Cooperation in Intergroup, $N$-Person and Two-Person Games of Chicken

by
GARY BORNSTEIN, DAVID BUDESCU
and
SHMUEL ZAMIR

Abstract

The authors introduce a new team game, the intergroup chicken game, to model intergroup conflicts involving bilateral threats (e.g., military conflicts, industrial disputes). The group that wins the game is the one that competes while the other group yields, and the benefits associated with winning (e.g., territory, higher wages) are public goods for the members of that group. However, a failure to yield on the part of both groups leads to an outcome (e.g., war, strike) that is disastrous to all the players. The authors report an experiment in which an intergroup chicken game with two players on each team was compared to a two-person chicken game and a (single-group) four-person chicken game. The games were played repeatedly, and each round was preceded by a signaling period. Results showed that subjects were more competitive (and, consequently, less efficient) in the intergroup chicken game than in either the two-person or the four-person chicken game.