ESA

Expressive Motivations in Committees

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Research Question

How well do a desire to report to the group and a desire to be sincere fit behavior in committees?

Roadmap

1. Identification
2. Experimental Design
3. LQRE
4. Conclusion

Preview of Results

KEY FINDING

A QRE with homogeneous reporting and sincerity motivations explains the data well.

Large AIC and BIC gains over a standard QRE in every treatment.

01

Identification

Setup

STATE OF THE WORLD

$\omega \in \{\mathbf{P}, \mathbf{G}\}$

Purple or Green (50/50).

GROUP PAYOFF

1

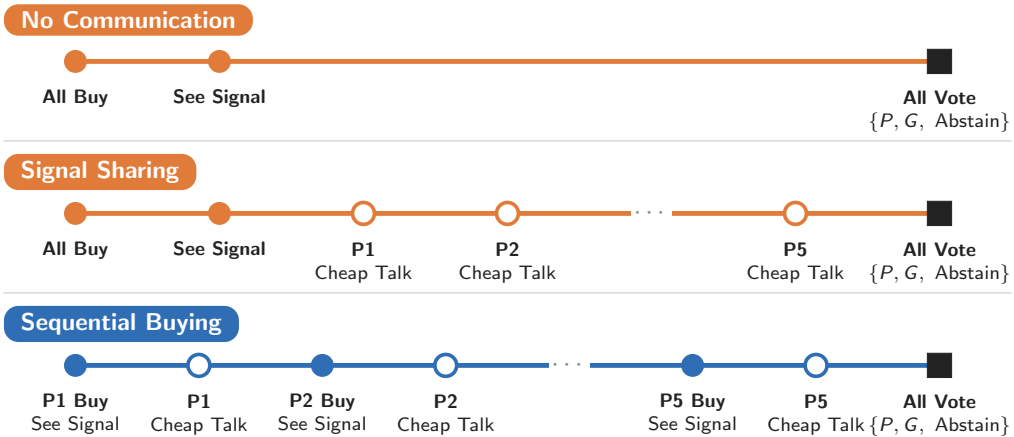
Paid to the group when the group's choice matches the state of the world.

PRIVATE SIGNAL

$x = 0.8$

Each member can buy a signal of strength x at cost $c = 0.25$.

Communication Structures



Reporting and Sincerity

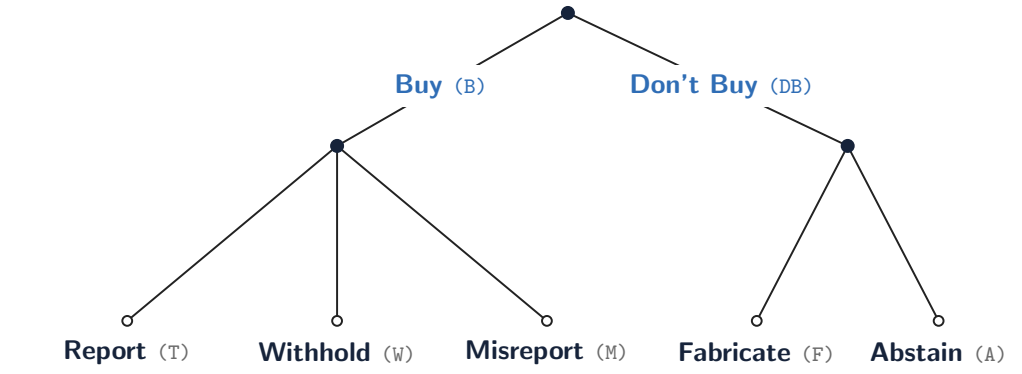
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Utility from reporting

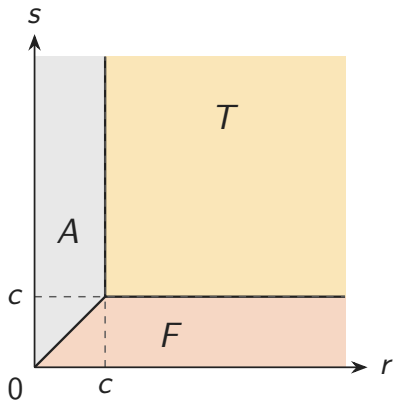
s

Utility from being sincere

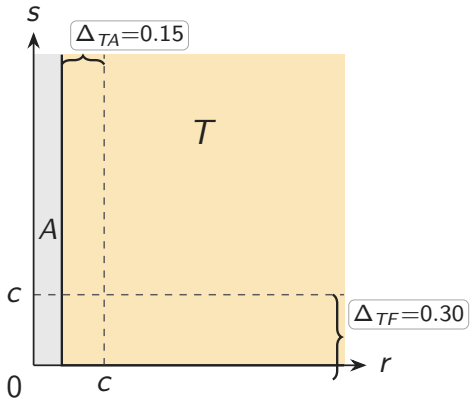
Each Member's Decision Tree and Utilities



No Difference in Accuracy



Large Difference in Accuracy



02

Experimental Design

Experimental Design

GMU
students

$10 + ~$7
paid for each of 15 rounds

1 hr
session length

~50
observations per treatment

Experimental Design

10 or 15

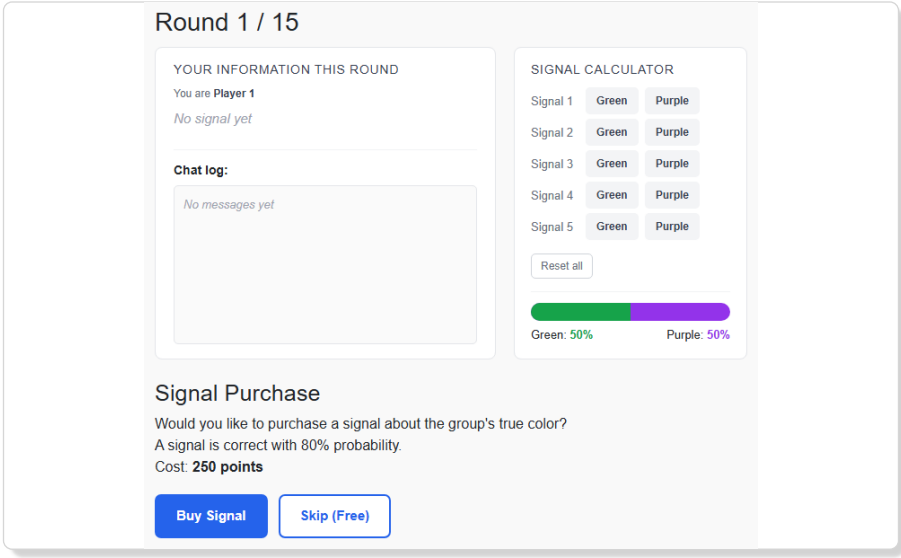
people per session,
repeated stage games

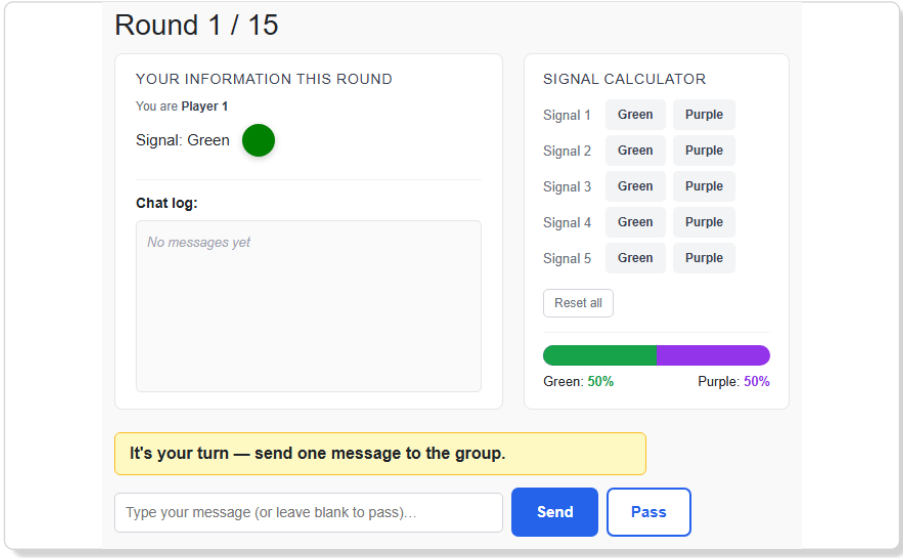
5

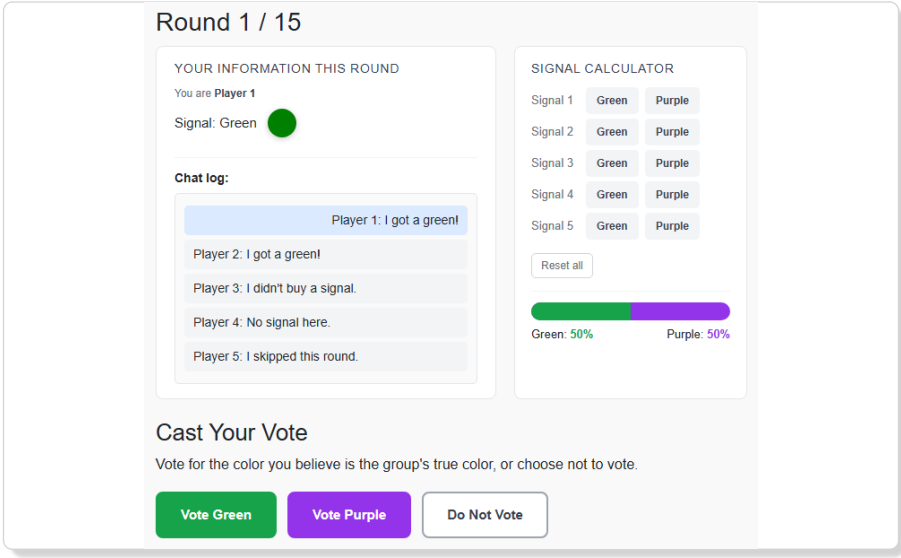
people per group

Random

rematching every round

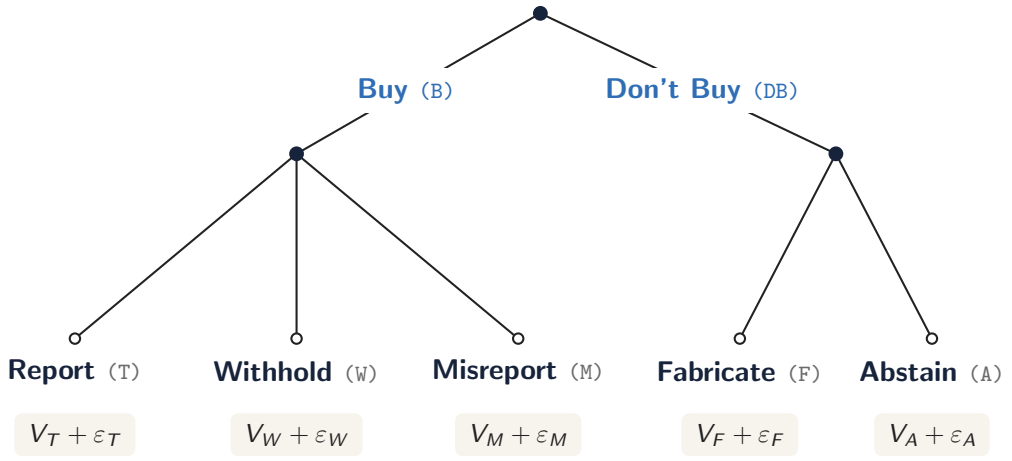

Round 1 / 15
YOUR INFORMATION THIS ROUND
You are Player 1
No signal yet
Chat log:
No messages yet
SIGNAL CALCULATOR
Signal 1 Green Purple
Signal 2 Green Purple
Signal 3 Green Purple
Signal 4 Green Purple
Signal 5 Green Purple
Reset all
Green: 50%
Purple: 50%
Signal Purchase
Would you like to purchase a signal about the group's true color?
A signal is correct with 80% probability.
Cost: 250 points
Buy Signal
Skip (Free)


Round 1 / 15
YOUR INFORMATION THIS ROUND
You are Player 1
Signal: Green
Chat log:
No messages yet
SIGNAL CALCULATOR
Signal 1 Green Purple
Signal 2 Green Purple
Signal 3 Green Purple
Signal 4 Green Purple
Signal 5 Green Purple
Reset all
Green: 50%
Purple: 50%
It's your turn — send one message to the group.
Type your message (or leave blank to pass)…
Send
Pass


Round 1 / 15
YOUR INFORMATION THIS ROUND
You are Player 1
Signal: Green
Chat log:
Player 1: I got a green!
Player 2: I got a green!
Player 3: I didn't buy a signal.
Player 4: No signal here.
Player 5: I skipped this round.
SIGNAL CALCULATOR
Signal 1 Green Purple
Signal 2 Green Purple
Signal 3 Green Purple
Signal 4 Green Purple
Signal 5 Green Purple
Reset all
Green: 50%
Purple: 50%
Cast Your Vote
Vote for the color you believe is the group's true color, or choose not to vote.
Vote Green
Vote Purple
Do Not Vote

03
LQRE

LQRE


Buy (B)
Don't Buy (DB)
Report (T)
Withhold (W)
Misreport (M)
Fabricate (F)
Abstain (A)
$V_T + \varepsilon_T$
$V_W + \varepsilon_W$
$V_M + \varepsilon_M$
$V_F + \varepsilon_F$
$V_A + \varepsilon_A$

LQRE Results

Treatment	r	s	λ	Log-Lik.
No Comm	0.381 [0.057]	0.071 [0.023]	7.630 [1.095]	−819.1
Sig Share	0.148 [0.031]	0.263 [0.049]	6.207 [0.807]	−871.9
Seq Buy	0.153 [0.031]	0.138 [0.035]	5.873 [0.540]	−968.3

Homogeneous r, s and λ. Square brackets: bootstrap standard errors from resampling subjects within the treatment.

Simple QRE vs Expressive QRE

Treatment	Model	r	s	λ	Log-Lik.	AIC	BIC
No Comm.	Homo.	0.381	0.071	7.630	−819.1	**1644.1**	**1658.3**
	QRE			5.537	−1146.8	2295.6	2300.3
Sig. Share	Homo.	0.148	0.263	6.207	−871.9	**1749.9**	**1763.7**
	QRE			6.306	−1002.7	2007.3	2011.9
Seq. Buy	Homo.	0.153	0.138	5.873	−968.3	**1942.7**	**1956.6**
	QRE			5.580	−1022.3	2046.5	2051.1

Conclusions

A desire to report and a desire to report sincerely describe behavior well.

Thank You

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