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How Does the Presence of a Social Other Affect the Perception of Emotions?

A Preliminary Report

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Regret is an emotion that may be experienced by a decision-maker that learns that an alternative choice would have led to a better outcome. How the presence of a social other affects a decision maker's perception of regret is still an open question. Zeelenberg and Pieters (2004) asked subjects to describe the emotions they thought they would experience in hypothetical situations involving lotteries. In the Netherlands there is a special type of lottery, the Postcode Lottery, where postal code numbers are randomly drawn and all the residents living in that postal code area share the prize, conditioned that they have purchased a ticket. The results showed a clear increase in the regret ratings in the situations involving the Postcode Lottery - where it was said that a "neighbor" had won the prize. Boles and Messick (1995) found that when a "social other" receives the payoff yielded by a foregone option, the alternative outcome becomes a more salient reference point, thus, acquiring more relevance when one evaluates his own payoff. Subjects were asked to evaluate how much satisfaction and regret they thought an imaginary player would feel in a two-gamble choice game. In that scenario, a "social other" always choose the option overlooked by the player. Regret should be elicited when the judged player does worse than the other player. However, only satisfaction ratings were affected due to the presence of a "social other": subjects evaluations of the regret experienced by the player were not significantly affected.

We performed a behavioral study similar to the one in (Boles and Messick, 1995) with the difference that subjects were put in the active role of decision-makers: they had to choose between two gambles (being informed about the probabilities and payoffs attached to each outcome), and endure the gains or losses yielded by their choices. Once the outcomes were determined, subjects were asked to report the perceived degree of *regret*, *jealousy*, *envy* and *satisfaction* using a numerical scale (1: *Not at all*; 9: *Very much*). Each condition consisted of 34 trials; a completely counterbalanced within-subjects design was employed. Gambles could lead to 4 possible outcomes (-100, -25, 25, and 100 yen) which were combined with 3 different probabilities (0.2, 0.5, 0.8). The two-gamble choice games employed in the experiments were similar to those used in (Mellers et al., 1999). Subjects were male university students (21.19 yrs. SD=2.39), who were scheduled to come in pairs to the experimental session ($N = 48$). Subjects were paid a fixed reward for

taking part in the experiment plus a bonus proportional to their performance in the task. The paired subjects did not know each other prior to the experiment.

In the "social other present" (SOP) condition, the payoff yielded by the unchosen gamble was given to the other player, whereas in the "social other absent" (SOA) the foregone payoff was given to no one. The Wilcoxon Signed Rank test was performed in the paired SOP-SOA average ratings. Regret ratings increased significantly in the SOP condition when the obtained payoff was negative and the unchosen gamble yielded a greater and positive payoff. Differences in the regret ratings were not detected when the foregone payoff was negative and greater than the obtained payoff, nor when the obtained payoff was positive but smaller than the foregone payoff. Jealousy and envy ratings were greater in the SOP condition in all cases where the obtained payoff was smaller than the foregone payoff, including the case where both payoffs were negative. Satisfaction ratings did not differ significantly between the SOP and SOA conditions.

These results show that the presence of a "social other" modulates the perception of post-decision emotions in certain outcome combinations. We believe that differences between these results and those reported in (Boles and Messick, 1995) can be largely explained by the shift in participants perspective from a third-person to a first-person point of view. The question whether and how such social comparison effect affects actual decision-making behavior is still to be clarified.

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