Changing Perspectives: Examining Factors Related To Counterfactual Thinking In Ambiguous Social Judgments

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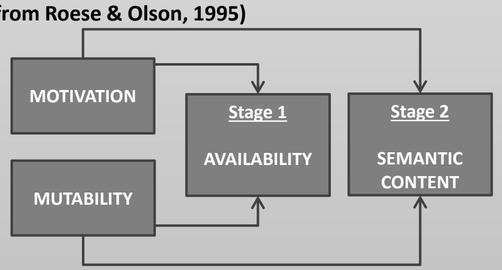
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INTRODUCTION

- People's sensemaking strategies underlie how they evaluate information and involves motivated reasoning (Kunda, 1990). Examples like hiring decisions, vaccine adoption, and climate change perception.
- People draw conclusions quickly and fail to question them (Pennington & Hastie, 1986).
- Questioning one's theory or perspective is a necessary step in considering alternatives in the sensemaking process (Klein et al., 2007).
- Operationalizing changing perspective: a) number of alternative stories, b) outcome likelihood judgments (e.g., Ji et al., 2001)
- Potential strategy is counterfactual reasoning (Roese & Olson, 1995). Hypothesis: Focus on mutability activates availability, or ease of generating counterfactuals *(Fig. 1).*
- **Research Question:** What factors are related to questioning one's perspectives?

Figure 1. Counterfactual generation model (Adapted from Roese & Olson, 1995)



METHODS

- 80 participants read 5 ambiguous scenarios (informational, social, work, environment, gender), generated 2 explanations of what could have been happening, and rated the likelihood of an unexpected outcome.
- Social scenario: *Andrew bumps into an old friend he hasn't seen for a long time in the street, but she is in a rush. Andrew arranges to meet later in a bar. He arrives on time and a few minutes later she is still not there.*
- Additionally generated missing information & mutable factors, and rated ease of generating explanations & ambiguity (1-9 scale)

RESULTS

- Path analysis performed with Unexpected Outcome Likelihood representing questioning an initial perspective of the ambiguous scenarios. Two models compared:
- **Base Model** *(Fig. 2)* Each variable equally predicts the Unexpected Outcome Likelihood.
- **Counterfactual Reasoning (CR) Model** *(Fig. 3)* Missing Info and Mutable Factors are mediated by Ease of Explaining in predicting an Unexpected Outcome Likelihood (as mutability activates availability of counterfactuals, e.g., Roese & Olson, 1995).

Figure 2. Base Model, all equally predict Unexpected Outcome Likelihood (* p< .05)

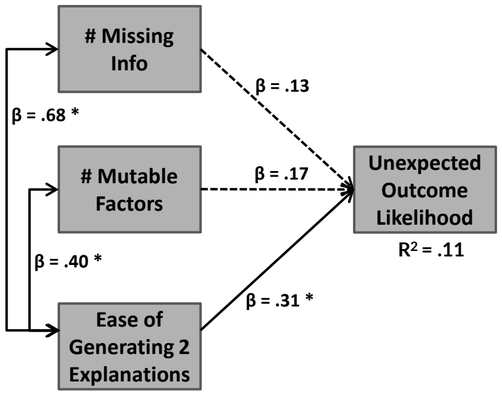
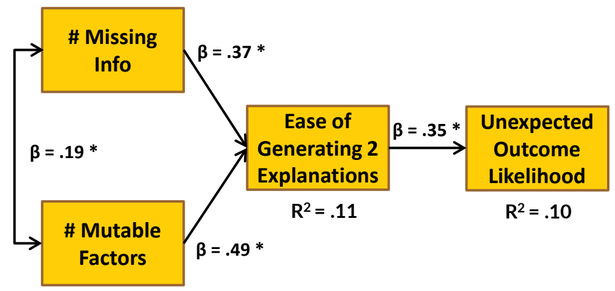


Figure 3. Counterfactual Reasoning Model, Ease as a mediator in predicting Unexpected Outcome Likelihood (* p< .05).



- CR Model fit was better than Base Model fit, indicating that Ease of Generating Explanations is an important mediator between measures of mutability and a measure of perspective questioning *(Table 1)*. One interpretation is that in this context, Ease is the driving process of making likelihood judgments; mutability only has an effect when generating alternatives is easy.
- CR Model fit was further improved by adding a direct link from Missing Info *(Fig. 4)* or from Mutable Factors *(Fig. 5)* to Unexpected Outcome Likelihood, though neither were significant.

Table 1. Model fit results of path analysis on Base and Counterfactual Reasoning (CR) models.

Model	AIC	RMSEA	TLI
Base model	5849.81	0.15 (CI: 0.08–0.24)	0.43
CR model	5841.92	0.60 (CI: 0.00–0.13)	0.93
CR 2 model	5841.74	0.60 (CI: 0.00–0.16)	0.92
CR 3 model	5841.24	0.40 (CI: 0.00–0.15)	0.96

Figure 4. CR Model 2, with direct path from Mutable Factors to Unexpected Outcome Likelihood (* p< .05).

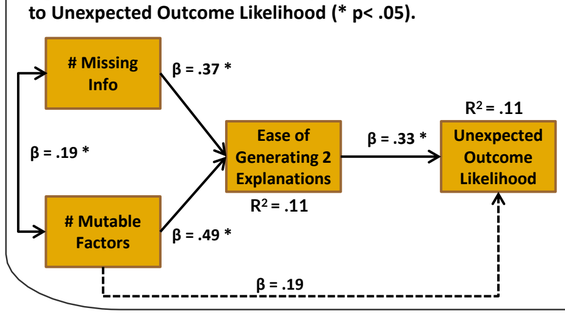
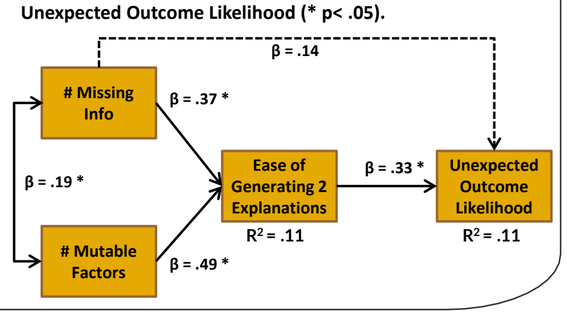


Figure 5. CR Model 3, with direct path from Missing Info to Unexpected Outcome Likelihood (* p< .05).



DISCUSSION

- **Path analysis results**: Ease of generating alternative explanations shows the strongest effect on the measure of questioning one's perspective. Consistent with Schwarz et al.'s (1991) availability heuristic research which shows evaluating how easy an idea comes to mind influences the outcome judgment.
- **Mutability**: Improved model fit through direct links to Missing Info and Mutable Factors suggests the importance of mutability on questioning perspectives as well. Mediation of Mutability by Ease is consistent with counterfactual generation model (Roese & Olson, 1995).
- ***Limitations:*** Study is correlational. Need to evaluate concepts experimentally.
- ***Future research:*** Experiment to manipulate focus on mutability and ease of generation, examining their effects on outcome likelihood judgments (questioning perspectives).
- ***Practical implications:*** Understanding what strategies lead people to question their theory of a situation has wide practical implications for decision making under uncertainty (i.e., hiring and promotion decisions, vaccine adoption, climate change policy). People's ability to consider alternate explanations remains crucial, though consideration of any mutability or unknown information in the situation may be a potential strategy for questioning or changing perspectives.

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