



Eye Movements Increase Utilitarian Responding in Moral Dilemmas but only for Certain Individuals

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Background

Emotion plays a key role in moral judgment, but evidence shows that the emotional salience in a dilemma differs between dilemmas and participants.

Research has mainly attempted to manipulate emotions impact on moral judgment in two ways, via directional inductions of affect or by adjusting the characteristics of dilemmas themselves.

In this study we tested the effects of a novel manipulation, eye movements, that have been shown to reduce general affect, on participants responses to personal and impersonal dilemmas.

Method

172 Ps completed 20 moral dilemmas in two blocks by selecting whether a utilitarian action was appropriate or not.

Ps were assigned to receive bilateral horizontal saccadic eye movements or the control.

Eye movements were performed before each block, following methods of Christman et al., 2003.

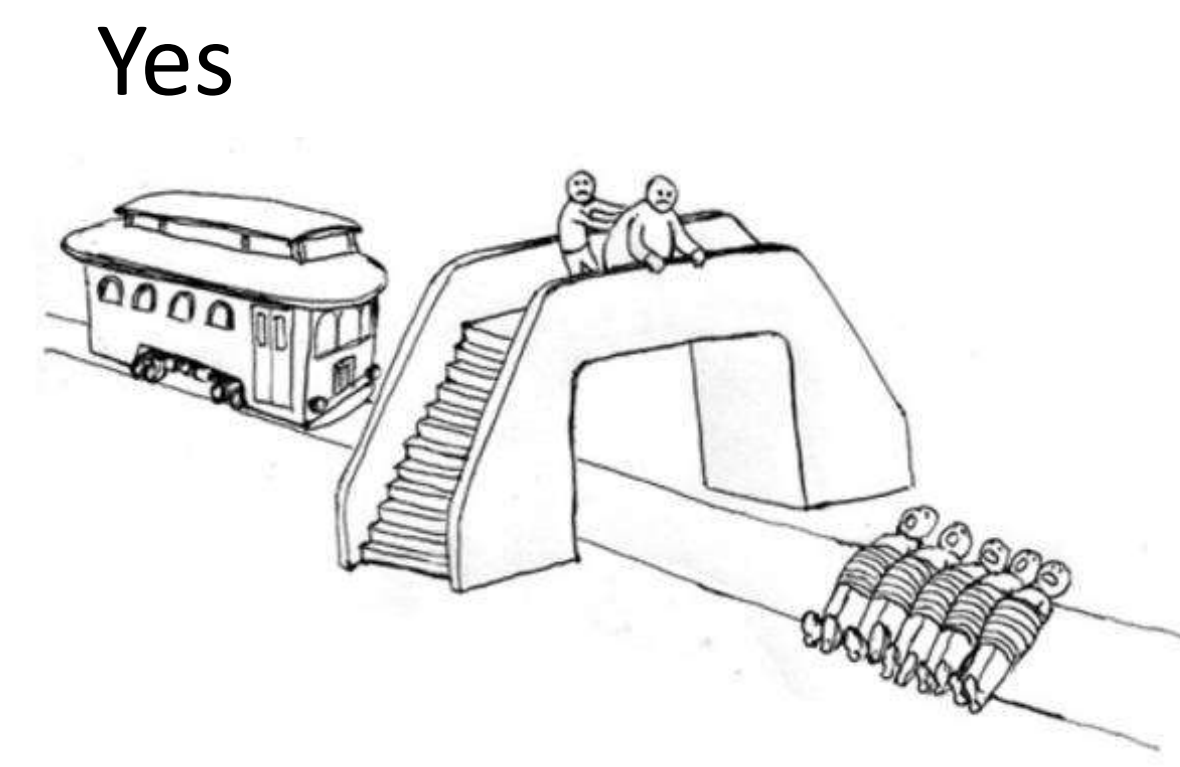
- Ps tracked a dot that flashed every 500 ms at 27 degrees visual angle apart.

Data on Ps gender and empathic concern were collected as individual difference variables.

Personal

Do you push the man off the bridge, in effect killing 1 but saving 5?

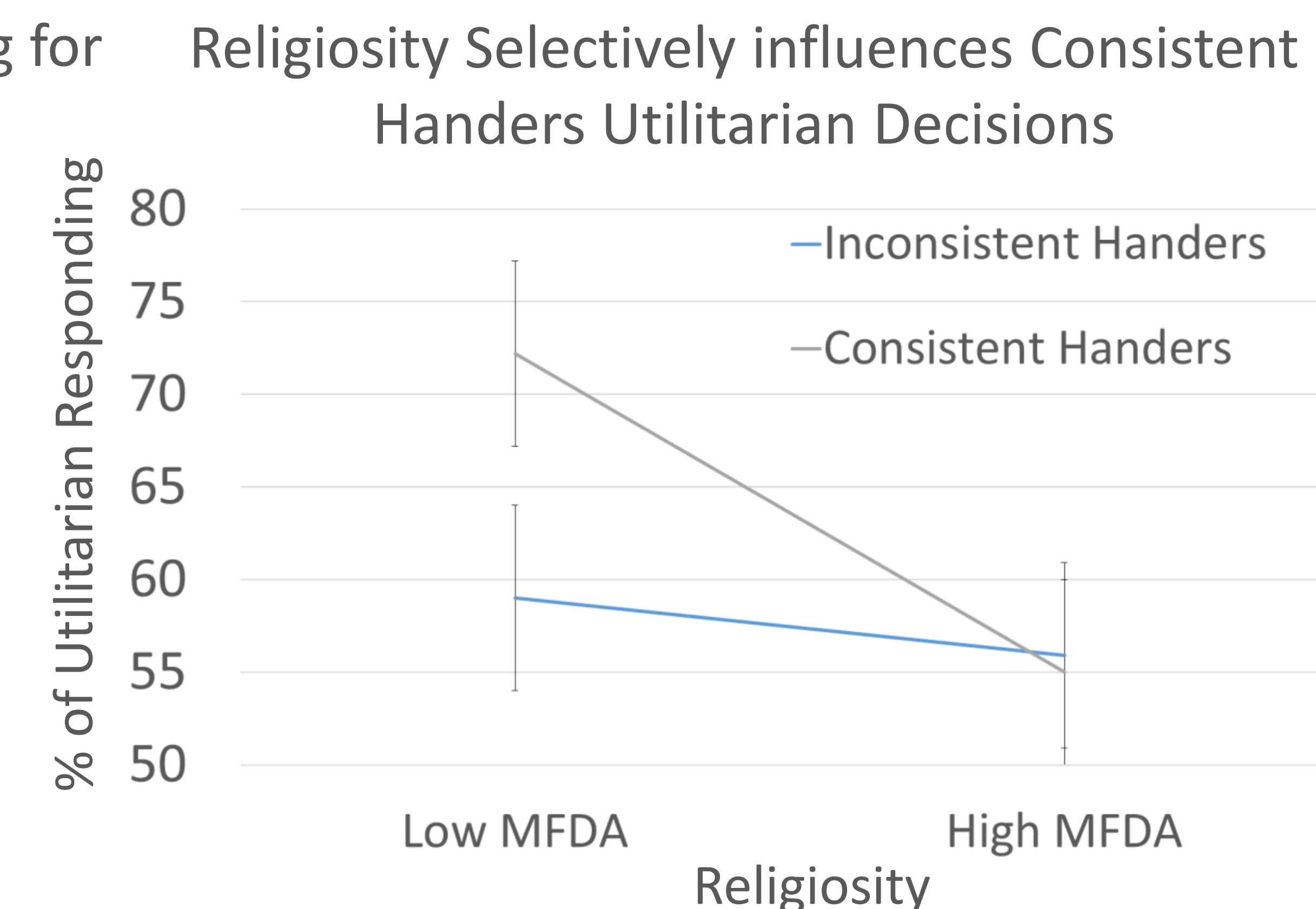
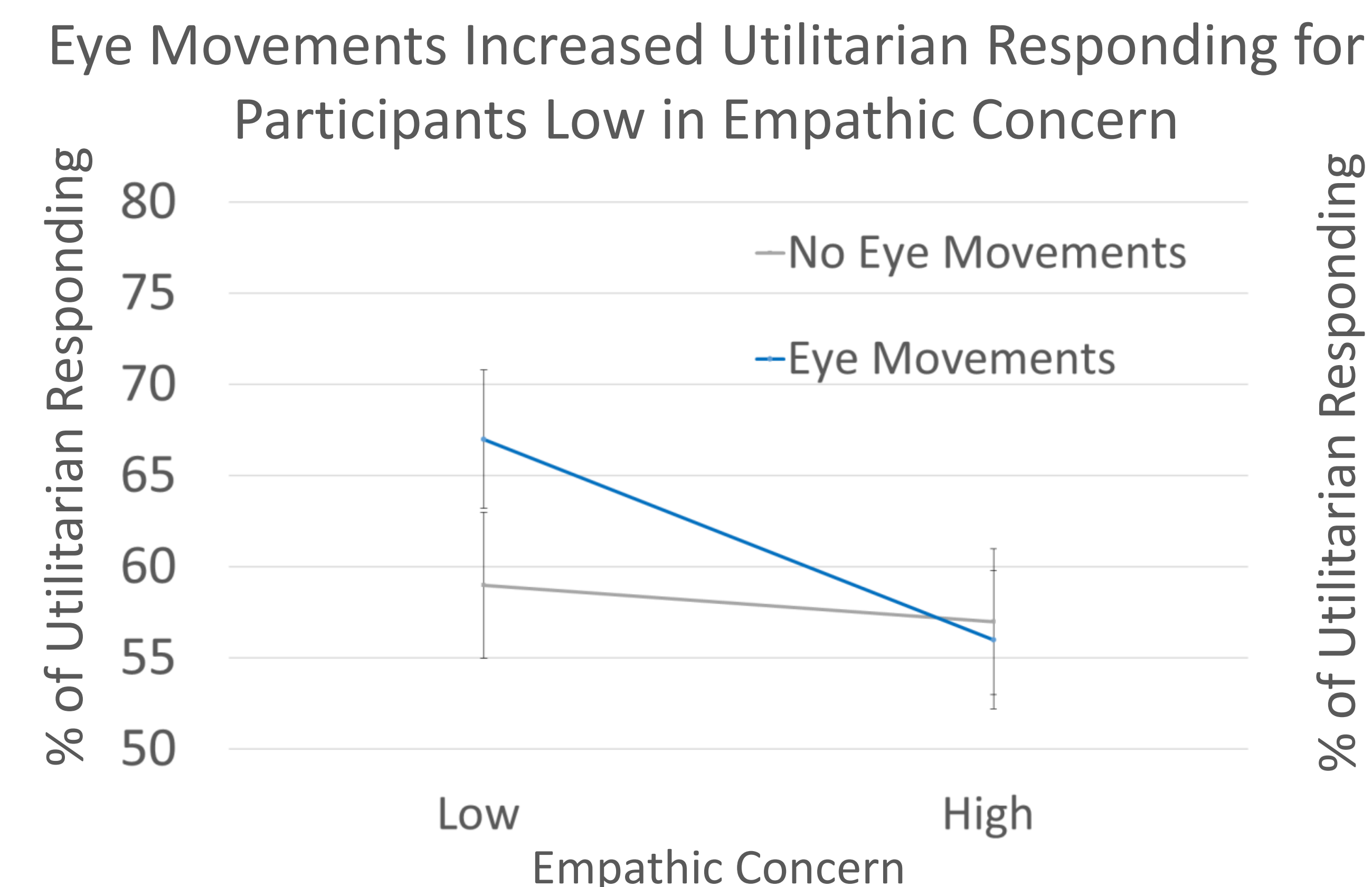
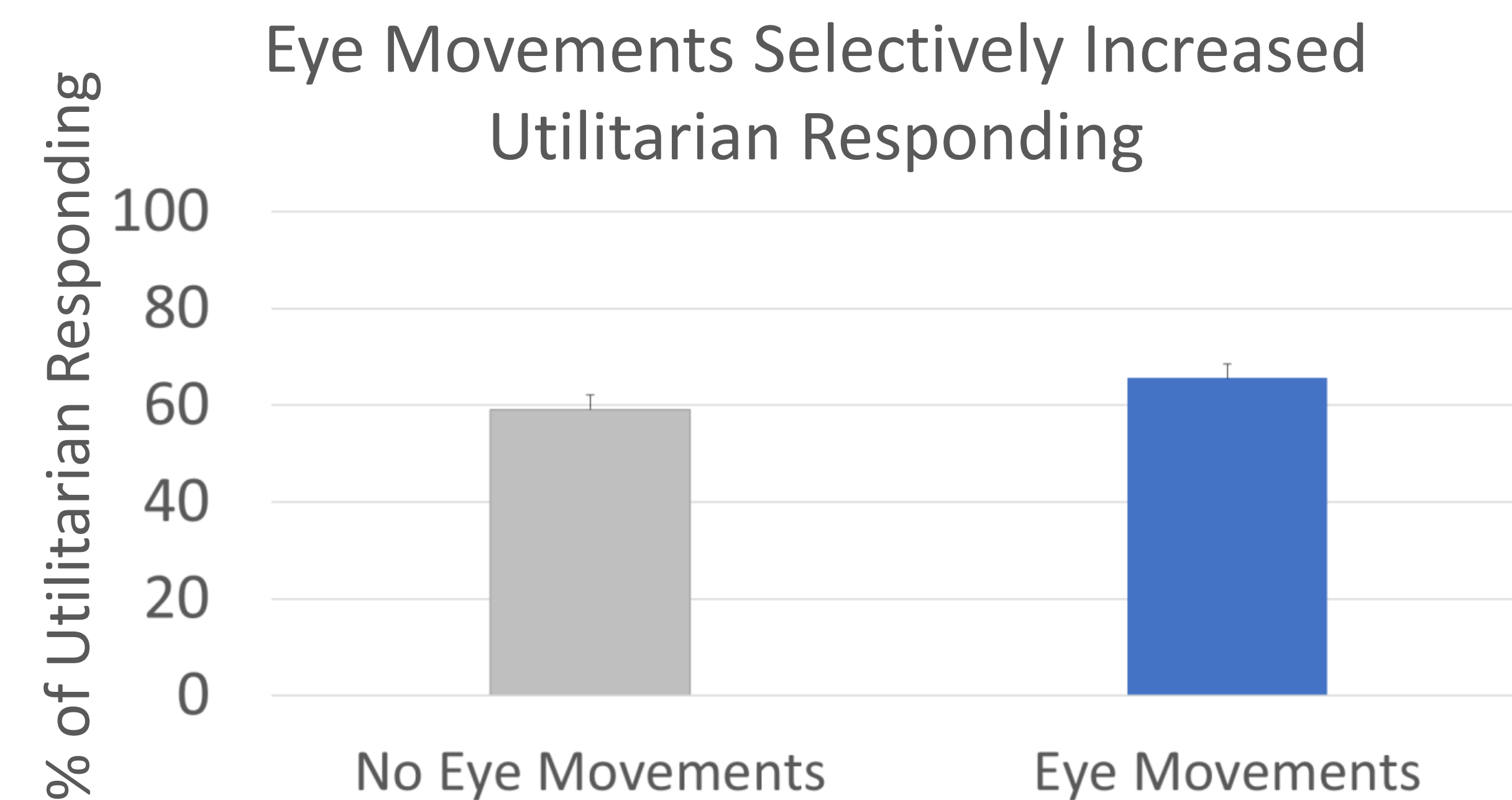
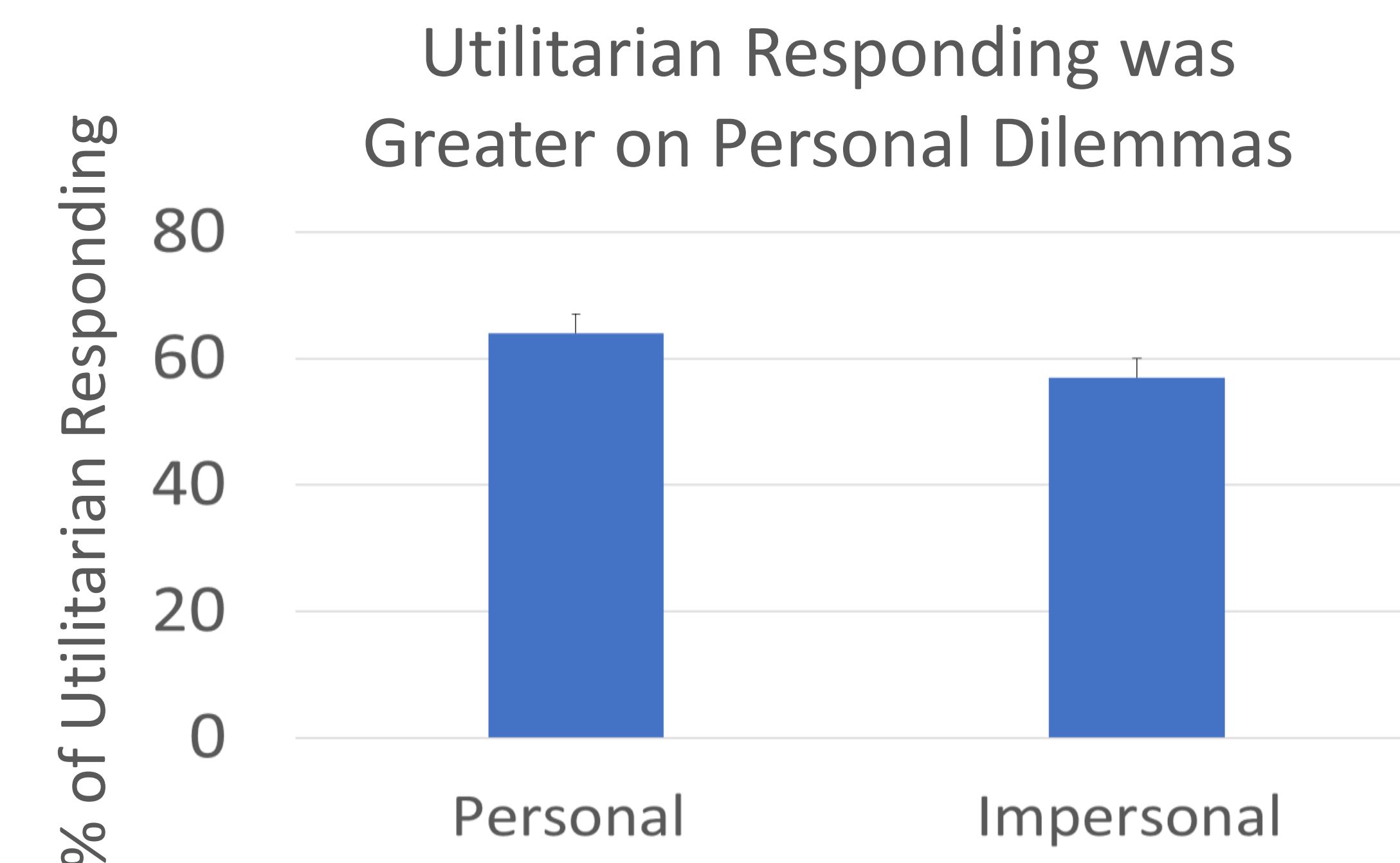
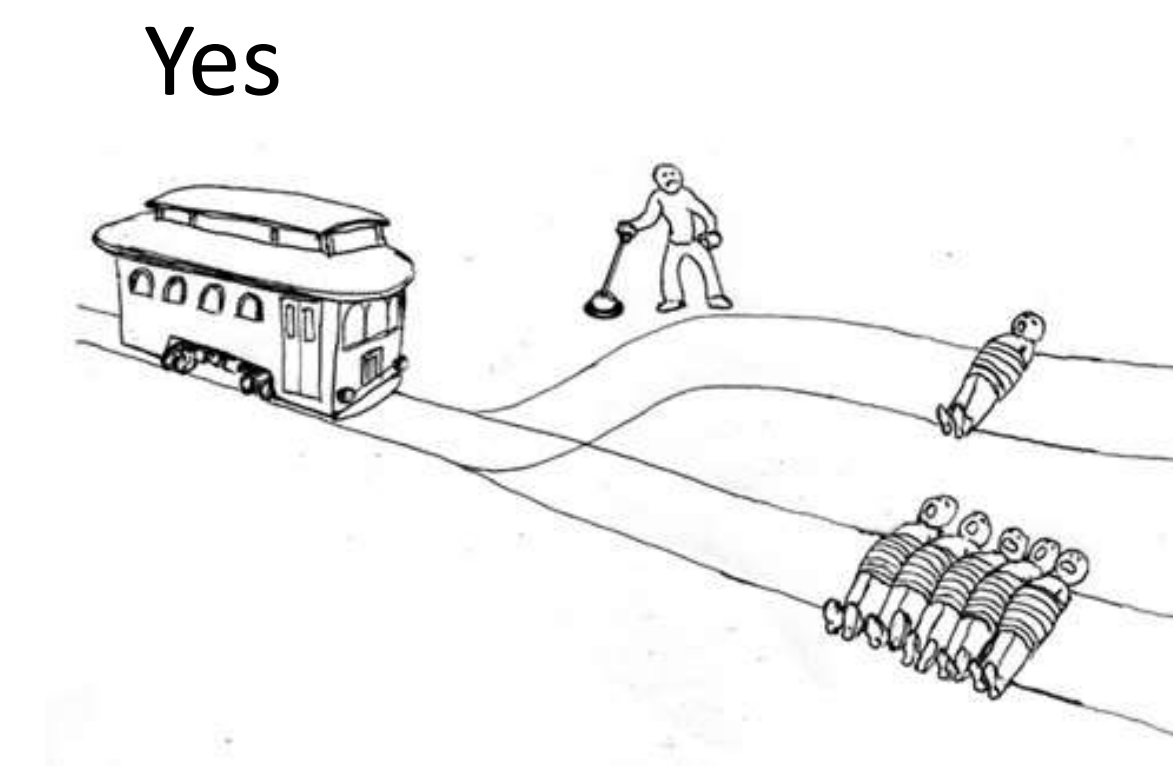
Utilitarian Response: Yes
More emotional –



Impersonal

Do you pull the switch, in effect killing 1 but saving 5?

Utilitarian Response: Yes
Less emotional –



References

- Christman, S., Garvey, K., Propper, R., & Phaneuf, K. (2003). Bilateral eye movements enhance the retrieval of episodic memories. *Neuropsychology, 17*(2), 221-229.
- Miller, M. B., Sinnott-Armstrong, W., Young, L., King, D., Paggi, A., Fabri, M., ... Gazzaniga, M. S. (2010). Abnormal moral reasoning in complete and partial callosotomy patients. *Neuropsychologia, 48*(7), 2215-2220.

Results

- Ps were more likely to consider the utilitarian actions appropriate in impersonal than personal dilemmas $t(85) = 23.64, p < .001$.
- Transformed data (10% trimmed mean) on utilitarian responses showed eye movements increased utilitarian responding $t(141) = 2.278, p = .024, \eta_p^2 = .035$.
- Empathic concern and eye movements interacted, $F(1,168) = 3.942, p = .049, \eta_p^2 = .023$.
- Handedness X Religiosity interaction, $F(1,168) = 5.309, p = .022, \eta_p^2 = .031$.

Conclusions & Future Studies

Eye movements increased utilitarian responding for specific Ps, i.e., those low in empathic concern and the middle 80% of Ps.

The effect of eye movements may be due to several underlying causes:

- A reduction in general affect
- An increase in interhemispheric integration, which Miller et al., 2010 has argued is key to moral responding.

Future research should measure affect before and after eye movements and add manipulations designed to increase integration by degree, rather than all or none.