

## Does “Being There” Improve Memory: The Impact of Presence on Recall

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### Abstract

*This study intends to investigate the roles of color vs. black-and-white in film and their impact on the level of presence experienced by viewers. The study also seeks to understand the relationship between color vs. black-and-white in terms of their effects on visual and factual recall, as well as the role of presence on these types of recall.*

**Keywords**---presence, visual recall, factual recall, color vs. black-and-white film

Past research suggests that the existence of color in a mediated presentation leads to changes in the way a person may view that mediated offering. Newspaper readers were found to prefer color over black-and-white in four-color halftones. [1] Also, the inclusion of color photographs in newspapers was discovered to alter the manner in which people read that paper. It was found that color photos drew people’s attention more than black-and-white photos. [2] In researching mediated presentations of moving images, studies utilizing what was then the advent of color television found that viewers felt that they were more participatory in televised events than those viewers who watched the same programs in black-and-white. [3; 4] The color group was described as being more absorbed and emotionally involved than the black-and-white group. [3; 4] The black-and-white group was found to have paid greater attention to the commentators of the programs. [3; 4].

Based on these findings, it appears that the color group was more immersed and engaged in the visual presentations than was the black-and-white group. Immersion and Engagement are two of the three elements of Presence, a communication concept which has also been described as a sense of “being there” for audience members. Through prior research, it has been suggested that color should evoke more presence than black-and-white. [5] Also, color should add a greater element of reality for viewers. [6] Realness is the third element of Presence. With recall also having been discussed in terms of color vs. black-and-white [3; 4], three research questions were developed.

Our three research questions consist of, (1) *Will color lead to greater recall?* (2) *Will color lead to a greater sense of presence?* and (3) *Will presence play a role in recall?* To explore these questions, two groups of college students were shown footage from a World War

II documentary [7], which utilized film from the war that was originally shot in color. One group was shown a ten-minute segment in its original color, while the second group was shown the same segment with the color having been stripped away, leaving it in black-and-white. Following the viewing sessions, both groups were administered a questionnaire that included measures for immersion, engagement, realness, visual recall, and factual recall. A statistical analysis of the relationships between these variables was then conducted using SPSS.

(1) It was found that color was significant in its relationship to factual recall, but not for visual recall. (2) Participants who watched the segment in color reported did not report a greater level of presence, though this relationship was also found to be approaching significance. This relationship was also found to be significant. (3) Also, participants who experienced a higher sensation of presence scored higher in their factual recall score. Visual recall was found to not significantly be affected by color, black-and-white, or a greater level of Presence.

### References

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