Q: If we initial R_0 with random numbers and keep $SUM(R_0) = 1$, will the ranking be different? Try to explain it.

A: By experiment, I initialize random vectors 100 times and calculate the ranking, the ranking are all the same. The reason is that no matter what the initial vector is, the Markov chain will converge to the same vector in the steady state. Therefore, as long as the iteration is sufficiently large, the ranking will be identical.