OBSESSED, WORRIED, OR ANXIOUS ABOUT MISTAKES: 
AN ERROR-RELATED NEGATIVITY STUDY
Laura Zambrano-Vazquez, Amreen Gill, Julia Kamp, Jinyuan Zhang, & John J.B. Allen
University of Arizona

Abstract

Background
- Error-monitoring activity is increased among those with anxiety and negative affect.
- Enhanced ERN in individuals with OCD.
- OCD is characterized by future-oriented worry cognitions that are associated with behavioral compensations and anxious arousal.
- To date, research has not investigated if this effect is specific to OCD or also characteristic of worry and anxiety in general.

Purpose
- To look at the differences in ERN amplitude across three experimental groups (high OC, high anxiety, and high worry) and a control group to attempt to better characterize the enhanced ERN observed in OCD.

Methods
- EEG data were recorded while participants completed a Flankers Letter Task. Data were collected from 63 participants.

Hypotheses
- It was predicted that for the high OC group, an enhanced ERN relative to the control group would be observed.
- High worry and high anxiety groups were also hypothesized to exhibit a larger ERN relative to the control group.

Results
- Contrary to expectations and to previous findings, our results showed no enhanced ERN in the OC group relative to the control group.

Conclusion
- Because these high OC participants were screened specifically to be lower on anxiety and worry, these findings suggest that heightened ERN in OCD may reflect anxiety and negative affect as opposed to OC symptoms specifically.

Background
- Error-monitoring activity is increased among those with anxiety and negative affect.
- Enhanced ERN in individuals with OCD.
- OCD is characterized by future-oriented worry cognitions that are associated with behavioral compensations and anxious arousal.
- To date, research has not investigated if this effect is specific to OCD or also characteristic of worry and anxiety in general.

Purpose
- To look at the differences in ERN amplitude across three experimental groups (high OC, high anxiety, and high worry) and a control group to attempt to better characterize the enhanced ERN observed in OCD.

Methods
- EEG data were recorded while participants completed a Flankers Letter Task. Data were collected from 63 participants.

Hypotheses
- It was predicted that for the high OC group, an enhanced ERN relative to the control group would be observed.
- High worry and high anxiety groups were also hypothesized to exhibit a larger ERN relative to the control group.

Results
- Contrary to expectations and to previous findings, our results showed no enhanced ERN in the OC group relative to the control group.

Conclusion
- Because these high OC participants were screened specifically to be lower on anxiety and worry, these findings suggest that heightened ERN in OCD may reflect anxiety and negative affect as opposed to OC symptoms specifically.

Results
- Contrary to predictions, the OC group in fact had the lowest response-locked amplitudes, across both correct and error responses, with other clinical groups showing elevated scores relative to the control group.

Background
- Error-monitoring activity is increased among those with anxiety and negative affect.
- Enhanced ERN in individuals with OCD.
- OCD is characterized by future-oriented worry cognitions that are associated with behavioral compensations and anxious arousal.
- To date, research has not investigated if this effect is specific to OCD or also characteristic of worry and anxiety in general.

Purpose
- To look at the differences in ERN amplitude across three experimental groups (high OC, high anxiety, and high worry) and a control group to attempt to better characterize the enhanced ERN observed in OCD.

Methods
- EEG data were recorded while participants completed a Flankers Letter Task. Data were collected from 63 participants.

Hypotheses
- It was predicted that for the high OC group, an enhanced ERN relative to the control group would be observed.
- High worry and high anxiety groups were also hypothesized to exhibit a larger ERN relative to the control group.

Results
- Contrary to expectations and to previous findings, our results showed no enhanced ERN in the OC group relative to the control group.

Conclusion
- Because these high OC participants were screened specifically to be lower on anxiety and worry, these findings suggest that heightened ERN in OCD may reflect anxiety and negative affect as opposed to OC symptoms specifically.

References


The authors would like to thank the members of the Psychofizz Lab for their feedback on the poster.