that the marquee factor lowered Virginia Tech's (a non-marquee team) chances of receiving an at-large bid to the 2010 NCAA men's tournament, while if UNC's 2010 (a marquee team) season record had been similar to Tech's, UNC's chances increased significantly.

Each year, the chair of the NCAA Selection Committee says committee members look at the entire body of work when selecting teams for the field without emphasis on any one factor. But it is clear that some factors are more important than others.

One such factor is the newly revealed marquee factor that can help push a marquee team into the NCAA tournament's coveted field of 68 teams over less-prestigious teams with a similar season record and strength of schedule rating.

An article—"Life on the bubble: Who's in and who's out of March Madness"—about this marquee factor finding is published in the *Journal of Quantitative Analysis in Sports* (http://www.degruyter.com/view/j/jqas). For a copy of the article or to speak with an article coauthor, email Jeff Myers at jeffrey@amstat.org and include "March Madness" in the subject line.

About the American Statistical Association

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