

Thinking Biases in Searching for Explanation: Plausibility Bias and Local Coherence

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ABSTRACT Authors' previous research demonstrated the existence of Post hoc Explanation Bias, which is contrary to scientific thinking. People did not prefer predictions to post hoc explanations. If this thinking bias reflects primitive "Searching for Explanation" mental set, the authors hypothesized that based on this mental set, people may emphasize on plausibility of every individual explanation than the existence of alternative explanations. This in turn generated the second hypothesis, that the attention on plausibility may lead to the neglect of the contradiction of existing explanations and induce local coherence. Two experiments were designed to test these hypotheses. In Experiment 1, 228 college students were asked to indicate to what degree they thought the explanation presented after each unusual event was acceptable. Results are consistent with the plausibility hypothesis: (1) participants demonstrated less acceptance of the explanation offered if he had own explanation; (2) the number of alternative explanations had no effect on participants' acceptance of the particular explanation offered. In Experiment 2, 284 college students were asked to evaluate the probability that an explanation was true (Argument A) in one story and the feasibility of a suggestion (Argument ~A) in the other. The result evidently supports the local coherence hypothesis.