# Effects of Wearing a Mask on Face Perception: A Literature Review of 2 Experimental Research Studies

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## ABSTRACT

The face is the most important and informative source for non-verbal communication in social life. COVID-19 has deeply affected our non-verbal communication due to wearing a mask covering a major part of the face. In accordance with this, 2 research studies show that wearing a mask negatively affects face recognition, including face identification and emotion reading. It can be concluded that wearing a mask makes harder our daily social conversations due to concealing the rest of the face.


## INTRODUCTION

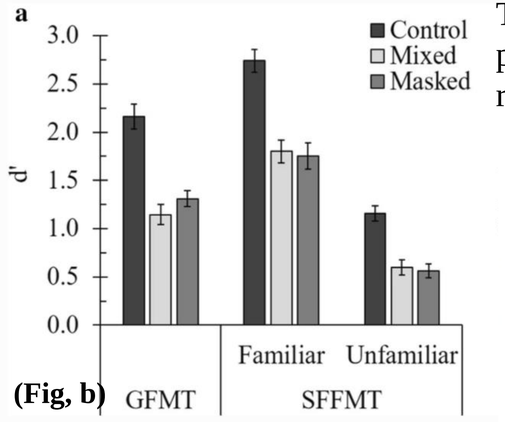
Faces can be considered as one of the most important clues of other's behavior or intentions in social interaction (6). Recognition of the face provides knowledge acquisition about biological and social features such as gender, species, age, familiarity, and emotional state (3).

However, the COVID-19 pandemic has radically changed the daily life of people around the world. In the context of COVID-19, epidemiological studies showed that wearing a mask in public has reduced daily infected cases in society (4,5). While wearing a mask is an effective way to prevent the virus, it conceals a major part of the face, which has a key role in our daily social life.

Therefore, there are two hypothesis that **wearing a mask negatively affects** both **identifying faces** and **understanding emotional expressions**.

## Effects of Wearing a Mask on Identifiying Faces


(Fig, a)




(Fig, b)

**Carragher & Hancock (2020)**

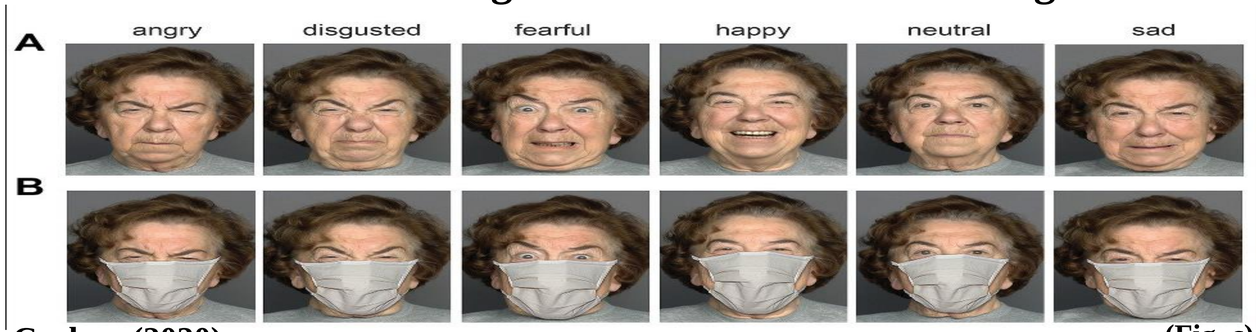
There are three different conditions: **control (both of non-masked)**, **mixed (one masked, one non-masked)**, **masked (both of masked) (Fig, a)**.

The participants were **randomly** assigned to one of the conditions.

The participants were asked to decide whether the pair presented the **same person** or **two different people**.

The results show that **wearing a mask reduces face identification performance (Fig, b)**.

## Effects of Wearing a Mask on Emotion Reading

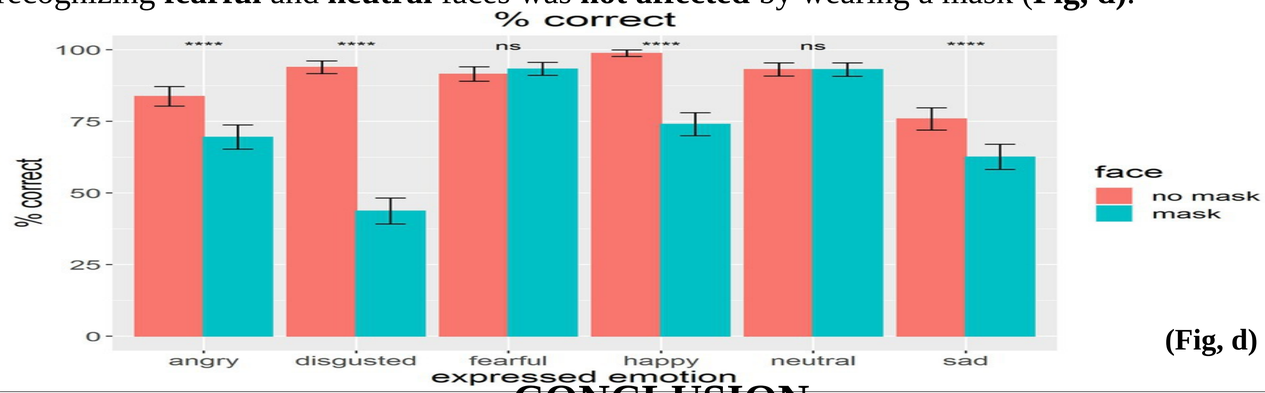



**Carbon (2020)** **(Fig, c)**

The researcher used **six universal emotional expressions** in the experiment. There are 2 types of stimuli; **non-masked** and **masked (Fig, c)**.

The participants were asked to select the **presented person's proper emotional state** from the list of six emotional expressions.

The results show that **wearing a mask makes worse emotion understanding** performance in **angry**, **disgusted**, **happy**, and **sad** facial expressions. However, recognizing **fearful** and **neutral** faces was **not affected** by wearing a mask (**Fig, d)**.




**(Fig, d)**

## CONCLUSION

In the **COVID-19 pandemic**, there is no doubt that **wearing a mask** is a **crucial** part of our daily life. However, this situation may **affect social life interaction**. According to results, **wearing a mask** has a **negative impact on face perception**, including **identifying faces** and **reading emotions**. It can be concluded that wearing a mask **makes harder** our daily social **conversations** due to **concealing the rest of the face**.


**References**

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