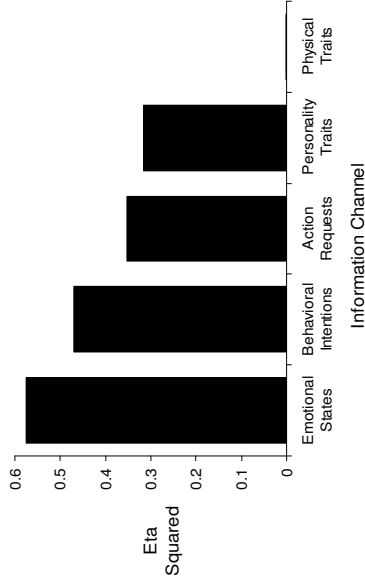


# What information is inferred from facial displays of emotion?

## Evidence that facial displays generate inferences across several distinct information channels

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Observers of facial displays infer more about emotional states than any other type of information



### Introduction

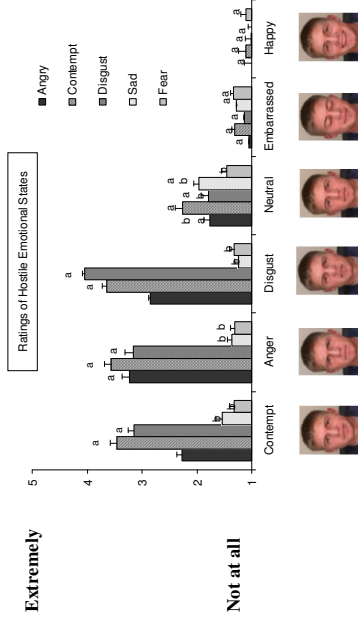
We examined five types of information that observers can infer from facial displays of emotion: 1) Emotional states, 2) behavior intentions, 3) action requests, 4) personality traits, and 5) physical characteristics. Most research assumes that observers of facial displays primarily infer information about the emotional states of the displayer (Ekman, 1993). Alternatively, the Behavioral Ecology view (Fridlund, 1994) has argued that facial displays primarily evoke inferences about the behavioral intentions of the displayer.

### Information Channels

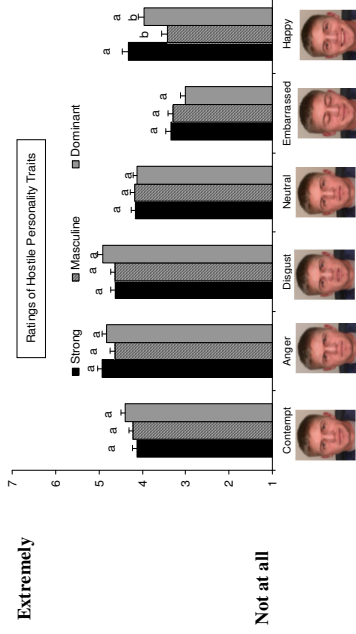
We introduce the term “information channel” to denote different types of information that can be inferred from facial displays. We examined five information channels based upon the work of Forstmann (2003):

- **Emotional States**  
How angry does this person appear?
- **Behavioral Intentions**  
How likely is it that this person intends to be aggressive?
- **Action Requests**  
How likely is it that this person is asking you to obey them?
- **Personality Traits**  
How dominant does this person appear?
- **Physical Traits**  
How tall does this person appear?

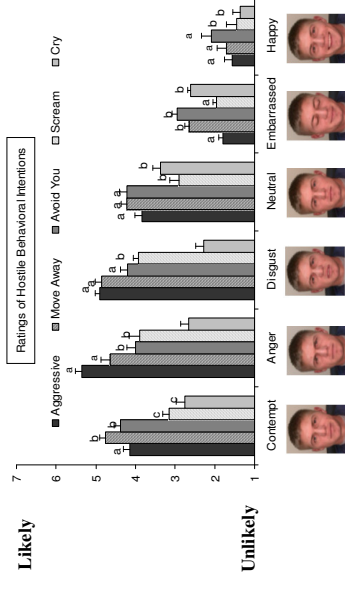
This person appears...



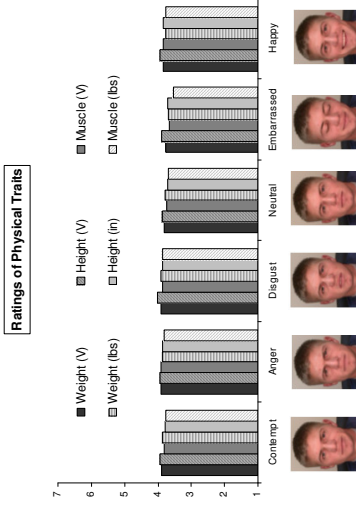
This person appears...



If this person is looking at you, how likely is it that this person intends to...



This person appears...



### Methods

Participants viewed digital images (movies and photos) of several posed facial displays including contempt, anger, disgust, embarrassment, happiness and a neutral face. Participants rated each facial display in terms of emotional states, behavioral intentions, action requests, personality traits, and physical traits.

### Conclusions

An analysis of the amount of variance accounted for in inferences (ratings) drawn from the six facial displays revealed that the Emotional State information channel accounted for the most variance, followed by Behavioral Intentions, Action Requests, Personality Traits and Physical Traits. More specifically, the effect size (eta squared) for emotional states was larger than the effect size for all other information channels (see Figure 1).