

Study shows increased aggression between evenly matched teams

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(Phys.org) -- Over the years, research has shown that when two people, or animals, are evenly matched opponents, both tend to resort to more savagery to win than if one is clearly superior to the other. Now new research by a team in the Netherlands has shown that the same appears to be true for groups, or teams of people engaged in sports. In a study, the researchers found, as they describe in their paper published in the journal *Biology Letters*, when two teams are evenly matched, they tend to resort to more illegal tactics resulting in more penalties, than do players on teams that are not so evenly matched.

The researchers, led by Gert Stulp of the psychology department at the University of Groningen, looked at two sports, football (aka soccer) and American basketball (the NBA). The first study group was made up of teams in the German Bundesliga soccer division. To come up with a way of defining parity of [skill level](#), the team used what they refer to as Resource Holding Potential (RHP) which was derived by looking at past success. The closer two teams were in RHP, the closer they were in skill levels, thus it could be used as a measure of teams when playing together.

After looking at statistics for 1,530 matches over a five year span, the researchers found a clear pattern developing. Average fouls overall were 38.76 per match. When the teams were close in rank, however, the number jumped to 39.15, compared to a low of 34.2 when really good teams played really bad ones. What's perhaps more revealing however were stats for more serious fouls, those that occur when a player does

something intentionally that might result in an injury to the other player. For teams with nearly equal RHP skill levels, 4.3 cards were issued per match, versus just 3.57 for unmatched teams, suggesting that resorting to more aggressive tendencies seems to be the norm when teams are very evenly matched.

In the [NBA](#) study, the researchers found nearly identical patterns, and thus assert that not only do people resort to more aggressive tendencies when two individuals compete (or fight), but they do so as well when operating as a team. The results overall show, they say, that not only do [teams](#) grow more aggressive and/or violent when playing equally matched [opponents](#), but that their behavior can be predicted due to general tendencies.

More information: Increased aggression during human group contests when competitive ability is more similar, *Biology Letters*, Published online before print August 15, 2012, [doi: 10.1098/rsbl.2012.0591](https://doi.org/10.1098/rsbl.2012.0591)

Abstract

Theoretical analyses and empirical studies have revealed that conflict escalation is more likely when individuals are more similar in resource-holding potential (RHP). Conflicts can also occur between groups, but it is unknown whether conflicts also escalate more when groups are more similar in RHP. We tested this hypothesis in humans, using data from two professional sports competitions: football (the Bundesliga, the German first division of football) and basketball (the NBA, the North American National Basketball Association). We defined RHP based on the league ranks of the teams involved in the competition (i.e. their competitive ability) and measured conflict escalation by the number of fouls committed. We found that in both sports the number of fouls committed increased when the difference in RHP was smaller. Thus, we provide what is to our best knowledge the first evidence that, as in conflicts between individuals, conflicts escalate more when groups are

more similar in RHP.

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