

Pandemic Emotion Perception

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INTRODUCTION

Holistic processing is used to perceive the faces we see everyday. It involves taking in all the features as an integrated whole to interpret emotions and expressions (Tauber et al., 2011).

The COVID-19 pandemic is unprecedented and has necessitated masks in most settings which interrupts the face perception process.

Previous research articulates the difficulties masks produce in multiple populations, including children and older adults (Carbon, 2021; Carbon & Serrano, 2021; Grundmann, 2020; Stajduhar et al., 2021), particularly while hearing sad, angry, and neutral audio clips.

The present study explored the impact of facial masks on emotional perception of happy, sad, and neutral audio clips in a college population to see the implications of the interruption of holistic processing.

METHODS

Participants ($N = 25$) were recruited from Intro Psych courses and were asked to determine the emotional expression perceived on each face (happy, neutral, sad) across **144 trials**.

Visual stimuli: 24 (12 male, 12 female) ambiguous masked and unmasked faces were taken from the Facial Masks and Respirators Database [FMR-DB] (Marceddu & Montrucchio, 2020).

Auditory Stimuli: 72 audio clips (24 of each emotion) from the Ryerson Audio-Visual Database [RAVDESS] (Livingstone & Russo, 2018) were displayed along with a face.

On each trial, the participants heard either **“The dogs are sitting by the door”** or **“the kids are talking by the door.”**

STIMULI



The auditory stimuli utilized can be found on a Google Drive using this QR code, as well as all stimuli references.



PREDICTED RESULTS

We predicted the participants would have greater difficulty interpreting the masked faces and their response would match the audio emotion more when presented with a masked face.

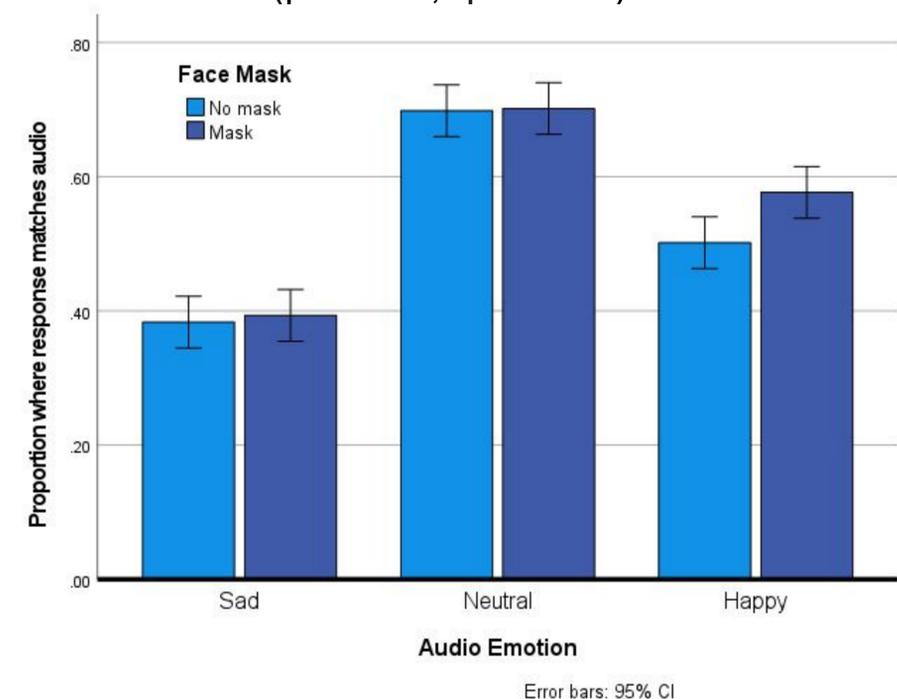
Although previous studies indicate difficulties with interpreting masks (Carbon, 2021) in this study the faces are ambiguous and would not provide them any guidance.

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ACTUAL RESULTS

- We found a main effect of audio emotion ($p < .001$, $\eta^2 = .065$)
- We found a marginal main effect of face mask ($p = .067$, $\eta^2 = .001$)



DISCUSSION

The results suggest that auditory elements can influence the process of facial detection. Masks did not change the participants' perception of the faces as much as expected which indicates local and detailed processing is being performed rather than holistic.

References

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