

1077-G1-607

**Sheldon H. Jacobson\*** (shj@illinois.edu), **Alexander G. Nikolaev**, **Douglas M. King**  
and **Adrian J. Lee**. *Seed Distributions for the NCAA Mens Basketball Tournament: Why it May  
Not Matter Who Plays Whom.*

Bracketology, the art of successfully picking all the winners in the NCAA annual Mens Division I college basketball championship tournament, has become a favorite national activity. In spite of the challenges and uncertainty faced in this endeavor, patterns exist in how the seeds appear in each round, particularly in the later rounds. This paper statistically analyzes tournaments from 1985 to 2011, finding that the distribution of seeds that win in the rounds beyond the Sweet Sixteen can be modeled as a truncated geometric random variable. This model allows one to consider any set of seeds in each tournament round and compute the probability that these seeds would win in that round; this methodology can evaluate the likelihood of each seed combination in each tournament round, based on past tournament history. Finally, each tournament from 1985 through 2011 is analyzed using this model to assess its likelihood and measure the probability of its occurrence. The resulting model was implemented in the website, [bracketodds.cs.illinois.edu](http://bracketodds.cs.illinois.edu), prior to the 2011 NCAA Tournament. The key implication of the model is that the teams in the tournament and who they play is far less important than where they are seeded, to determine their likelihood of advancing deep into the tournament. (Received September 08, 2011)