Emotions are not only a key aspect of experience in our daily life, but they also influence attention to the environmental stimuli. Task irrelevant emotional information can draw our attention and influence task performance. Specifically, the impact of emotion on spatial perception is affected by which sense we receive the emotional information or use to target the attended objects; however, the nature of this interaction is not fully understood.

In the current study, participants localized a neutral visual or auditory target (dot or beep) paired with an emotional visual or auditory distractor, with varied timing of presentation (during target presentation or localization response). We found that when the target and distractors are presented simultaneously, sensory congruent target-distractor pairs were impacted by the emotion of the distractor. For auditory pairs, an emotional valence effect was noted, with the positive emotional distractors impairing localization performance most and negative distraction least. For the visual pairs, an emotional arousal effect was discovered, with both the positive and negative emotional distractors decreasing localization performance compared to the neutral distractors.

When the distractor is presented with the behavioural response, no similar effects were identified in sensory-congruent trials; however, negative auditory emotional distractors increased performance over trials with neutral visual distractions. These results highlight the complexity of the multi-sensory emotional integration in localization tasks as well as the importance of consideration of all aspects of an emotional stimuli in a context in order to predict and interpret performance.

Themes:

| Innovation and Technology | Health and Wellness | Culture and Society | Sustainability and Conservation |

Comments:

Commented [A1]: I found this abstract very technical and could not understand it without looking up terminology online.

Overall comment: please use active voice, it would make the abstract already much easier to follow (at least for me)

Commented [A2]: What is task irrelevant emotional information?

Commented [A3]: This is quite convoluted… can you use active voice?

Commented [A4]: This is very technical. I have a hard time imagining what the participants were doing … lots of information in one sentence.

Commented [A5]: This is very technical… what is the emotion of a distractor? What is sensory-congruent?

Commented [A6]: What is this?

Commented [A7]: ? Do you mean, there was an emotional valence effect?