SANS conference abstract

Do social norms impede optimal learning?

While norms often act as a useful heuristic facilitating cohesive interpersonal dynamics, norms sometimes prevent the exploration of valuable courses of action. Under what circumstances do social norms impede optimal decision making? The ultimatum game is a useful tool with which to examine this issue. The ultimatum game is a dyadic paradigm in which one player, the proposer, decides how much of an endowment to offer to a responder, who decides whether to accept the offer, in which case the endowment is divided as proposed, or to reject the offer, in which case both parties receive nothing for that trial. Two psychological phenomena have been offered as competing explanations of why proposers often make “fair” 50/50 offers: adherence to a fairness norm, and fear that an “unfair” offer will be rejected. In the current experiment, we were able to tease apart these two phenomena. Specifically, we examined the behavior of proposers playing against groups of individuals with different acceptance functions as well as computer generated lotteries programmed to mimic human behavior. Our goals were (i) to assess whether or not proposer behavior could be captured with a reinforcement learning framework in which subjects learned the acceptance functions of their opponents, and (ii) to see if this learning process differed between social and non-social conditions, with learning in the social condition being slower due to reluctance to explore the full range of acceptable offers as a result of adherence to the fairness norm.