

## Pure and Mixed Nash Equilibria Domain of a Discrete Game Model with Dichotomous Strategy Space

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**Abstract :** We present a discrete game theoretical model with homogeneous individuals who make simultaneous decisions. In this model the strategy space of all individuals is a discrete and dichotomous set which consists of two strategies. We fully characterize the coherent, split and mixed strategies that form Nash equilibria and we determine the corresponding Nash domains for all individuals. We find all strategic thresholds in which individuals can change their mind if small perturbations in the parameters of the model occurs.

**Keywords :** coherent strategy, split strategy, pure strategy, mixed strategy, Nash equilibrium, game theory

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020