

Which Strategies Do People Use in the Repeated Prisoner's Dilemma?

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Abstract

The repeated prisoner's dilemma game is one of the most widely studied games in the social sciences, and it is essential to some theories of human cooperation and trust. In the present study, we try to use tools from data mining and provide a meta-analysis, based on a data set that was analyzed twice: by DalBo (2018), who created the data, and in parallel by Backhaus (2018). We present an innovative analysis based on machine learning algorithms. Particularly, we use the K-means model to find the clusters in the data based on the elbow method. Additionally, we analyze each cluster and examine whether the algorithm is able to classify participants according to similar strategies presented in the literature.