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Is laziness contagious? A computational approach to attitude alignment in neurotypic and autistic individuals.

Summary:

What do people learn from observing others' attitudes, such as *prudence*, *impatience* or *laziness*? These attitudes are typically viewed as examples of subjective and biologically entrenched personality traits, which may even be under (at least partial) genetic control. Here we challenge the underlying assumption of a stable trait. In particular, we ask whether such behavioural attitudes may not be influenced by others' attitudes, through an alignment process akin to goal contagion. First, we assume that prudence, impatience or laziness derive from uncertain (and mostly implicit) beliefs about how to best weigh risks, delays and efforts in ensuing cost-benefit trade-offs. In this view, it is adaptive to update one's belief after having observed others' attitude, which provides valuable information regarding how to behave best in related difficult decision contexts. This is the starting point of our bayesian model of attitude alignment, which we derive in the light of recent neuroimaging findings. First, we disclose a few non-trivial predictions from this model. Second, we test these predictions experimentally by profiling people's prudence, impatience and laziness both before and after guessing a series of cost-benefit arbitrages performed by calibrated artificial agents (which are impersonating human individuals). Third, we extend these findings and assess attitude alignment in autistic individuals. Finally, we discuss the relevance and implications of this work, with a particular emphasis on the assessment of biases of social cognition.