## Neural Systems Underlying the Fundamental Attribution Error and its Consequences for Person Perception

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## Abstract

When trying to figure out why other people behave the way they do, we should take into account both dispositional factors (such as personality traits) and situational constraints as potential causes for a behavior. However, people often ignore the importance of situational factors, a phenomenon known as the Fundamental Attribution Error (FAE). To investigate the neural mechanisms underlying the FAE, we decomposed the attribution process by separately presenting information about behaviors and about the situational circumstances in which they occur. After reading the information, participants judged to what extent the behavior was attributable to dispositional or situational causes (attribution), and how much they liked the person described in the scenario (evaluation). FAE was associated with reduced BOLD in DLPFC during the encoding of situational information, consistent with the failure of a correctional process that integrates situational information into attributions. Furthermore, attributions were strongly linked to subsequent evaluations. We observed a dissociation between brain regions involved in evaluations that integrated situational information and evaluations based exclusively on behavior, with DMPFC emerging as potential substrate of the integration of attributions and evaluations. Our findings demonstrate how top-down control processes regulate impression formation when situational information is taken into account to understand others.

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