What is the effect of introducing an incredibly productive employee into the workplace? In a tournament environment, general theory predicts that “superstar” workers will disincentive peers (competitors) and lower their productivity (performance). If the total salary pool is fixed, then “non-superstars” have less to gain by working harder. Despite conflicting results in the Labor Economics literature, this field has an important impact on businesses, hiring managers, and even professional athletes.

In Jennifer Brown’s paper, Quitters Never Win: The (Adverse) Incentive Effects of Competing with Superstars, she challenges the claim that internal competition motivates worker effort. By examining large skill differences in players in golf tournaments she argues that the presence of a superstar is associated with reduced performance by the superstar’s peers. Brown uses Tiger Woods as an example and finds that Tiger’s presence in tournaments reduces performance of higher ranked players more than lower ranked players. This means that in a competitive workplace environment, introducing a superstar worker might actually lower overall productivity.

As a rebuttal to Brown’s paper, Robert Connolly and Richard Rendleman found the opposite results in The (Adverse) Incentive Effects of Competing with Superstars: A Reexamination of the Evidence. They said that players actually performed worse when Woods was absent than when he participated at events. Connolly and Rendleman concluded that extensive data problems and player-course interactions led Brown to falsely discover a Tiger Woods effect on the field. In addition, they found that between 40% and 50% of players could take the superstar role and have a similar effect – in which case there is nothing special about Tiger Woods.

Much of Connolly and Rendleman’s argument comes from the Guryan, Krott, and Notowidigo paper, Peer Effects in the Workplace: Evidence from Random Groupings in Professional Golf Tournaments. They argue that common modeling issues caused by a reflection problem in the failure to estimate to ability leads to an unrecognizable downward bias in discovering Peer Effects. In short, they argue that there are no peer effects in golf. This is essentially the argument that Connolly and Rendleman make. However, there is a key distinction between Peer Effects and a Superstar Effect. Peer Effects are the effects that every player or worker has on each other. A Superstar Effect has only one source. Guryan, Krott, and Notowidigo found that a pairing with Tiger Woods usually improved scoring. Unfortunately, the standard error was slightly too high so they couldn’t say anything.

I plan to jump into the hole in the literature and see if there is a superstar effect within pairings, and reevaluate Brown’s claim of an effect across the field. Similarly, I hope to see if greater sponsorship has changed the way professional golf players perform with more or less on the line depending on a player’s ranking.