

Social Closure and Social Norms

An Experimental Study of Coleman(1988)

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Motivation



When can the stakeholders collectively force the shareholder to internalize the negative externality?

Coleman (1988): Social norm enforcement limits negative externality if the social structure is closed.

Motivation

use a social relationship to:

- ① coordinate enforcement efforts, share costs of enforcement efforts
- ② encourage each others enforcement efforts
- ③ enforce each others enforcement efforts

Design

20 rounds, same groups

in each round:

- 3 players: shareholder A , stakeholders B_1 and B_2 , each receives an endowment of 50 tokens

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in each round:

- 3 players: shareholder A , stakeholders B_1 and B_2 ,
each receives an endowment of 50 tokens
- 3 stages: A takes away $d \in [0, 20]$;
 B s chat for 2 minutes;
each B_i chooses punishment $p_i \in [0, 15]$, $i = 1, 2$

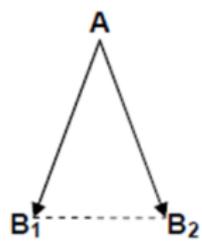
Design

20 rounds, same groups

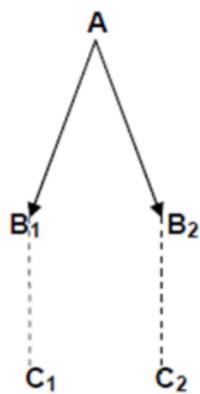
in each round:

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each receives an endowment of 50 tokens
- 3 stages: A takes away $d \in [0, 20]$;
 B s chat for 2 minutes;
each B_i chooses punishment $p_i \in [0, 15]$, $i = 1, 2$
- payoffs: $\pi_A = 50 + d - (p_1 + p_2)$;
 $\pi_{B_1} = 50 - d - p_1$,
 $\pi_{B_2} = 50 - d - p_2$

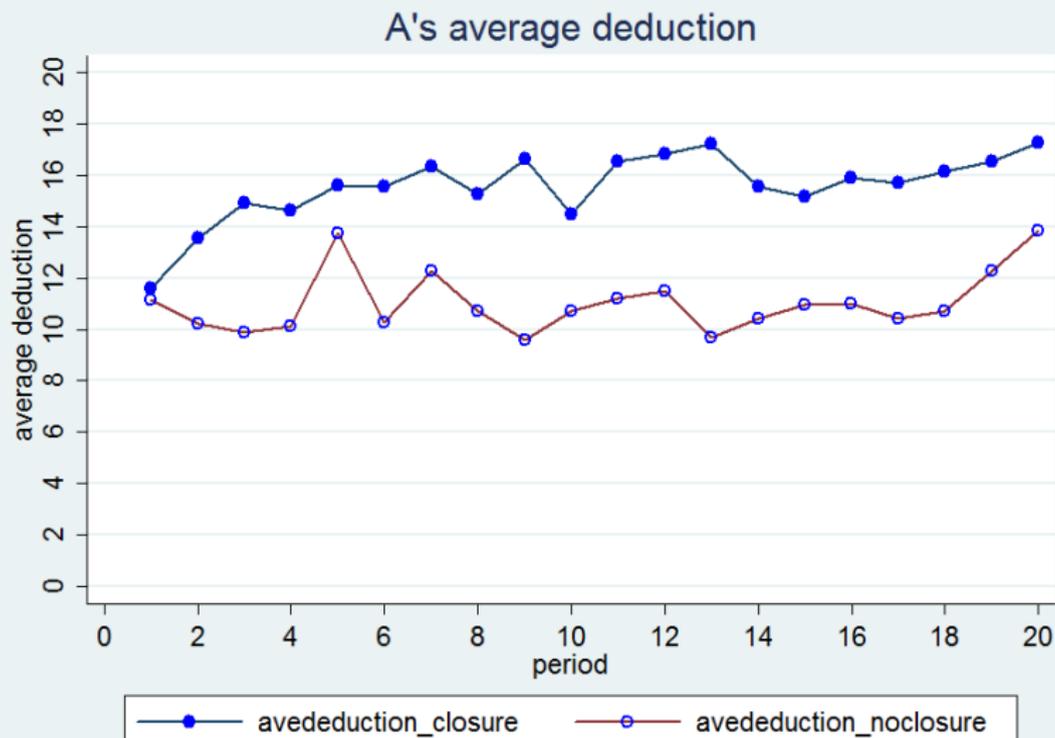
closure



no closure



Results



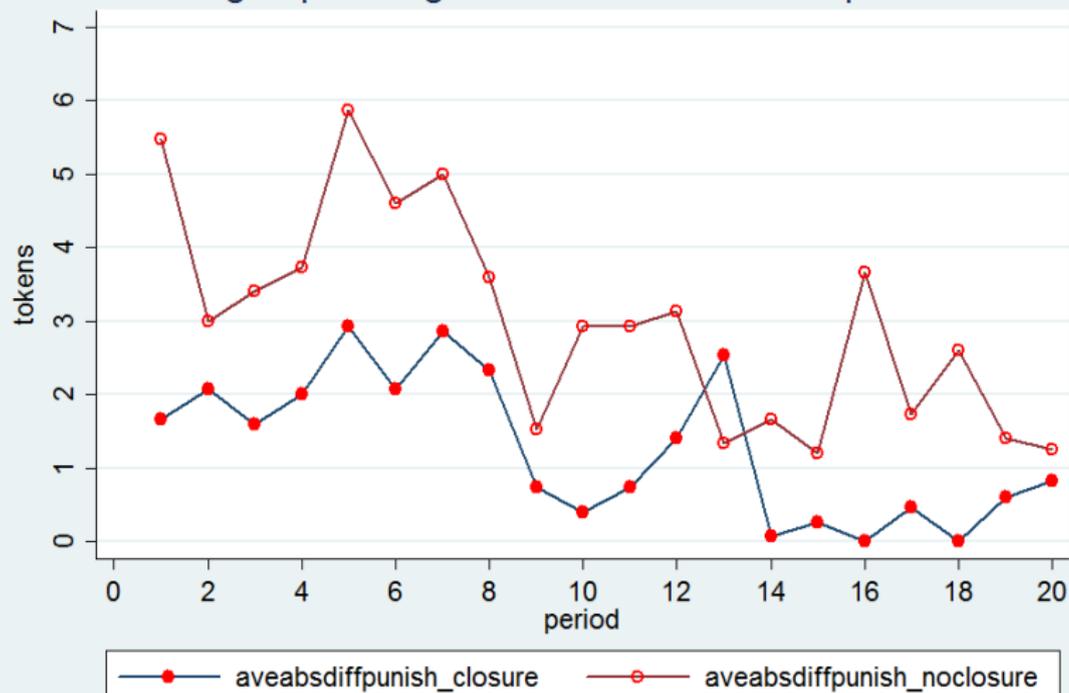
Results

Chat

| | closure | noclosure |
|----------------------------|---------|-----------|
| coordinate | 0.20 | 0.01 |
| trust/morale/team building | 0.01 | 0.00 |
| strategy | 0.16 | 0.07 |
| A's character | 0.02 | 0.01 |
| A's circumstances | 0.13 | 0.13 |
| irrelevant | 0.48 | 0.78 |

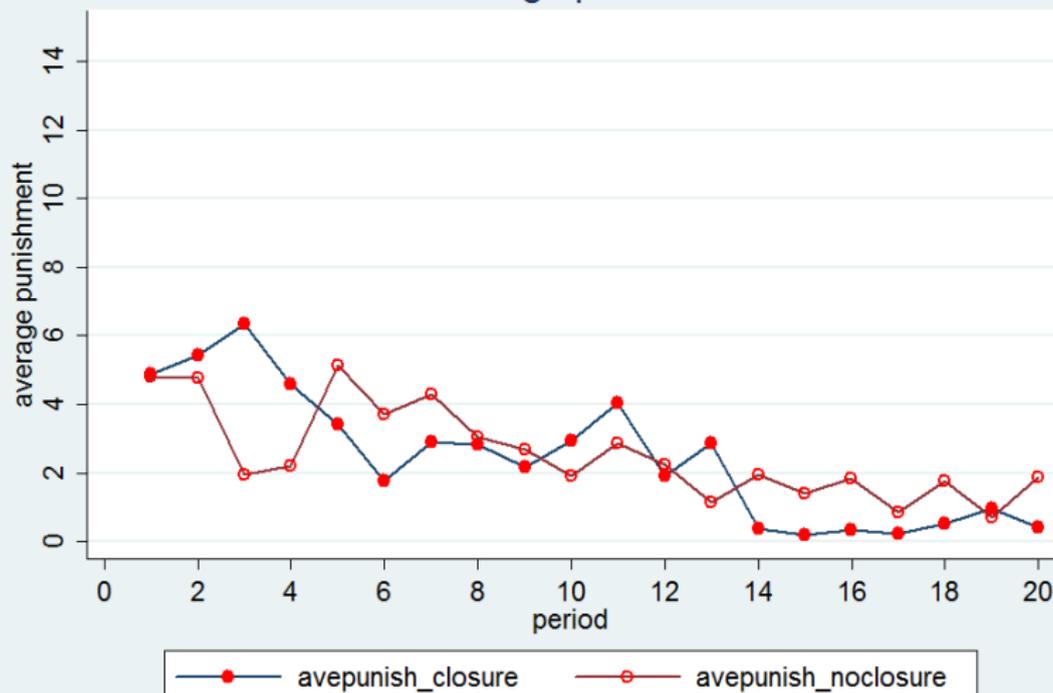
Results

Within-group average absolute difference in punishments



Results

Bs' average punishment

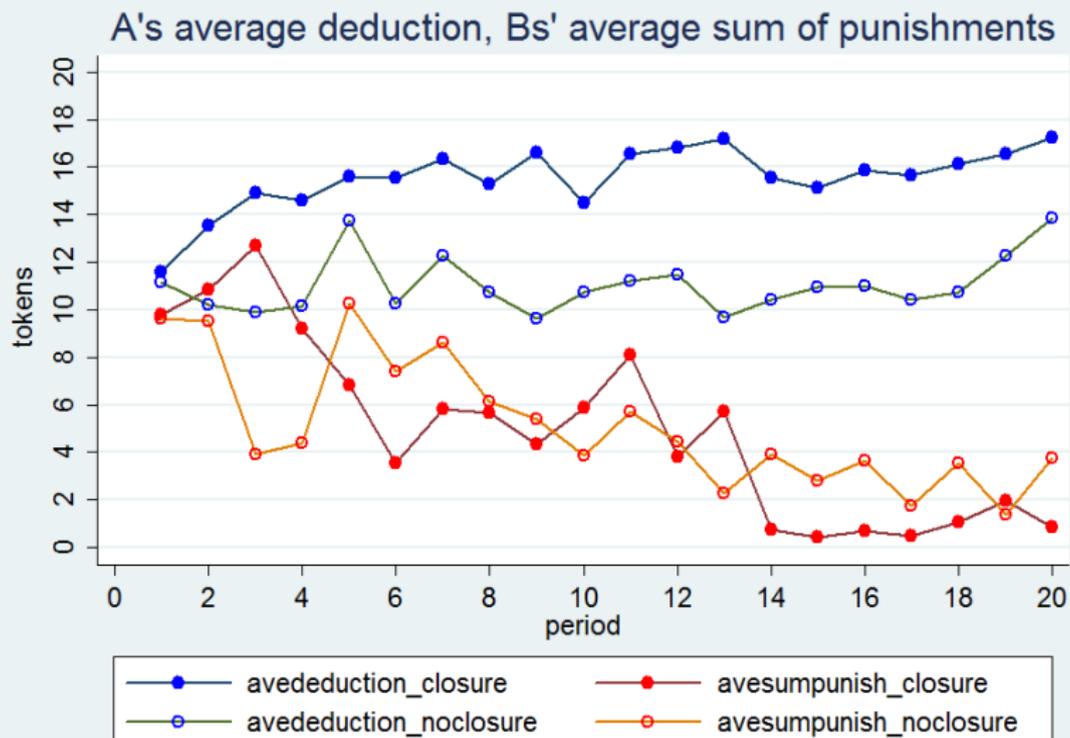


Conclusion

Summary

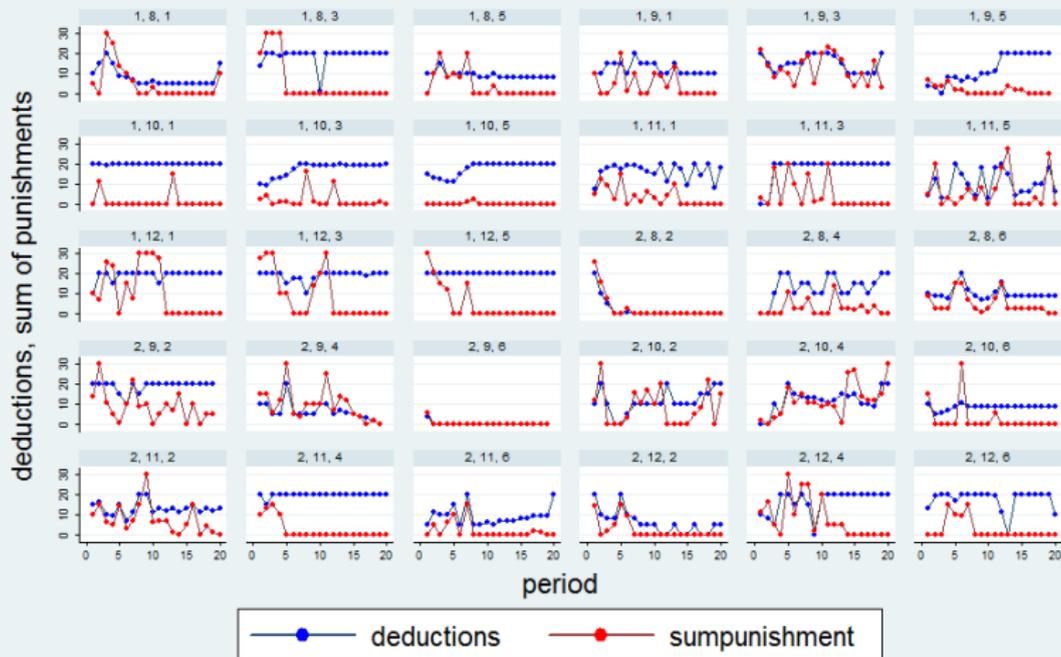
- 1 shareholders' average deduction is higher in the closure treatment
- 2 stakeholders did not motivate each other to sustain punishments in the closure treatment
- 3 stakeholders coordinated more effectively in the closure treatment
- 4 stakeholders' average punishment levels are low and decrease over time

Appendix 1



Appendix 1

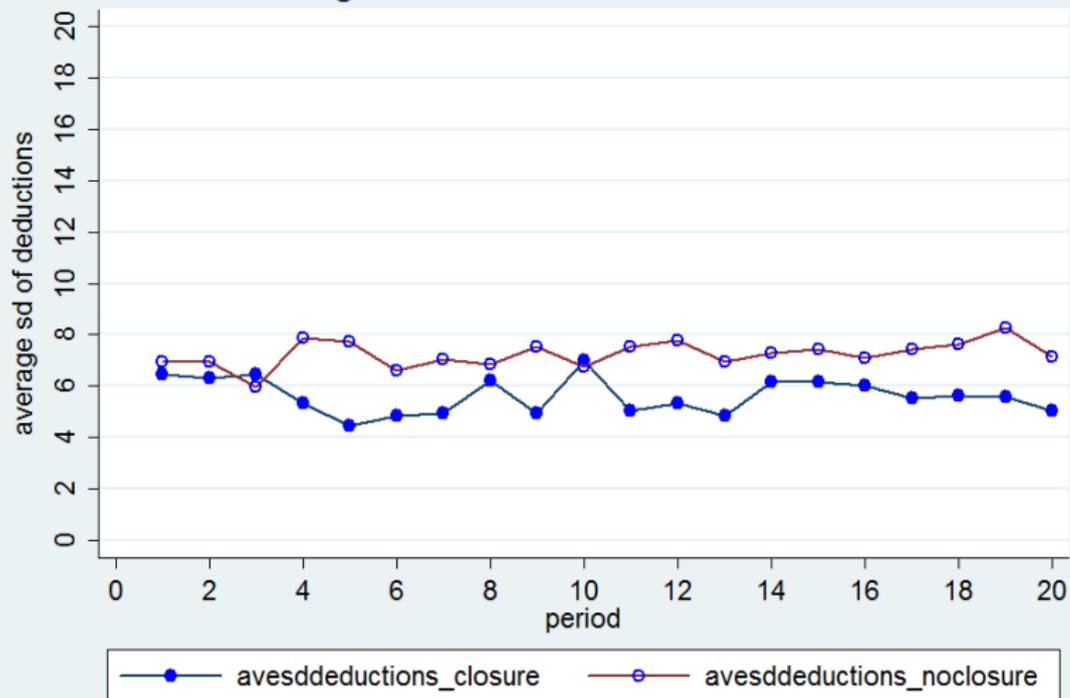
Deductions and sums of punishments within each group



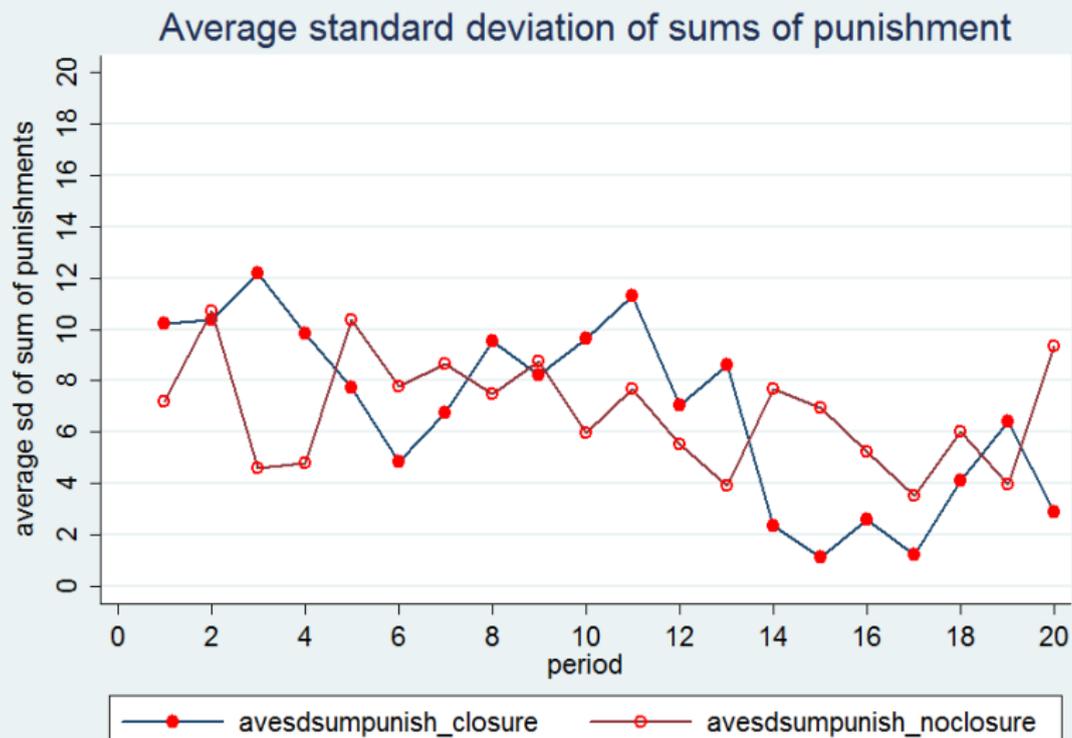
Graphs by treatment, SessionID, and Group

Appendix 1

Average standard deviation of deductions

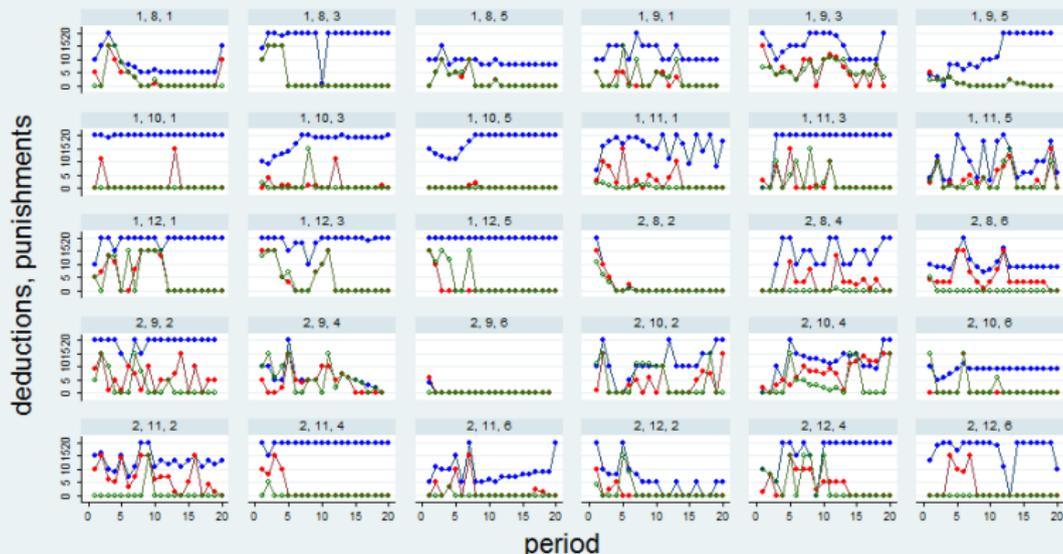


Appendix 1



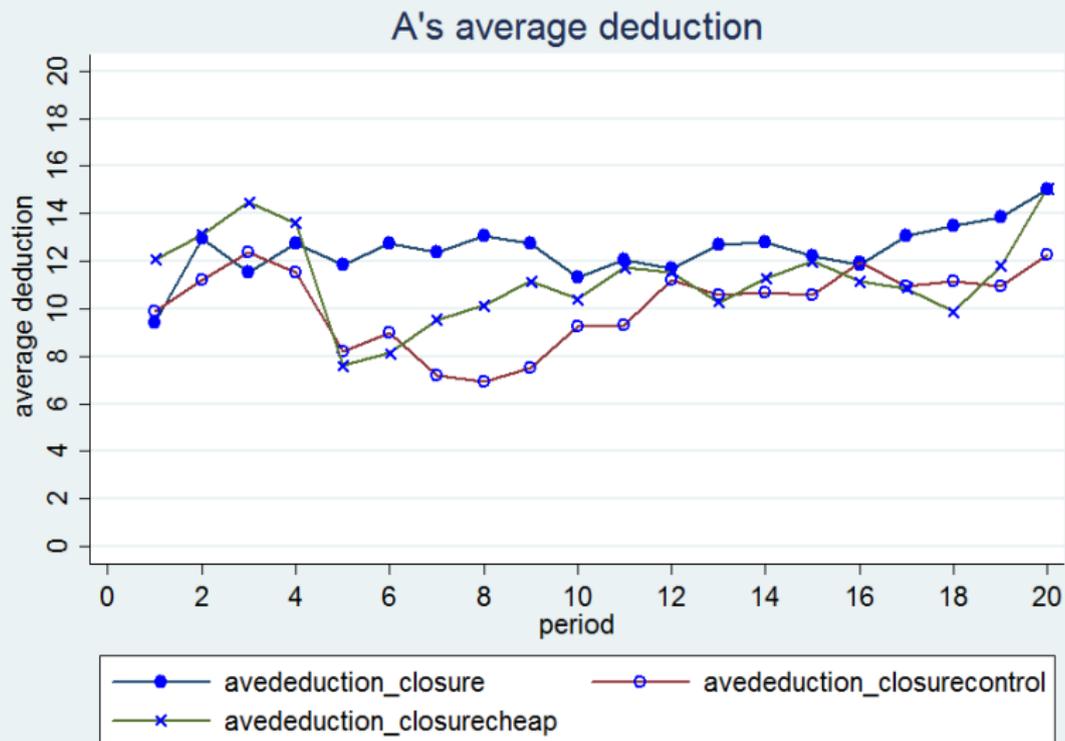
Appendix 1

Deductions and punishments within groups



Graphs by treatment, SessionID, and Group

Appendix 2

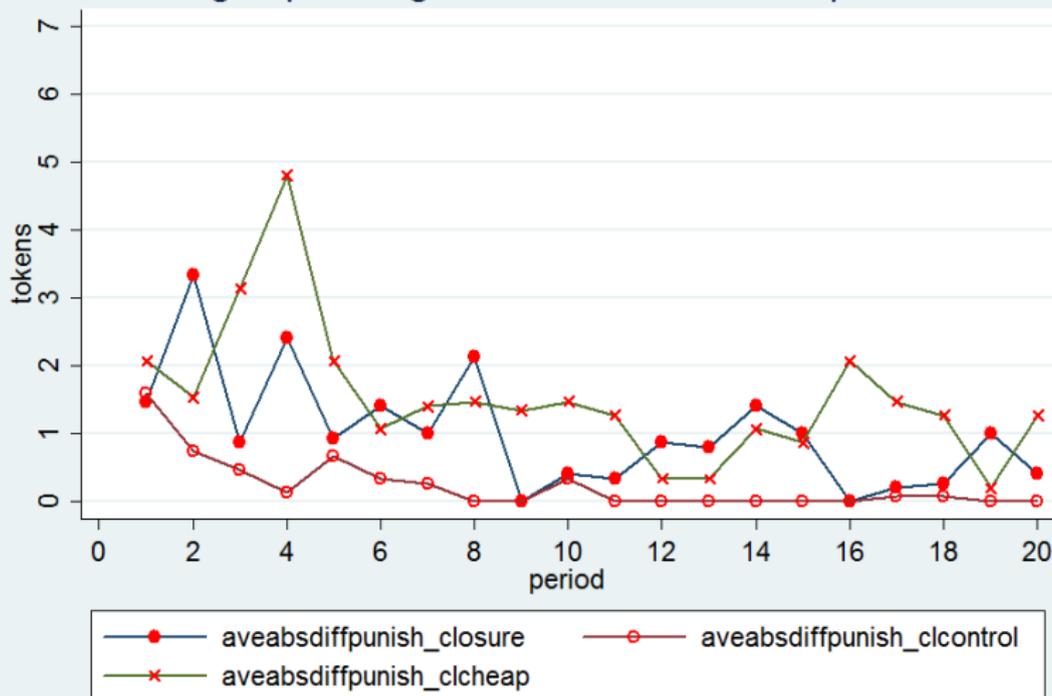


Appendix 2

| | closure | closurecontrol | closurecheap |
|----------------------------|---------|----------------|--------------|
| coordinate | 0.12 | 0.12 | 0.15 |
| trust/morale/team building | 0.01 | 0.01 | 0.01 |
| strategy | 0.13 | 0.21 | 0.18 |
| A's character | 0.04 | 0.03 | 0.03 |
| A's circumstances | 0.12 | 0.09 | 0.08 |
| irrelevant | 0.57 | 0.55 | 0.55 |

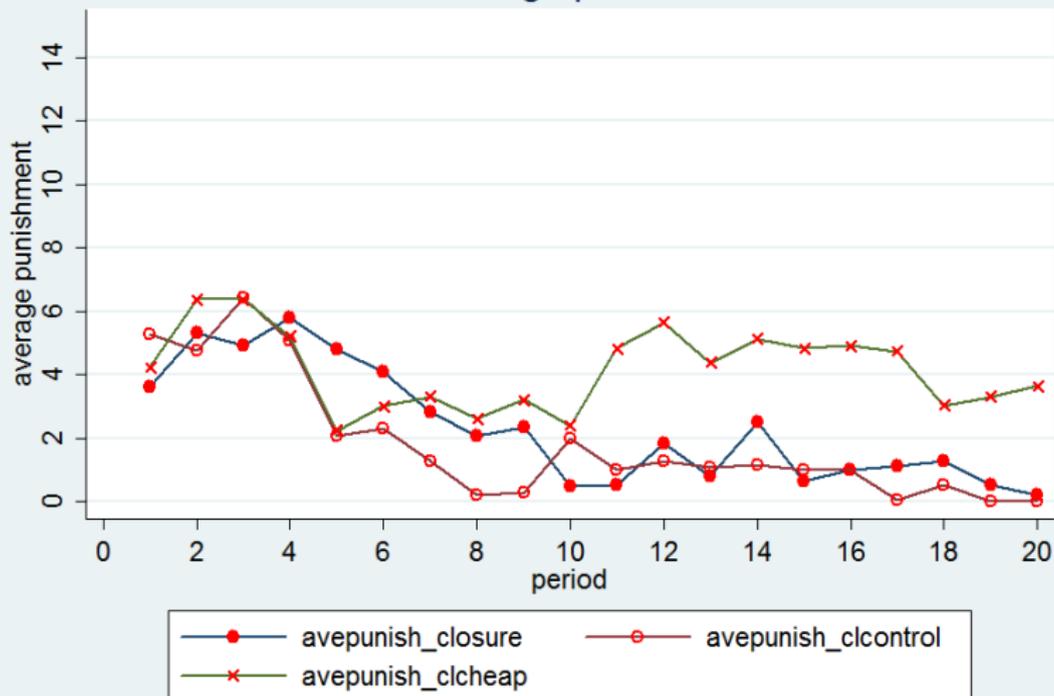
Appendix 2

Within-group average absolute difference in punishments

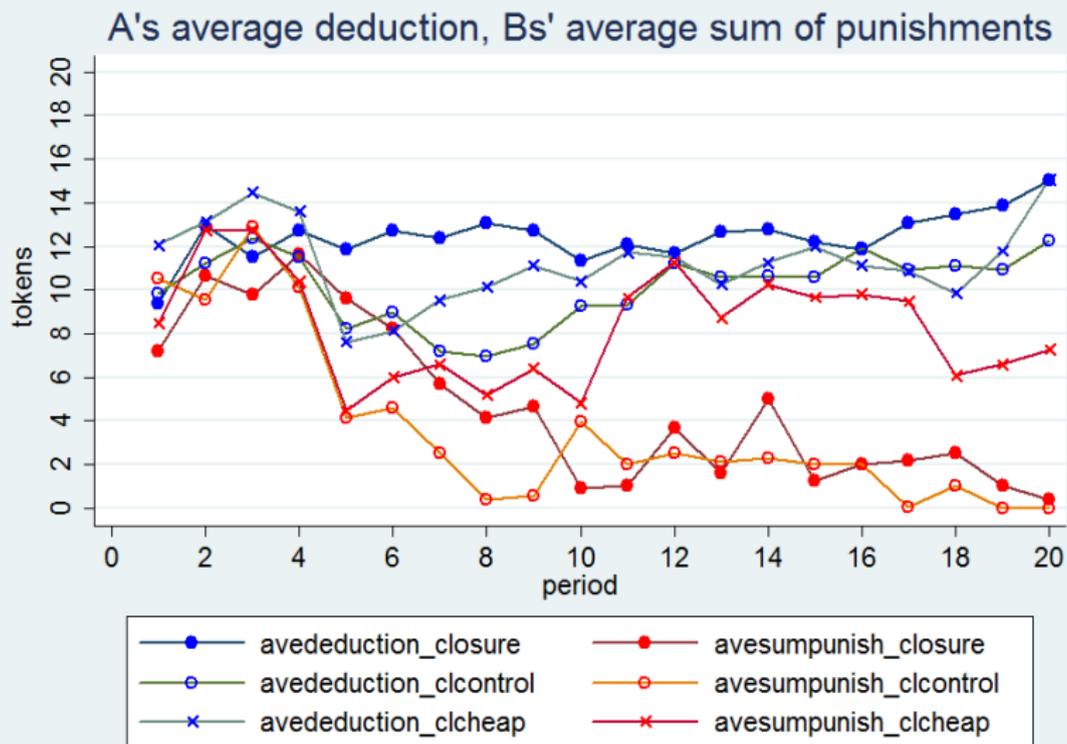


Appendix 2

Bs' average punishment

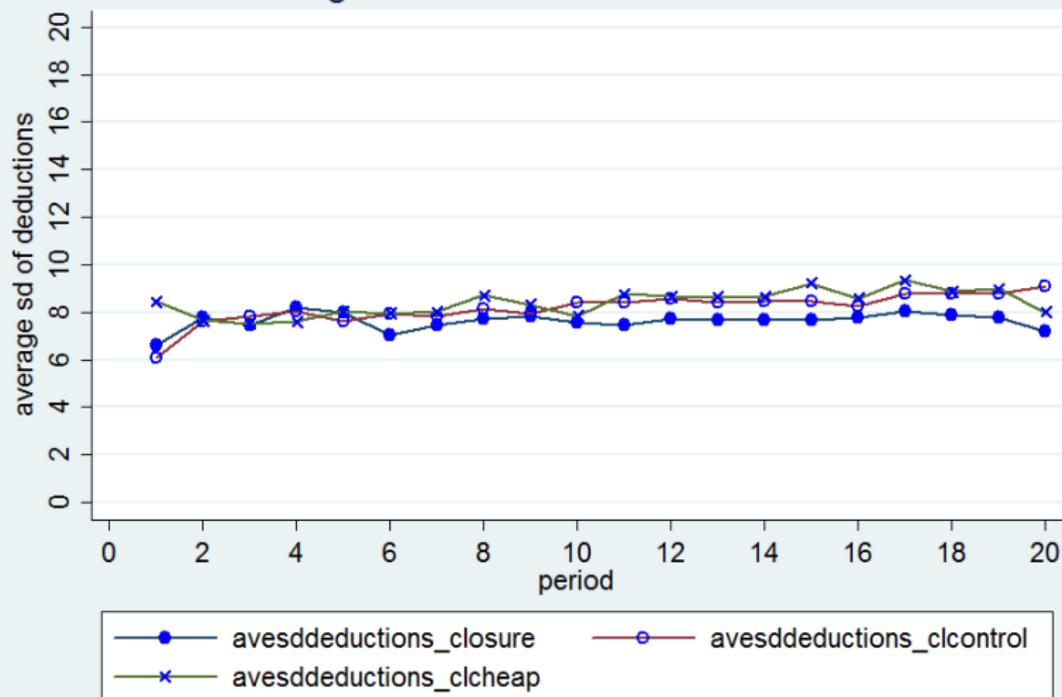


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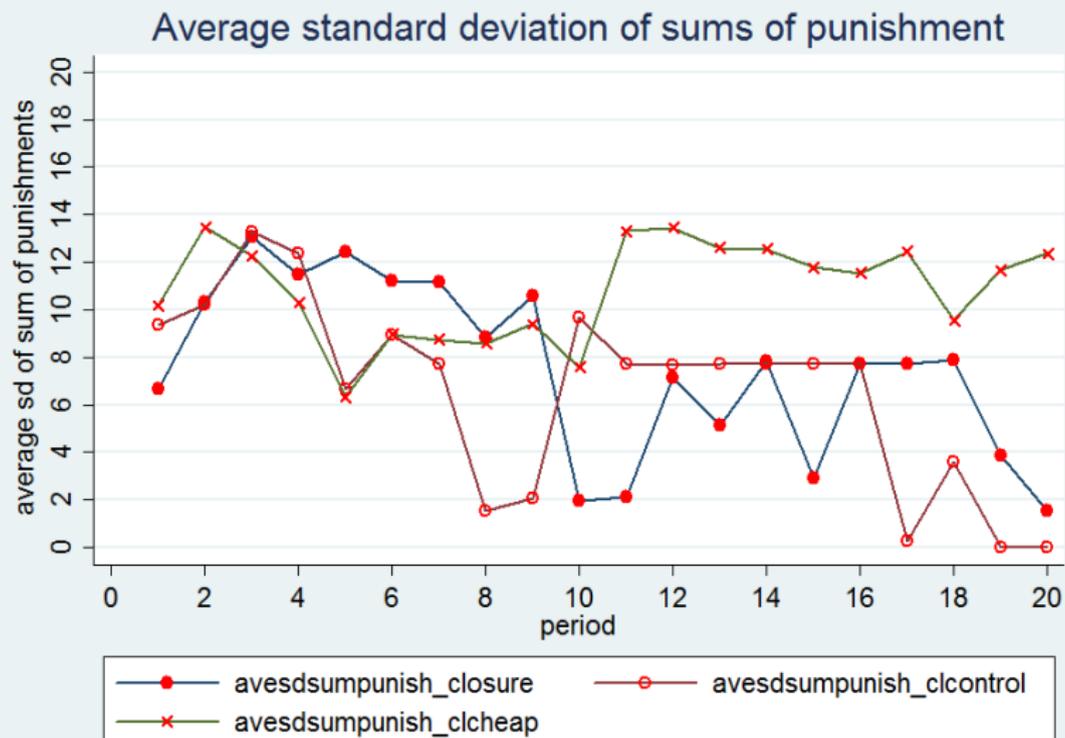


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Average standard deviation of deductions

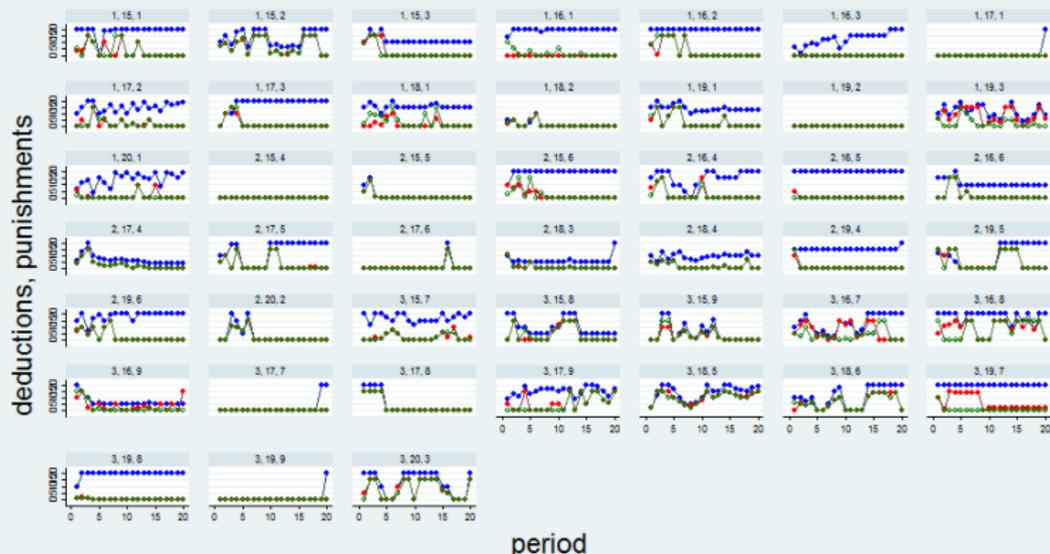


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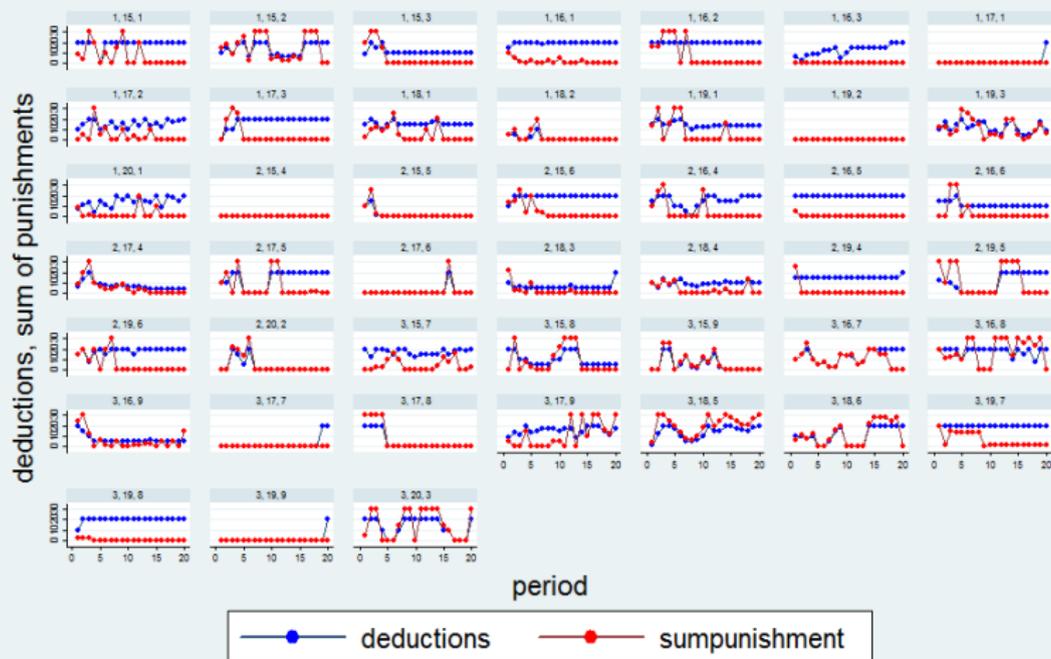
Deductions and punishments within groups



Graphs by treatment, SessionID, and Group

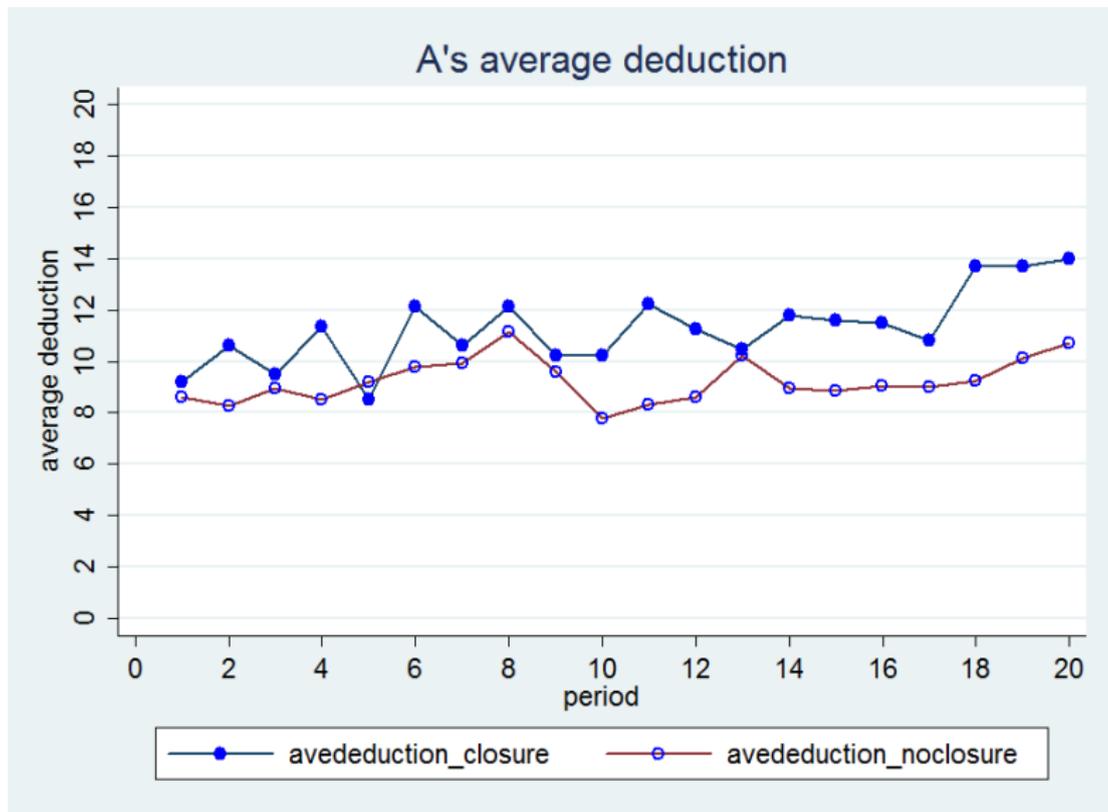
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Deductions and sums of punishments within each group



Graphs by treatment, SessionID, and Group

Appendix 3

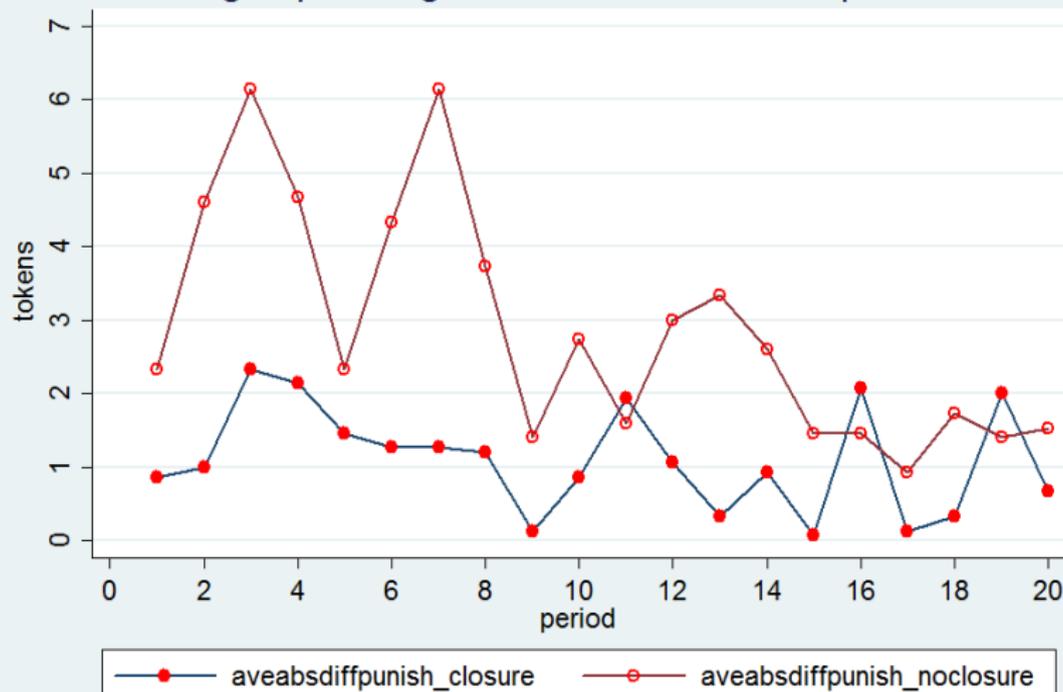


Appendix 3

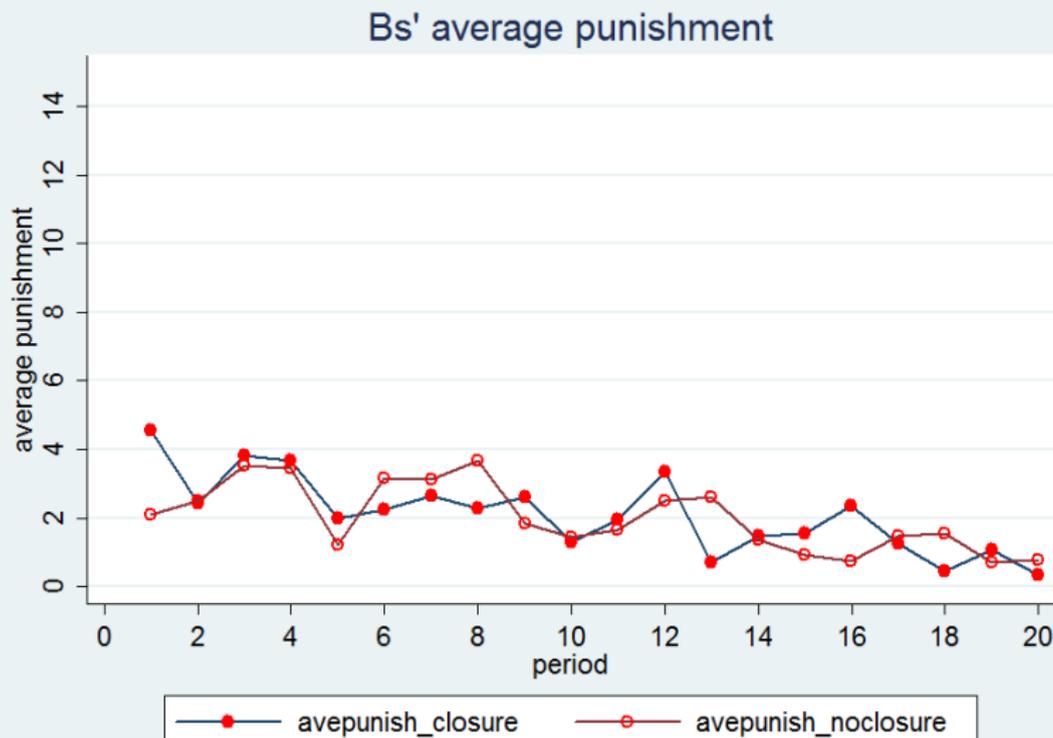
| | closure | noclosure |
|----------------------------|---------|-----------|
| coordinate | 0.20 | 0.03 |
| trust/morale/team building | 0.02 | 0.01 |
| strategy | 0.20 | 0.10 |
| A's character | 0.02 | 0.02 |
| A's circumstances | 0.12 | 0.14 |
| irrelevant | 0.44 | 0.69 |

Appendix 3

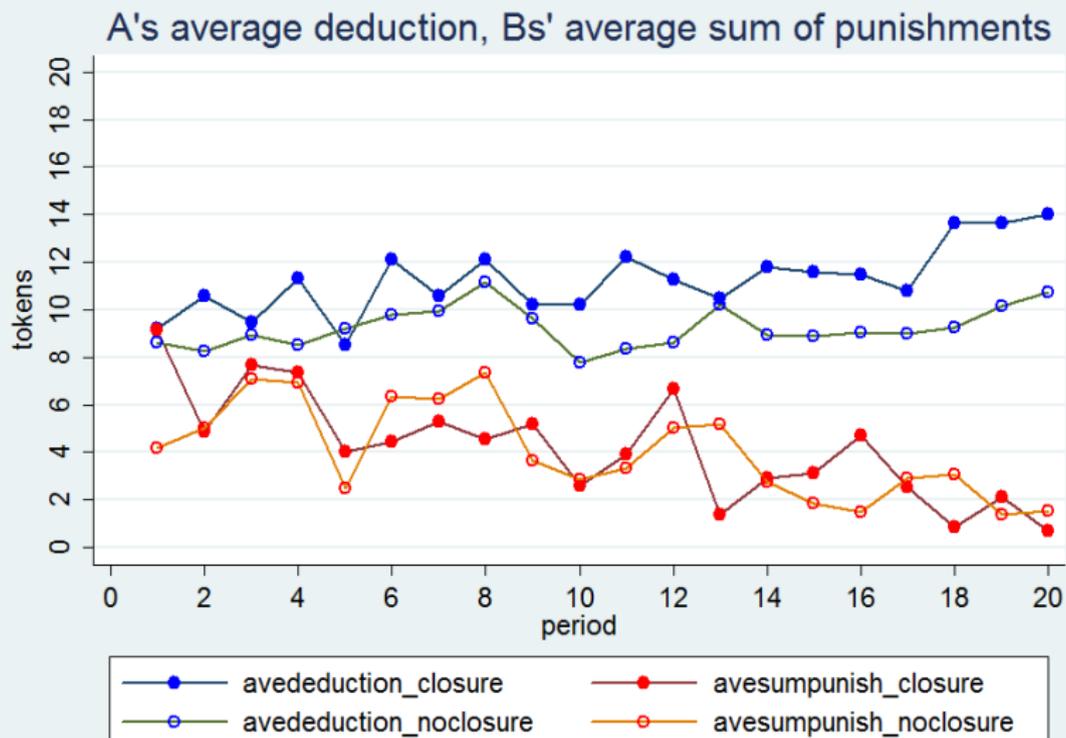
Within-group average absolute difference in punishments



Robustness in A's information

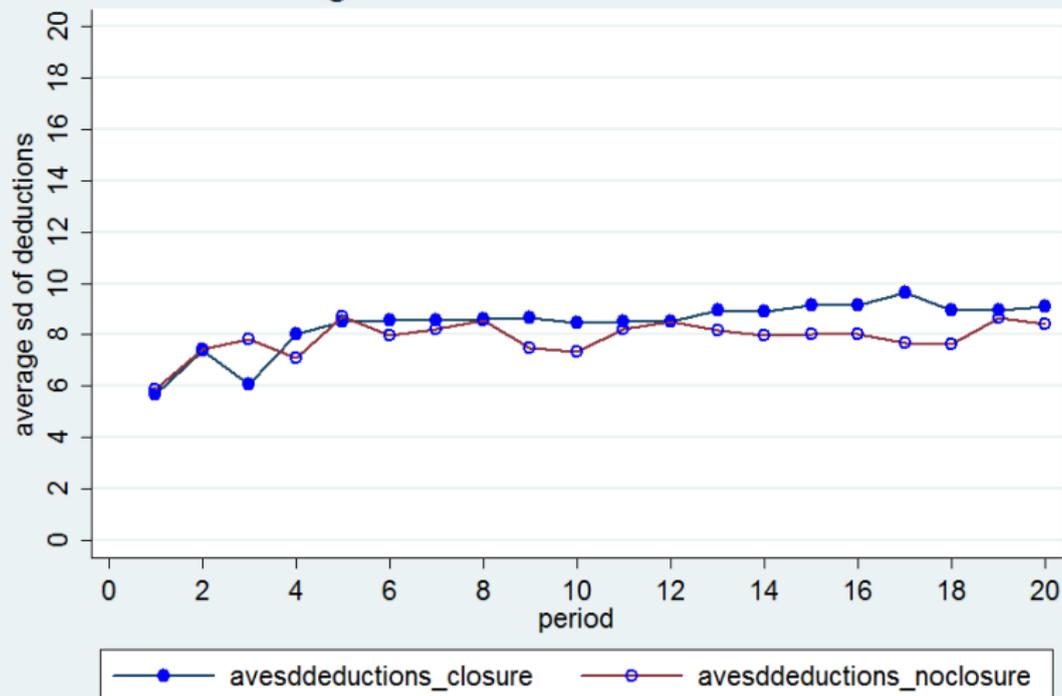


Appendix 3



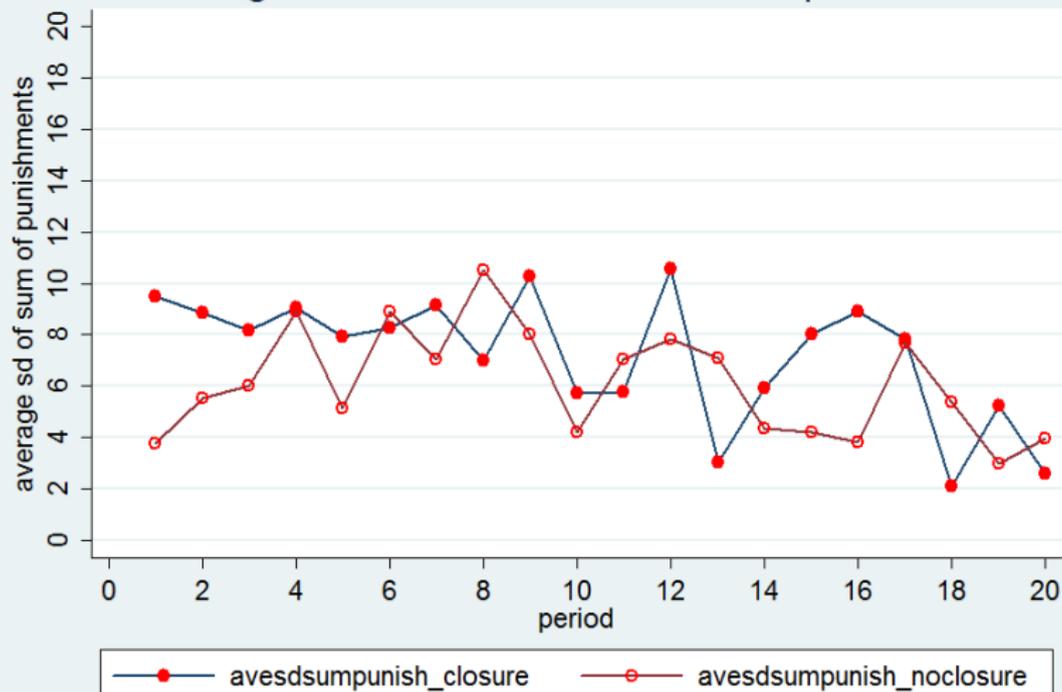
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Average standard deviation of deductions



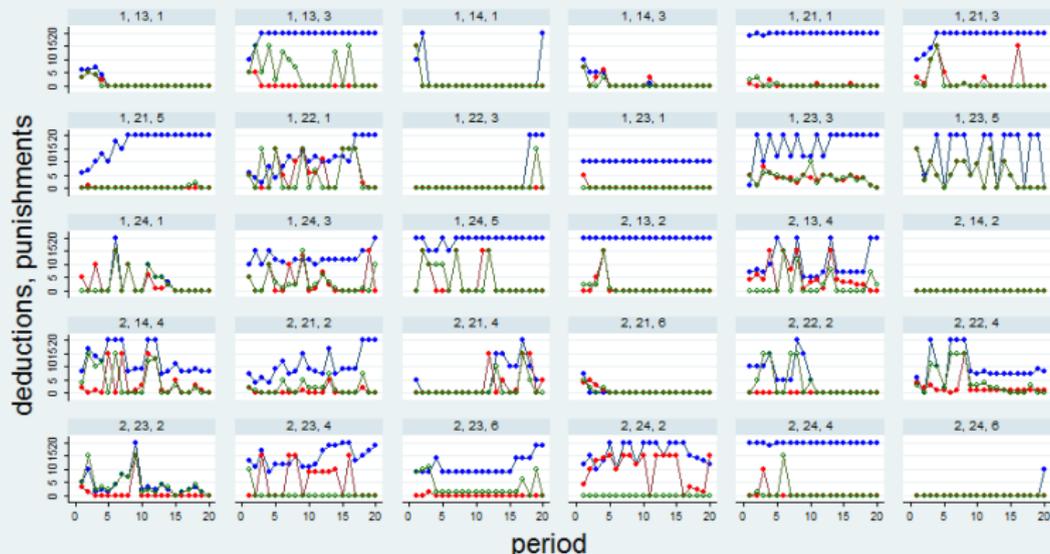
Appendix 3

Average standard deviation of sums of punishment



Appendix 3

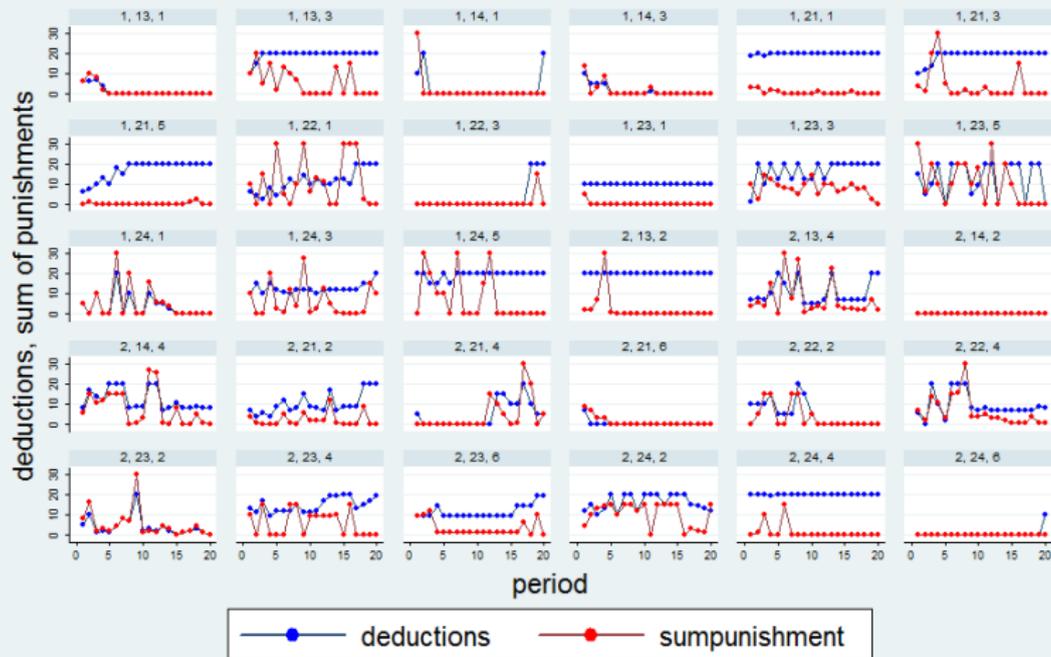
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