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## Introduction

- Language has consistently been demonstrated to influence emotion perception and memory for ambiguous facial expressions of emotion<sup>1,2,3,4</sup>
- In a previous experiment, we found that people trained to identify specific ambiguous expressions with accompanying emotion labels, people misremembered these expressions as more like the stereotypical expression for the labeled emotion than they were in reality<sup>4</sup>
- Importantly, it is unclear if the provided labels bias individuals' initial perception during encoding or their retrieval of the faces when remembering them

## Methods

**Participants:** 156 UNH undergraduate students (84.5% female/woman, 83.3% white)

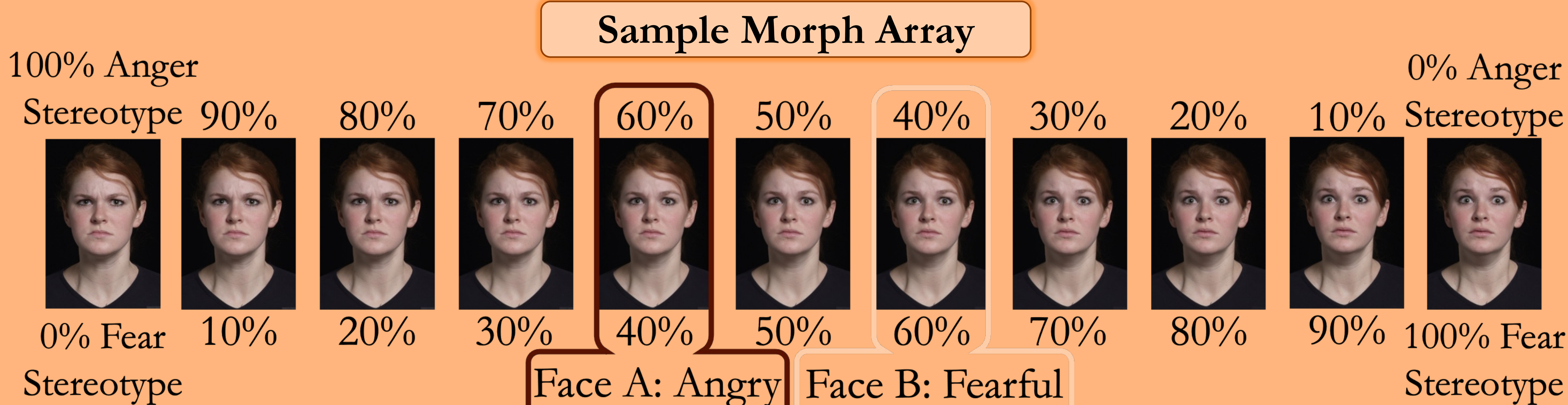
**Stimuli:** Emotion morph array made from a posed stereotypical anger and fear expression in 10% increments for 6 models (3 male, 3 female), selected from a normed stimulus set<sup>5</sup>

**Label Conditions:** Randomly assigned in a 2x2 design varying in terms of whether they received emotion labels during encoding (or not) and retrieval (or not)

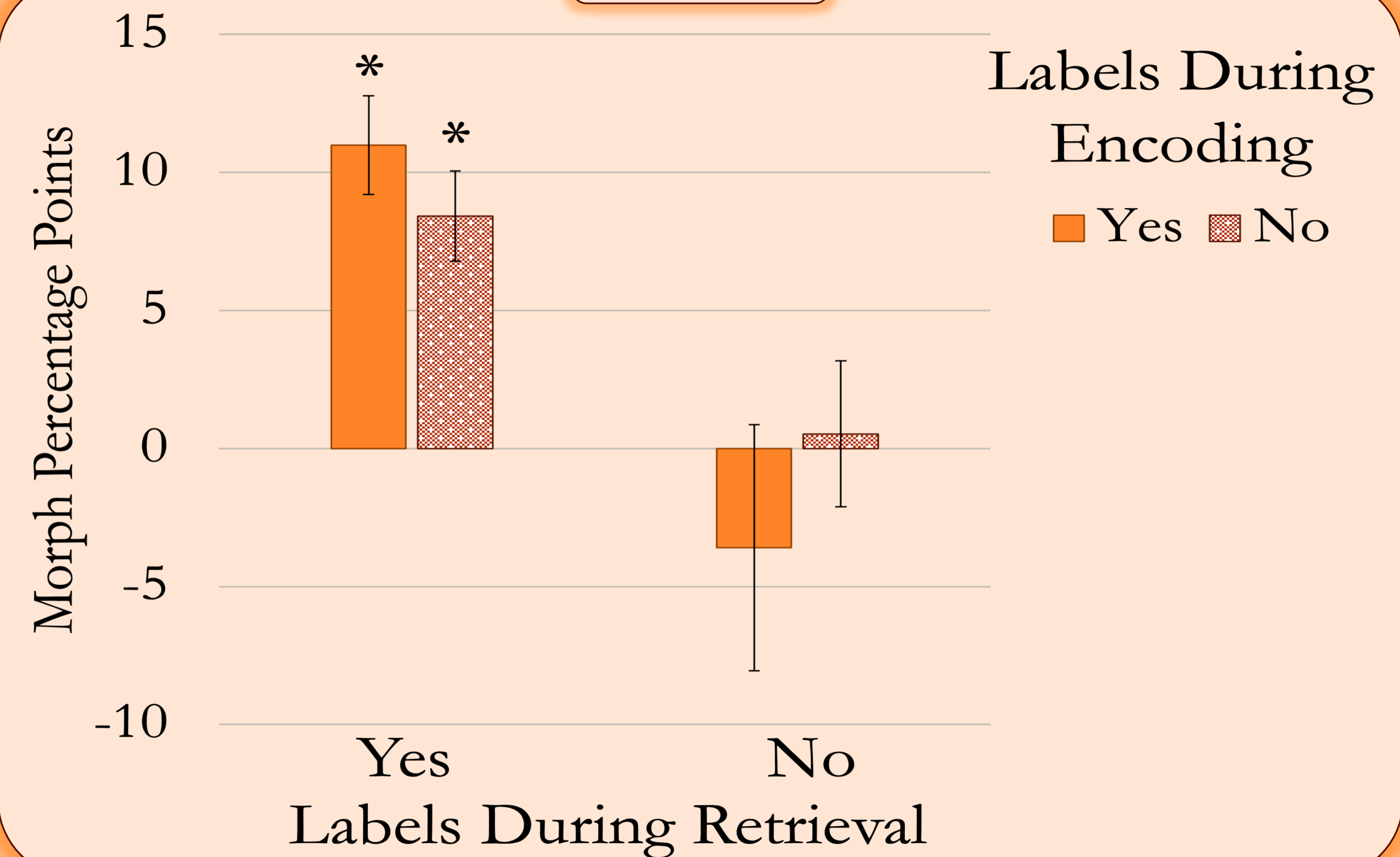
**Encoding:** Target expressions (60/40% blends of anger and fear) shown one at a time, and participants identify each expression 5 times with immediate feedback

**Retrieval:** All faces in the morphed array (from 80% anger/20% fear to 20% anger/80% fear) shown one at a time, total of 35 trials. Participants identify each face as one of the target expressions or neither of them without feedback

**Outcome Measure:** Overall peak shift, representing the distance (in morph percentage) between the faces most frequently identifies as the target expression during retrieval, such that higher numbers indicate the two target expressions were recognized as more distinct



## Results



## Encoding

## Retrieval

### Emotion Words



YES

Face A: Angry

Face B: Fearful

Face A: Angry

Face B: Fearful

NO

Face A

Face B

Face A

Face B

Neither

## Discussion

- Memory biases seem to emerge when emotion words labels are included during the retrieval of ambiguous facial expressions, but not when they are presented during initial encoding
- Suggests the presence of emotion words may not be influencing how one initially perceives an ambiguous expression
- Influence of information presented during retrieval biasing memory is consistent with the broader memory literature, and specifically eye-witness testimonies and suggestibility<sup>6,7,8,9,10</sup>

### References