Player's ability as probability of winning

Probability density

θ
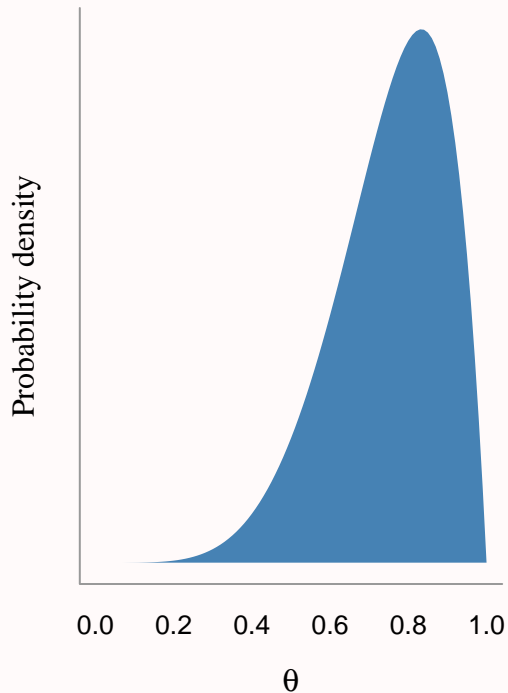
Random samples given player's ability

Count

40K

30K

20K

10K

0

0 1 2 3 4 5 6 7 8 9

Matches won