



# You can't trust an angry group: asymmetric evaluations of angry and surprised rhetoric affect confidence in trending opinions



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**Majority** opinion is a strong influence on us (and many other species): if 80% of people say Route A is faster than Route B, we trust the **majority** over the **minority**.

However, our informants also influence each other. Social influence can improve collective learning, but it can also lead to illusions of consensus and groupthink.

Affective cues like **anger** and **surprise** could help learners evaluate social influences on consensus judgements by suggesting whether consensus is **genuine** or **forced**. If so, then confidence in **surprised** factions will **rise** or **fall** as they **gain** or **lose** endorsers. Confidence in **angry** factions will **fall** when they **lose** endorsers, but will **not rise** even when they **gain** endorsers.

## Summary

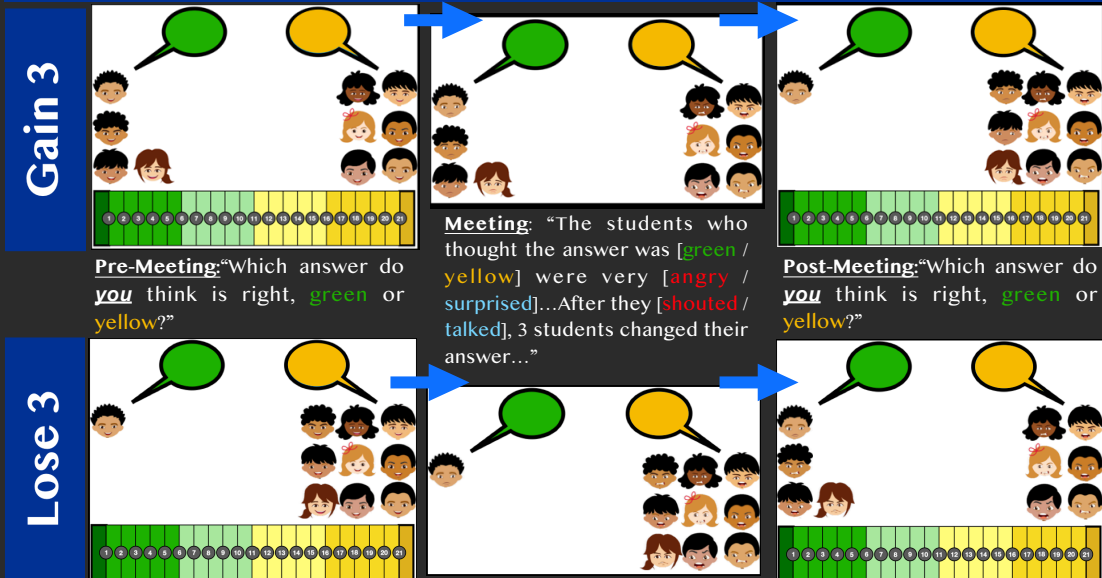
As predicted, participants rejected the “ill-gotten gains” of **angry** factions, whether the **angry** faction was a **minority** or **majority**.

Emotional expressions and other agents' responses to those emotions provide information about contested beliefs. Though the depth & breadth of human knowledge makes evaluating every claim “on the merits” impossible, emotional cues are one of many that may help us learn from opinion dynamics in groups of social learners.

Each participant made a pre-judgement and post-judgement for one **Anger** trial and one **Surprise** trial.

Design of Experiments		Opinion Change
Exp 1: Emotional Majority	Majority Gains 3	4vs6-to-1vs9
	Majority Loses 3	1vs9-to-4vs6
Exp 2: Emotional Minority	Minority Gains 3	1vs9-to-4vs6
	Minority Loses 3	4vs6-to-1vs9

## Example Trials: Angry Majority Gains 3 vs. Loses 3



## Results: Relative Confidence in Majority vs. Minority Factions

### Trust in Angry vs. Surprised Factions: Pre-Post Shifts Are Symmetric After Losses, Asymmetric After Gains

