

Different alternative explanations can render different information relevant to explaining an event

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Abstract: Scientific reasoning includes deciding whether information is relevant to explaining an event. In some cases, seeing information as relevant requires having a background theory or explanation that can make sense of the information. College students were shown a possible explanation for an event, along with two pieces of possibly relevant information (Info1 and Info2), and one of two possible alternative explanations (Alt1 or Alt2). Info1 was seen as more relevant when Alt1 rather than Alt2 was presented; Info2 was seen as more relevant when Alt2 rather than Alt1 was presented. In addition, relevance ratings of the information increased as did initial ratings of the Alternative. People from different backgrounds might bring with them different alternative theories that can hinder the understanding of why some information is relevant and other information not. In addition, finding the initial alternative compelling might enable people to better assess the relevance of additional information.