

# Bias, Suggestibility, and the Creation of False Memories

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Hypothesis: Post-event suggestion will create a higher rate of false memories than bias. Methods: 185 subjects were randomly assigned to 2 groups, either bias or suggestibility. The bias group received negative pre-event priming, asked what they saw in the video, given neutral post-event priming, and asked again about the video. The suggestibility group received neutral pre-event priming, asked about the video, given negative post-event priming, and asked again about the video. In the first round, the suggestibility group was not yet been given negative priming, and therefore acts as the control group for the bias group. Results: There was a 16.2% increase in the false memory rate from control to suggestion, a 14.9% increase from bias to suggestion, and only a 1.3% increase from control to bias. The difference between bias and suggestion, and control and suggestion are significant at the 0.05 level on a using a Pearson's Chi Square Test. Conclusion: The original hypothesis was supported by the experimental data. There is a statistically significant increase in false recollection, when post-event suggestibility is used, compared to pre-event bias. This study found a 14.9% higher rate of false memories from bias to suggestion. The experiment showed no significant relationship between bias and false recollection, and shows a significant relationship between suggestion and false recollection. This result seems to suggest that pre-event negative knowledge is less likely to change memory than post-event information. Suggestion has a greater ability to create memories than bias.

**Awards Won:**

