

Effects of Expectation and Speed on Moral Decision-Making

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論 文 名	Effects of Expectation and Speed on Moral Decision-Making (期待と意思決定速度が道徳的意思決定に及ぼす影響)			
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論 文 審 査 の 結 果 の 要 旨

This study examines the effects of expectation and speed on moral decision making from a cognitive science perspective. The tradeoff between speed and accuracy is one of the most fundamental phenomena of behavioral performance in perception and memory tasks, and it is well known that speed leads to decreased accuracy. However, it was not known how speed affects subjective decision making based on moral judgments for which there is no clear measure of accuracy.

Four experiments were conducted to tease apart two alternative hypotheses for the relation between speed and subjective moral evaluation. The hypothesis of the “Speed-Polarization Tradeoff” implies that urgency causes more polarized evaluations. In contrast, the “Ease-of-Processing” hypothesis suggests that any association between speed and polarization is due to the salience of evaluation-relevant image content. The more salient the content, the easier to process, and therefore the faster and more extreme the evaluation. In each experiment, participants were to evaluate images on a continuous scale from -10 to +10 and their response times were measured. A cueing procedure was used to inform the participants on a trial-by-trial basis whether they could make a self-paced evaluation or whether they had to perform a speeded evaluation within two seconds.

The results showed that compared to the self-paced conditions, the responses in the speeded condition were consistently much faster, indicating that the urgency manipulation was successful. However, comparing the conditions, there were no significant differences in any of the evaluations. Yet, the reported ease of processing of moral evaluation covaried strongly with both the response speed and the polarization of evaluation. The overall pattern of data indicated that, while speed is associated with polarization, urgency does not cause participants to make more extreme evaluations. Instead, the association between speed and polarization reflects the ease of processing. Images that are easy to evaluate evoke faster and more extreme scores than images for which the interpretation is uncertain.

Furthermore, previous research indicated that predictive cues enhance preference and reduce response time for congruent targets during bivalent food evaluation, suggesting a

confirmation bias in subjective evaluation. However, the influence of prior processing on subjective moral evaluation had not yet been examined. In the present study it was found that the moral ratings were in line with the expectations induced by the cues. Compared to the non-predictive condition, the moral evaluation in the directional conditions was more polarized. For neutral images, the predictive cues tilted the evaluations to positive versus negative, indicating a decisive liminal influence. Moreover, the gaze positions during the interval between the predictive cue and the image showed a spatial displacement in line with the cue instruction, indicating a response preparation in line with the confirmation bias.

Taken together, the study proved that predictive cues elicit a liminal confirmation bias in moral image evaluation, much in the same way as in bivalent food evaluation; and response speed is associated with, but does not cause, polarization in the moral evaluation of real-world images and in the judgment of food preference but suggested a critical role for the ease of processing. The findings in the present research realize a valuable achievement in the area of psychological science, particularly with respect to moral cognition.

Therefore, we conclude that this thesis deserves to be acknowledged as a doctor's thesis (Systems Life Sciences).