How Well Does Single Player Performance Predict Overall Winning Probability?

The standard Riot API state of deaths and kills are, well, okay. The better you do these individually, the more likely your team is to win. But, if you’re really good, your team doesn’t win as much as it should: and if you’re really bad, it doesn’t lose as much as it should.

Abstract: Standard metrics for multiplayer online battle arena (MOBA) games like League of Legends (LoL) are very simple: kills, deaths, and the like. At Vantage Sports, we use a proprietary method to generate unique metrics that are more useful for professional players. These metrics are then calculated for hundreds of thousands of amateur player games, and the results used to determine which ones most contribute to winning. Some of the most important ones are worthless deaths and smart kills, which refine the standard metrics based on whether the team overall benefited from the activity. A new player rating model described here correlates strongly with winning even though it is essentially based on just one individual's contribution to a five-on-five game.