Computational modeling of parenting styles and academic performance

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Abstract: Computational modeling of how people maintain beliefs and make decisions has become increasingly popular for understanding the dynamic of social interaction. In this work, we create a computational model for different parenting styles – Authoritative, Authoritarian, and Permissive – and simulate their impact on children's emotional experiences and academic performances. This model is created within a larger decision-theoretic framework for social simulation. Our model is capable of reproducing the classical cases of children's academic performances dropping because their parents either pushing them either too much or too little in their school work. Through fine adjustment of the parameters, we are experimenting how fine distinctions in parenting style affect children's long term academic performances and mental health.