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# Review of: "Collective rationality in interactive decisions: Evidence for team reasoning" by Andrew M. Colman, Briony D. Pulford, Jo Rose

## Introduction

Approach of decision theory and game theory based on assumption, that each player try to maximize his utility function. But for some interactive cases it seems reasonable to maximize utility function of whole group of players.

Fundamental assumptions of expected utility theory and subjective expected utility theory are *rationality* of a player and attempt to maximize self *utility* by player in all circumstances. We can measure individual preferences of each player with utility, and in game it is payoff. Russel's interpretation of rationality is "the choise of the right means to an end that you wish to achive".

Research into judgment and decision making for interactive decisions or games shows that humans often deviate from full rationality in practice, because they are limited by bounded rationality that constrains them, in difficult decisions, to use rough–and–ready judgmental heuristics that are faster but that sometimes generate biased judgments and decisions.

In such games persons often try to increase *collective* utility instead of individual one. *Team reasoning* — based on collective preferences decision making approach. Theories of team resoning assume that players motivate to maximize either collective or individual utilities depending on circumstances.

## Payoff dominance

## Experiment 1

## Experiment 2

## Conclusions