

Greater social cognition-related right temporal pole activation in World Trade Center Responders with PTSD: preliminary evidence

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INTRODUCTION

The neural instantiation of social cognition (as a psychological factor associated with greater resilience to traumatic stressors), is an emerging but important area for understanding interpersonal dysfunction in PTSD.

OBJECTIVES

In this study, we sought to examine social cognition-related brain activation during a mentalizing task in symptomatic individuals with PTSD, compared both to highly resilient and lower-exposed controls. We hypothesized that the PTSD group would show lower social cognition-related BOLD activation in hypothesized regions of interest relative to both lower-exposed and resilient control groups.

SOCIAL COGNITION TASK

*Does the word match the face?
Press right for Yes and left for No*



CURIOUS

No

Yes

Social decision



DARK EYEBROWS

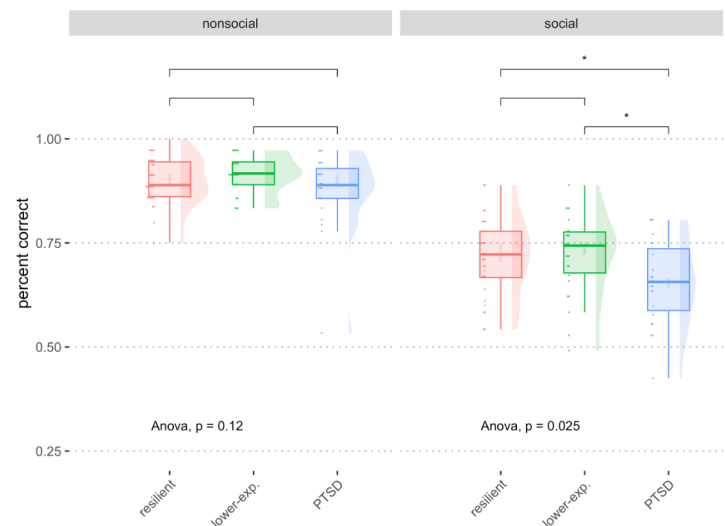
No

Yes

Non-social decision

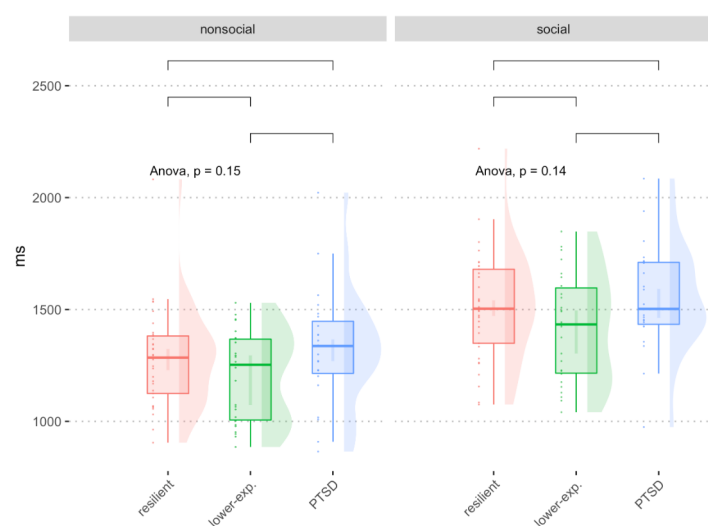
METHOD & RESULTS

Behavioral data



Accuracy by group & trial type (N = 82)

All groups had comparable accuracy on Non-social trials, but the PTSD group was less accurate on Social trials than than other groups. Across the sample, accuracy rates were lower in the Social condition vs. the Non-social condition.



Mean RTs by group & trial type (N = 82)

All three groups were slower to respond on Social trials vs. Non-social trials, with no significant group differences in either condition.

fMRI results

fMRI methods

CONCLUSIONS

LIMITATIONS

REFERENCES

FUNDING