

## Introduction

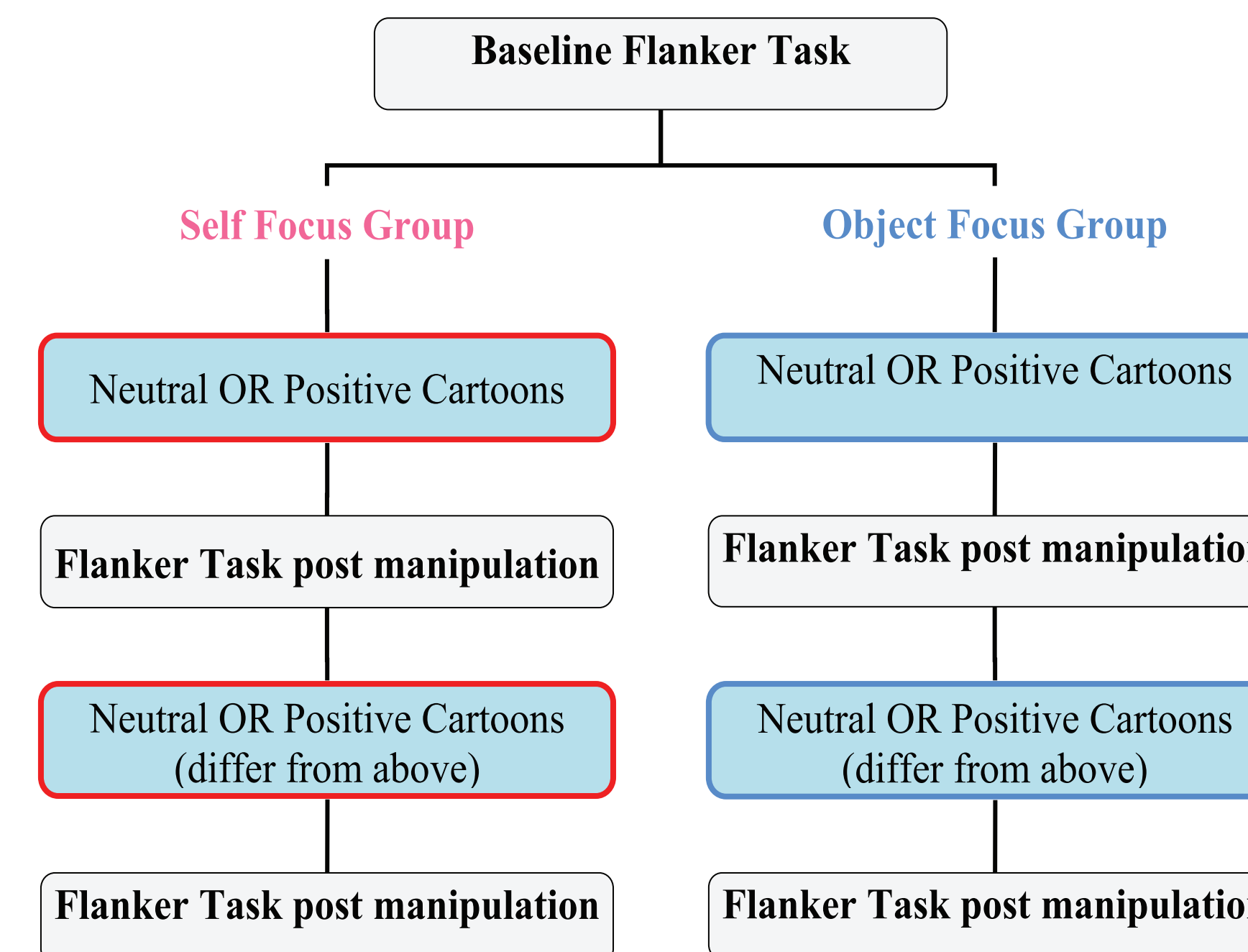
Derryberry and Tucker (1996) and the Broaden-and-Build Theory (Fredrickson, 2001) hypothesised that one of the functions of positive emotion is to broaden people's scope of attention. This was shown in studies by Fredrickson and Branigan (2005) and Rowe, Hirsh and Anderson (2007), but only with certain stimuli (i.e. music) and using specific measures. More clarity is needed.

### Key Questions:

- 1) Do positive stimuli that involve complex cognitive processing influence the relationship between positive mood and the scope of attention?
- 2) Does focusing on one's mood in particular influence the relationship?

## Method cont.

Procedure:



## Discussion

- The results showed that the positive mood induction led to a broadening in the scope of attention when flankers were presented furthest apart from each other.
- The mood induction changed the direction of the interference effect in relation to the neutral condition and baseline (shown by the crossing of the lines - see graph).
- However the effects are likely to have been stronger had we used a stronger mood induction, such as short film footage with audio instead of written words.

### Key Questions:

- 1) Do positive stimuli that involve complex cognitive processing influence the relationship between positive mood and the scope of attention?

Yes - Although the cartoons are a complex mood induction that require further processing they still managed to broaden the scope of attention.

- 2) Does focusing on one's mood in particular influence the relationship?

No - The results showed that what we asked the participants to focus on whilst looking at the cartoons had no effect on the broadening of the scope of attention.

## What is the Scope of Attention?

The scope of attention is the extent to which an individual can attend to all of the stimuli in their visual field.



## Results

We calculated the extent to which incompatible flankers at increasing spatial distances interfered with attention.

$$\text{Interference effect} = \text{compatible} - \text{incompatible trial reaction times}$$

A repeated measures ANOVA was carried out on the interference reaction time with mood (positive and neutral) and distance (near, medium, far) as within-subject variables. Results showed a significant ( $p < 0.05$ ) mood versus distance interaction (see graph).

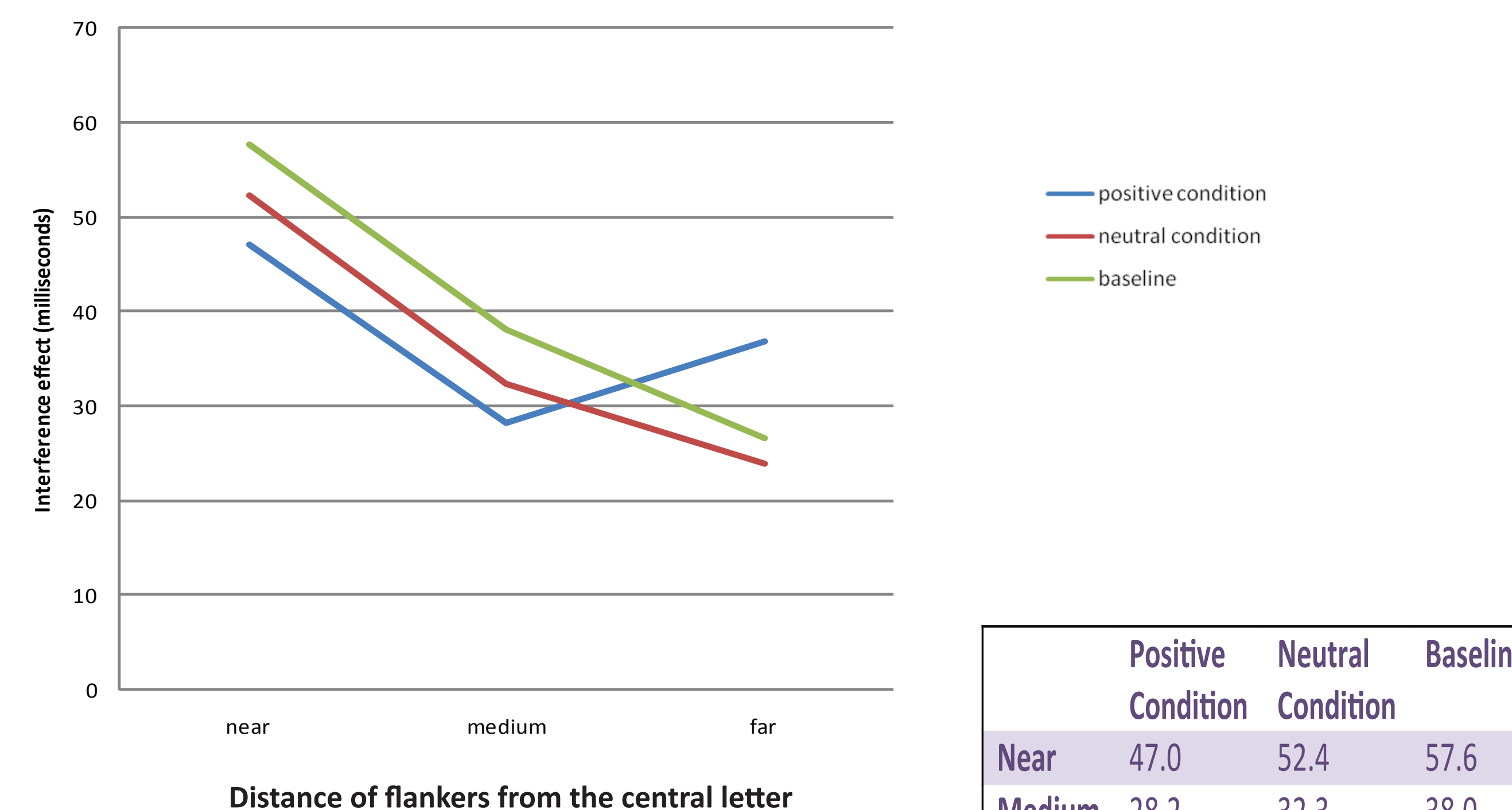


Table of Mean interference RTs

The interference effect decreases with distance except at the furthest distance where positive mood produces an increase in interference. Mood Vs Object focus showed no significant effects.

## Method

**Participants:** 68 Healthy Individuals

### Independent variables:

- 1) Positive Vs Neutral mood induction (within participants) using cartoon images with captions.
- 2) Mood Vs Object focus (between participants) through instructions and questions asked.

**Dependent variable:** The scope of attention measured by reaction times from a flanker task (used in Rowe, Hirsh and Anderson, 2007). Participants were presented with a row of 5 letters in the center of the screen, varying distances from each other (near, med, far), and asked:

"Is the middle letter a 'N' or 'H'?"

examples: NNHNN (incompatible letters) or HHHHH (compatible letters)

## Conclusion

Stimuli that involve a complex cognitive route to the generation of positive affect has the potential to broaden the scope of attention. This is regardless of whether the individual is focused on their actual mood or has a separate task to do.

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## References

- Derryberry, D., & Tucker, D.M. (2006). Motivation, self-regulation, and self-organization. In D.Cicchetti, & D.Cohen (Eds.), Developmental psychopathology. Vol. 2: Developmental neuroscience (pp. 502-532). Hoboken, NJ: John Wiley & Sons.
- Fredrickson, B.L. (2001). The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions. *American Psychologist*, 56(3), 218-226.
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