

A Flexible Influence of Affect on the Usage of the Availability Heuristic

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Emotion and **processing style** were once thought to be directly linked

- The affect-as-information hypothesis (Schwarz & Clore, 1983)
 - **Positive affect** → Heuristic processing
 - **Negative affect** → Systematic processing

However, the affect-as-cognitive-feedback account suggests that this relationship is actually **malleable** (Huntsinger, Isbell, & Clore, 2014).

- **Positive affect (anger, happiness)** acts as a “go” signal, affirming that the active processing style is working
- **Negative affect (anxiety)** acts as a “stop” signal, indicating uncertainty about the active processing style, thus inducing a switch to the opposite

Usage of the **availability heuristic** is directly impacted by affect (Ruder & Bless, 2003) and processing style.

- The availability heuristic is a mental shortcut that people use to quickly assess the frequency or probability of an event. However, these assessments are based upon information that is easily accessible, which can lead to problematic outcomes (Tversky & Kahneman, 1973).
 - Events that are **distinct in nature** or **occur frequently** are often the most cognitively accessible, leading to an:
 - Overestimation of the frequency of distinct or frequent events.
 - Underestimation of the frequency of rare events.

This study examined the relationship between the availability heuristic and the affect-as-cognitive-feedback account

- **Hypothesis:** When heuristic processing is primed, **anger** and **happiness** will be associated with greater usage of the availability heuristic compared to negative affect. When systematic processing is primed, **anxiety** will instead be associated with greater use of the availability heuristic compared to positive affect.

A total of 291 undergraduate students (217 female, 71 male, 2 non-binary, 1 other) were recruited via Loyola University Chicago’s participant pool to complete a series of tasks online via Qualtrics.

Between-subjects



Processing Prime: 15 words with missing letters, write out the word
Heuristic: In_uitive, Effort_ess, etc. **Systematic:** Anal_tical, Met_odical, etc.

(Adapted from Huntsinger & Ray, 2016; White, 2005)



Mood Induction: “Describe as vividly and in as much detail as possible a recent event that made you feel REALLY (HAPPY¹/ANGRY²/ANXIOUS³).”

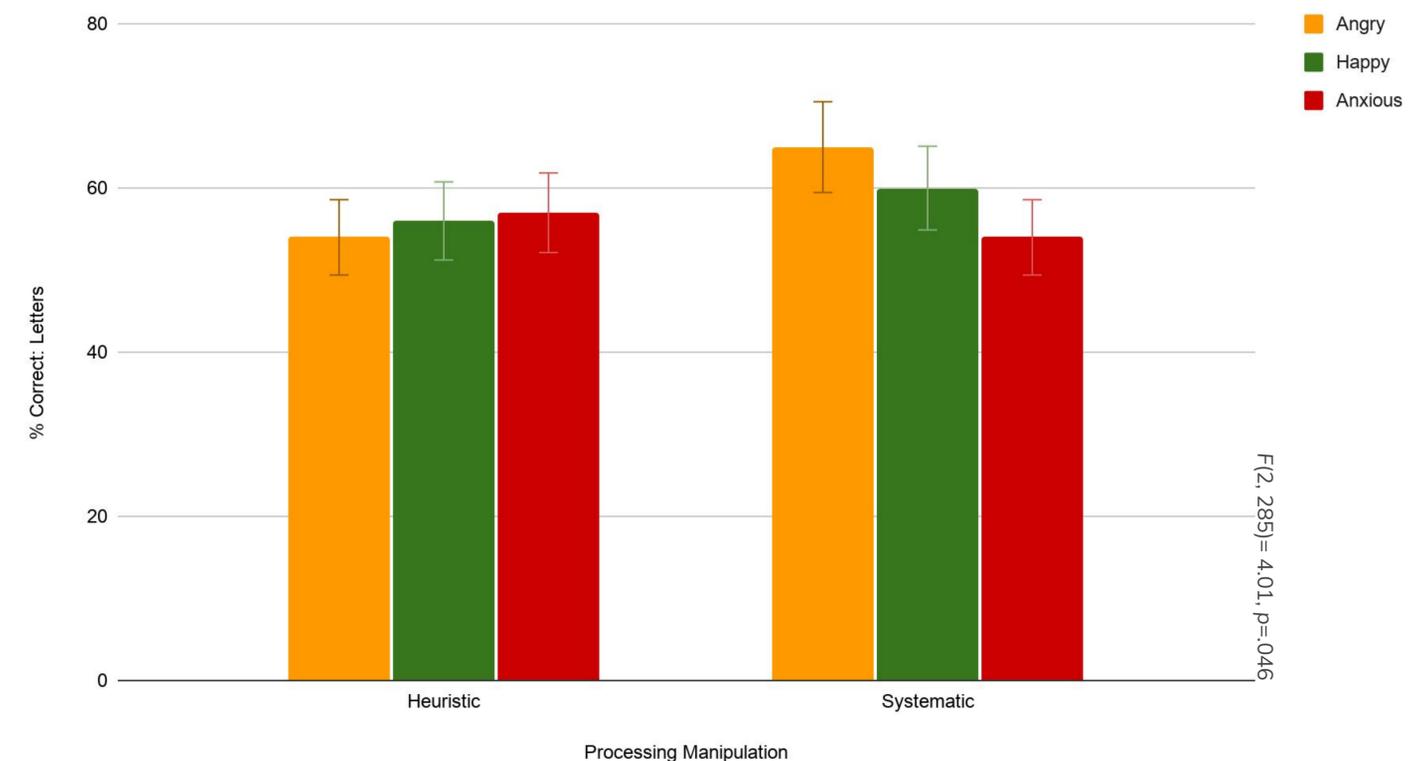
(Adapted from Schwarz & Clore, 2007) 1. $F(2, 285)=128.52, p<.0005$ 2. $F(2, 285)=89.24, p<.0005$ 3. $F(2, 285)=32.93, p<.0005$



Availability Measure: “Consider the letter (K / L / N / R / V). Is this letter more likely to appear in the first or third position of English words?”

(Adapted from Tversky & Kahneman, 1973)

Availability Usage



When heuristic processing was primed, **angry** and **happy** participants were more likely to use the availability heuristic (i.e., more answers incorrect) than **anxious** participants. When systematic processing was primed, **angry** and **happy** participants relied less on the heuristic than **anxious** participants.

As the availability heuristic, in addition to other heuristics, are so pervasive in human cognition, further research into how specific emotions interact with cognitive biases and processing style could lead to new debiasing strategies.