

A Test of Evolutionary Policing Theory with Data from Human Societies

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Abstract

In social groups where relatedness among interacting individuals is low, cooperation can often only be maintained through mechanisms that repress competition among group members. Repression-of-competition mechanisms, such as policing and punishment, seem to be of particular importance in human societies, where cooperative interactions often occur among unrelated individuals. In line with this view, economic games have shown that the ability to punish defectors enforces cooperation among humans. Here, I examine a real-world example of a repression-of-competition system, the police institutions common to modern human societies. Specifically, I test evolutionary policing theory by comparing data on policing effort, per capita crime rate, and similarity (used as a proxy for genetic relatedness) among citizens across the 26 cantons of Switzerland. This comparison revealed full support for all three predictions of evolutionary policing theory. First, when controlling for policing efforts, **crime rate correlated negatively with the similarity among citizens**. This is in line with the prediction that high similarity results in higher levels of cooperative self-restraint (i.e. lower crime rates) because it aligns the interests of individuals. Second, policing effort correlated negatively with the similarity among citizens, supporting the prediction that more policing is required to enforce cooperation in low-similarity societies, where individuals' interests diverge most. Third, increased policing efforts were associated with reductions in crime rates, indicating that policing indeed enforces cooperation. These analyses strongly indicate that humans respond to cues of their social environment and adjust cheating and policing behaviour as predicted by evolutionary policing theory.