

The prisoner's dilemma

This amazing model was based on a traditional gambling game, and brought to prominence particularly by the American political scientist Robert Axelrod. The prisoner's dilemma has been studied and discussed for decades by strategists, gamblers, philosophers, and evolutionary theorists (see note about Richard Dawkins below). It represents a fundamental aspect of thoughtful choice over unquestioning instinct, a dilemma which we see played out everywhere - from the simplest human relationship to the largest global conflict.

At its core is the question of whether to collaborate or not (called 'defect' in this model).

The question is often is a measure respectively of emotional maturity and security (enabling collaboration and trust) versus personal insecurity and fear (tending to prompt aggression, animosity, conflict and defection).

Here's how the gambling game works. At a simple level it's great for demonstrating the dangers of selfish behaviour, and the benefits of co-operation:

There are two players or teams. Each has two cards, one marked 'Defect', the other 'Co-operate'. There is a neutral banker, who pays out or collects payments depending on the two cards played. Each player or team decides on a single card to play and gives it to the banker. The banker then reveals both cards.

Here's the scoring system:

- Both play the 'Co-operate' card - Banker pays each £300.
- Both play the 'Defect' card - Banker collects £10
- One of each card - Banker pays 'Defect' £500, but collects £100 from 'Co-operate'.

Try it. See the ['win-win' teambuilding game](#) based on the prisoner's dilemma on the teambuilding games page.

The tendency is for each team to play Defect all the time, in hope of the big payout, and as a defence against being 'suckered' and having to pay the big fine. But where do these collective tactics lead? In the end the banker will collect all the money, albeit at £10 per round, but the banker always wins and both players always lose.

After a while, the players realise that their only hope for survival and beating the banker is to co-operate. Of course along the way, one or other players might be tempted to play 'Defect' and will collect the big payout having exploited the trust of the other side, but is this a sustainable strategy? Of course not. It reignites the tit-for-tat aggressive defence scenario when both sides play 'Defect' and both sides lose.

Try playing the game with a group of people who randomly pair up for each round (single show of cards). Again, some players will attempt a strategy of continuous 'Defect'. Their gains however will be short-lived. Pretty soon they'll get a reputation for being selfish and no-one will play them, let alone co-operate.

Professor Richard Dawkins, Fellow of New College, Oxford, provides more fascinating explanation about this model and just how fundamental it is to our existence in his book *The Selfish Gene*.

The model is called the prisoner's dilemma after the traditional story of two prisoners who are suspected of a crime and captured. The evidence is only sufficient to achieve a short custodial conviction of the pair, so they are separated for questioning, and each invited to betray his partner in exchange for their freedom. Not permitted to meet and discuss their decision, they each face the following prisoner's dilemma:

- Both men refuse to betray each other - Each receives a 6 month sentence due to lack of evidence.
- Both men betray each other - Each receives a reduced 1 year sentence because they told the truth.
- One betrays while the other does not - The betrayed gets 3 years while the betrayer goes free.

Info: <http://www.businessballs.com/teambuildinggames.htm>