

# Smiling builds trust

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Credit: AI-generated image ([disclaimer](#))

"A smile gains more friends than a long face." This Chinese saying has been scientifically validated by researchers of the Max Planck Institute for Evolutionary Biology in Plön and the Toulouse School of Economics in a study involving a behavioural experiment. The researchers examined whether subjects could induce trust with their smiles and profit from this. The results show that a smile rated as honest and genuine induces trust, and rightly so: on average, those individuals are also more

cooperative. The study shows that genuine smiles are subconsciously produced more frequently when the stakes are higher and the smiler is "honest". It seems, then, that smiling this way is costly, and the associated effort is made only when worthwhile. Smiles rated as genuine are strong predictors of the trustworthiness of the individual in question.

Smiling is a fundamental component of communication in every human society. Some scientists speculate that it arose during the course of evolution from a gesture of submission such as that observed among apes, when socially inferior animals draw back their lips and bare their teeth as a way of demonstrating their subservience to dominant members of their species. In humans, smiling may have developed as a kind of mimicry in which dominant individuals imitate a submissive gesture in order to signal that they are trustworthy.

It is still unclear, however, whether the human smile is actually a tool for communication or simply an involuntary expression of one's emotional state. Consequently, the Max Planck scientists and their colleagues developed a behavioural experiment to measure the impact of smiling on readiness to cooperate in trust situations. Darwin himself discussed the function of the "Duchenne smile", which is unconscious or involuntary in origin and is considered to be outside voluntary control. In the experiment, two participants had to cooperate in order to obtain a small sum of four euros in the first wave, or eight euros in a second wave. The trustees (potential recipients) introduced themselves using a predetermined text in short video clips, asking their partners to send the money supplied by the researchers.

Based on the video, the sender then had to decide whether to send the money to the trustee. If the money was sent, the stake was tripled and the trustee could choose whether to return one third or half of the increased stake or simply keep it all, i.e. a maximum of 24 euros, leaving the sender empty-handed.

The scientists started by documenting how the senders and non-participating subjects assessed the [video clips](#). They had to rate the person in the clip for attractiveness, intelligence and trustworthiness and whether they considered his/her smile to be genuine. "The people whose smiles were rated as genuine were also judged to be trustworthy. Senders could actually use the smile as a basis for predicting whether the trustee would share the stakes", explains Manfred Milinski from the Max Planck Institute for Evolutionary Biology.

For the senders, it was worth trusting the trustees who produced genuine smiles, because on average they sent more money back. "This means a smile perceived as genuine is an honest signal that displays a readiness to cooperate. It aims to encourage others to cooperate in situations that require justified trust", says Milinski.

In addition, in games with higher stakes of eight euros, trustees were more likely to produce smiles that were rated as genuine. This suggests that it is easier to produce an honest smile when a greater reward beckons. Since genuine smiles are unconscious in origin and outside voluntary control, it seems that they are costly and involve an effort that is only made unconsciously when it pays – and when the subject really means it. Gifted actors may be able to deliberately produce "genuine" Duchenne smiles. Either way, in the research lab and in daily life, smiling is a frequently used signal that induces [trust](#) and promotes cooperation.

**More information:** "Honest signaling in trust interactions: smiles rated as genuine induce trust and signal higher earning opportunities Samuele Centorrino, Elodie Djemai, Astrid Hopfensitz, Manfred Milinski, Paul Seabright" *Evolution and Human Behavior* DOI:

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