Rivalry and Teamwork Among Players in the National Basketball Association

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Although the goal of sport competitions is to beat an opponent, athletes and fans become much more enthusiastic about winning when competing with a certain opponent or so-called “rival.” Rivalry can be conceptualized as “a subjective competitive relationship that an actor has with another actor that entails increased psychological involvement and perceived stakes of competition for the focal actor, independent of the objective characteristics of the situation” (Kilduff et al., 2010, p. 945). Rivalry is subjective, relational (formed over time via repeated competition), and often leads people to behave irrationally (Kilduff et al., 2010).

Rivalry motivates athletes to win games because the expected psychological and financial rewards are higher than usual. As suggested by expectancy theory (Vroom, 1964), such strong motivation and anticipated rewards often lead athletes to devote their best efforts to winning a game. In turn, according to the theory of rivalry, such effort often manifests in effort-based behavior (Kilduff et al., 2010). For example, in the context of basketball, it is likely that players will make a high level of cooperative effort with their teammates. As such, we intend to investigate whether rivalry can improve team performance through players’ cooperation and teamwork, potentially reflected by the number of assists in basketball (West, 2018). We will also examine whether rivalry can increase attendance.

In basketball, the number of assists is regarded as a good proxy of teamwork between players and is directly related to team performance (West, 2018).

Hypothesis 1: Rivalry between competing teams will increase teamwork, which manifests in an increased number of assists.

Rivalry also affects attendance because the entire fan community feels rivalry as well as players. Therefore, we expect that fans place more value on games with rivals, resulting in higher attendance.

Hypothesis 2: Rivalry between competing teams will increase attendance.

We collected a decade of game-by-game stats and attendance from NBA.com and BasketballReference.com. The rivalry between NBA teams will be rated through a survey of 900 NBA fans and 30 fans for each team. Following the method used by Kilduff et al. (2010), we will ask survey respondents to rate the perceived rivalry with 29 teams in the league using an 11-point scale. We will compute intraclass correlation coefficients (ICCs) to account for interrater reliability (McGraw & Wong, 1996).

Based on the data, we will first develop a rivalry map between teams using social network analysis to determine a broad picture of rivalry networks in the NBA. Second, we will investigate the effects of rivalry on the number of assists and attendance using econometric models. This study is based on the expectancy theory and theory of rivalry, which will enable us to suggest significant theoretical and practical implications. We expect that the results will expand our understanding of rivalry by revealing its effects on team-level cooperative behavior. This study is also expected to have critical managerial implications in that we would demonstrate that rivalry has a direct influence on team performance and attendance.