

Parental education and peer effects promote children's cooperation in a prisoner's dilemma experiment, even when the benefits from cooperation are asymmetric

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Abstract: Human social interaction relies crucially on mutual cooperation as a means to achieve synergies and thus increase the welfare of human society. Here we study the determinants of cooperation at young age, by letting 285 four- to five-year old children play an experimental prisoner's dilemma game. We find a strong impact of family background and peers on children's behavior. Parents with higher education have children who cooperate more often, which indicates a strong influence of socio-economic status on cooperation levels. Having more siblings increases cooperation rates, as does attending a kindergarten with higher cooperation rates of peers, suggesting that peer effects complement the influence of the socio-economic background. Contrary to previous research, we do not only investigate the case when the benefits from cooperation accrue to the same extent to both players, but also when one player benefits more than the other. We find that asymmetric outcomes in case of mutual cooperation do not decrease cooperation rates, controlling for all other factors. This might explain why cooperation could evolve in human mankind despite the fact that, in real life, it is typically the case that cooperation is more valuable for some than others