Mood Congruent Visual Perception

Matthew Altobelli & Tina Sutton, PhD

Contact Information: mga4278@rit.edu

INTRODUCTION

- Inattentional blindness is missing a stimulus within the visual field when cognitive resources are spent elsewhere (Bredemeiier et al., 2014)
- Some stimuli manage to break through the attentional filter
 - Mood plays a critical role in what people see and remember (Spindle & Riener, 2013)
 - Stimuli congruent with one's mood and goals are more likely to be noticed and remembered (Becker & Leinenger, 2011)
- Current study looked at how a participant's mood influenced what words would be noticed and remembered when they were presented at a speed on the threshold of conscious awareness (.03058 Sec)

METHODS

- Undergraduate RIT students (N= 29 mean age = 20.62, *SD* = 5.85, 44.8% male and 55.2% female)
- 15 participants were in a positive mood, 14 were in a negative mood (PANAS).
- Ishihara Color Vision Test
- Mood Induction Video: Positive, Negative, or Neutral
- PANAS to assess mood state after video
- Color Identification Task (see below)
- Recall Task
- Recognition Task (99 words, 30 from the task and 69 new)





Figure 2. Mean correct recognition for negative, neutral, and positive words for all participants





Figure 3. Correct recall for negative, neutral, and positive words, and false recall for negative, neutral, and positive words by mood state (negative or positive)

Figure 4. Correct recognition for negative, neutral, and positive words by mood state (negative or positive)



Department of Psychology, College of Liberal Arts, Rochester Institute of Technology Presented at the 125th Meeting of the Eastern Psychological Association 2020, Boston

> Figure 1. Mean correct recall for negative, neutral, and positive words for all participants

DISCUSSION

- There was a three-way interaction between task, valance and mood.
 - Participants in a negative mood recognized more • negative words than positive words and neutral words
 - Participants in a positive mood recognized more positive words than neutral words and more negative words than neutral words
 - The broaden-and-build theory of positive emotions suggests that positive emotions broaden one's awareness and encourage novel, varied, and exploratory thoughts and actions (Fredrickson, 2006)
- Word Recognition was better than Recall
 - Negative words were recognized the most, followed by positive words. Neutral words were recognized significantly less than both positive and negative words consistent with the emotional memory enhancement theory (Sereno et al.,2015)
- Participants in a negative mood recalled more false negative words (words that were not in the task) than those in a positive mood consistent with the negative dominance theory (Wicker et al., 1979)
 - People in a negative mood are more likely to see • everything in a negative light. The results here show that those in a negative mood thought of other negative words they were not shown more than participants in a positive mood.

References

Becker, M. W., & Leinenger, M. (2011). Attentional selection is biased toward mood-congruent stimuli. Emotion, 11(5), 1248-1254. doi:http://dx.doi.org/10.1037/a0023524

Bredemeier, K., Hur, J., Berenbaum, H., Heller, W., & Simons, D. J. (2014). Individual differences in emotional distress and susceptibility to inattentional blindness. Psychology of Consciousness: *Theory, Research, and Practice*, 1(4), 370-386. doi:http://dx.doi.org/10.1037/cns0000032

Fredrickson, B. L. (2006). The broaden-and-build theory of positive emotions. In M. Csikszentmihalyi, & I. S. Csikszentmihalyi (Eds.), A life worth living: Contributions to positive psychology; A life worth living: Contributions to positive psychology (pp. 85-103, Chapter ix, 253 Pages) Oxford University Press, New York, NY. Retrieved from https://ezproxy.rit.edu/login?url=https://search.proquest.com/docview/621210442?accounti

- d=108 Sereno, S. C., Scott, G. G., Yao, B., Thaden, E. J., & O'Donnel, P. J. (2015). Emotion word processing: Does mood make a difference? Frontiers in Psychology, 6, 13. Retrieved from https://ezproxy.rit.edu/login?url=https://search-proquest-
- com.ezproxy.rit.edu/docview/1770005579?accountid=108

Spindle, T. R., & Riener, C. R. (2013). The effect of anger and relaxation on the visual perception of distance. Psi Chi Journal of Psychological Research, 18(1), 2-9. Retrieved from https://ezproxy.rit.edu/login?url=https://search.proquest.com/docview/1509632540?accounti d=108

Wicker, F. W., Craghead, J. C., Convis, C. L., & DeJong, R. H. (1979). Negative dominance in hedonic integration of noun–noun pairs. *Motivation and Emotion, 3*(2), 129-141. doi:http://dx.doi.org/10.1007/BF01650598