Tutorial 1: Testing whether people plan

Bone, J., Hey, J. D., & Suckling, J. (2009). Do people plan?. *Experimental Economics*, 12(1), 12-25.

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General Information

- About the tutorial
  - Reading session (w28, 30, 33): discuss a paper together & any related questions
  - Lab session (w32): visit the lab & participate a pilot experiment
- About the tutor
  - Email: Ying.Chen2@nottingham.edu.cn
  - Office hr.: Tuesdays, 2-3 pm, IEB-320 (start from this week)

Questions to Bone et al. (2009)

Research question – 1. What research questions motivate the paper? How does this topic relate to the real world?

Experimental Design – 2. What are the main features of the experimental design? What functions do they serve?

Conclusion – 3. What are the main findings of the experiments?

Limitation – 4. Do you see any reason to query the interpretations of the findings? Are there any limitations?

Extension – 5. Can you think of any additional experiments on this topic that would be worthwhile?

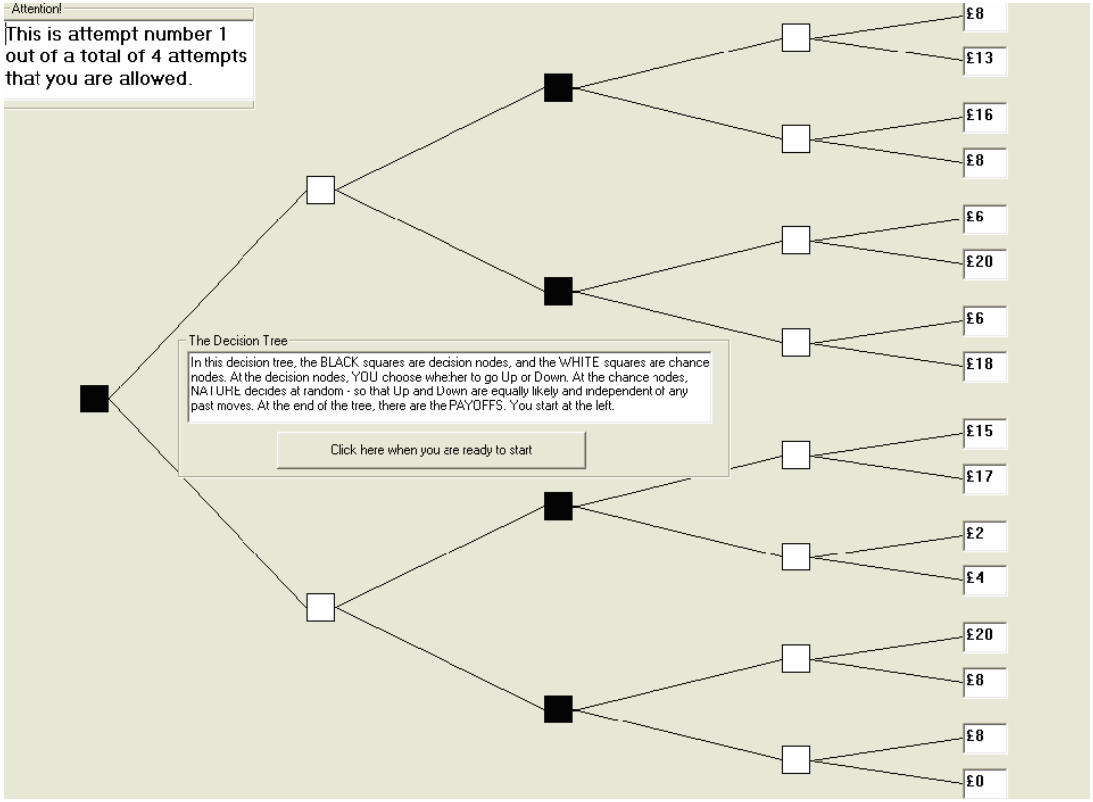
*** *In general, any experimental paper can be analyzed by the five questions.*

1. What research questions motivate the paper? How does this topic relate to the real world?

- Research question: Do people plan?
  - To investigate whether the subject does indeed plan.
  - To test one of the key assumptions in the model of individual dynamic decision making – "plan".
- Definition of "Plan".
  - In order to decide what to do today, rational economic agents should first consider what they will do in the future, using the future to adjust today's behaviour.
- "Plan" in the university…
  - Place an order for takeout via, e.g., 饿了么 美团…

2. What are the main features of the experimental design? What functions do they serve?

- Task: a decision tree.



Nodes	Who play that node?	Actions
2 Decision nodes: ■		
2 Chance nodes: □		
1 payoff node		

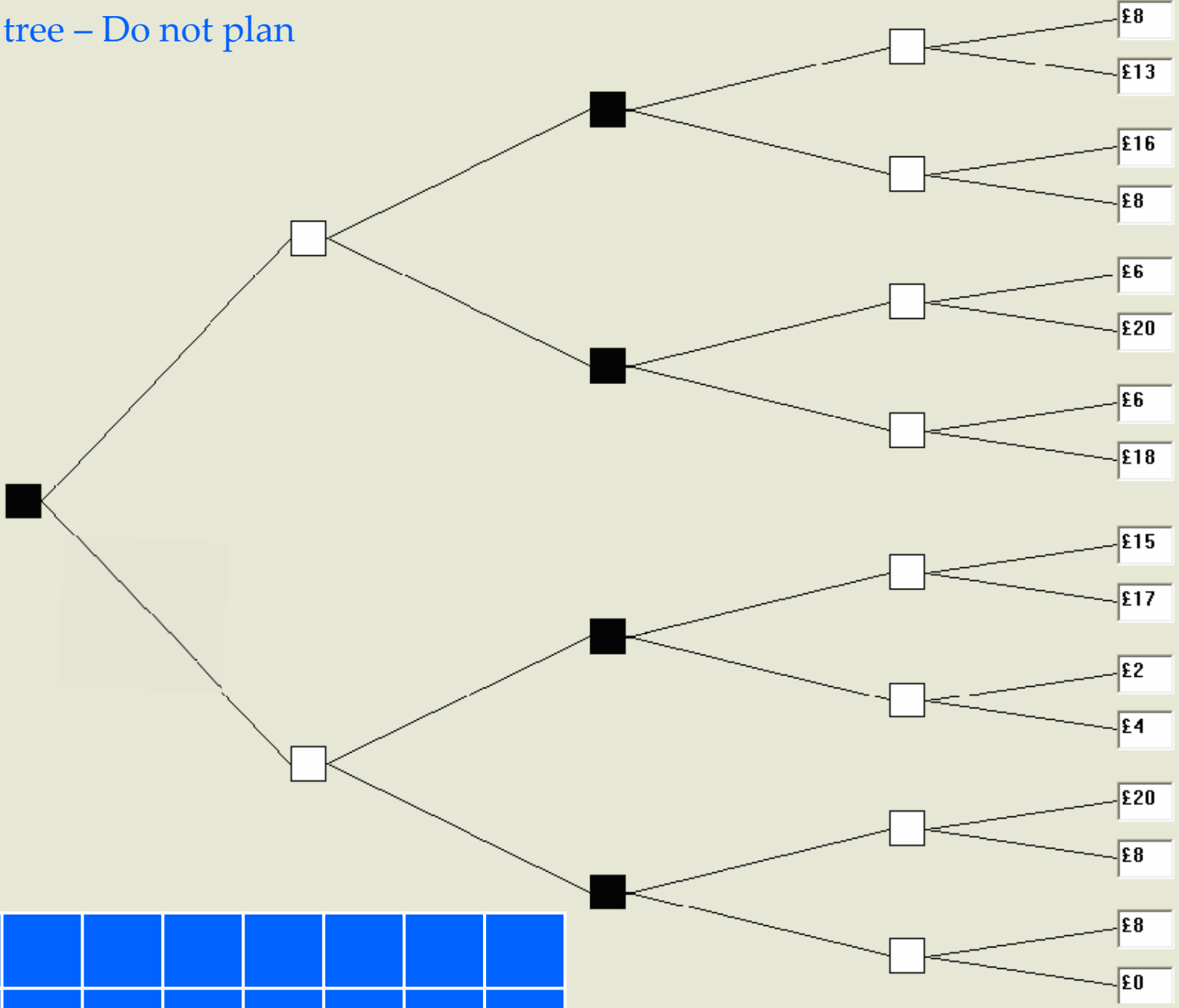
2. What are the main features of the experimental design? What functions do they serve?

- Distinguish between "do not plan" and "do plan ahead".
  - If the majority choose U/D at the 1st D-node →

	Do not plan	Do plan ahead
Behaviour		
(Reduced) decision tree		
Payoff panel		
Choice at 1st D-node	Up	Down

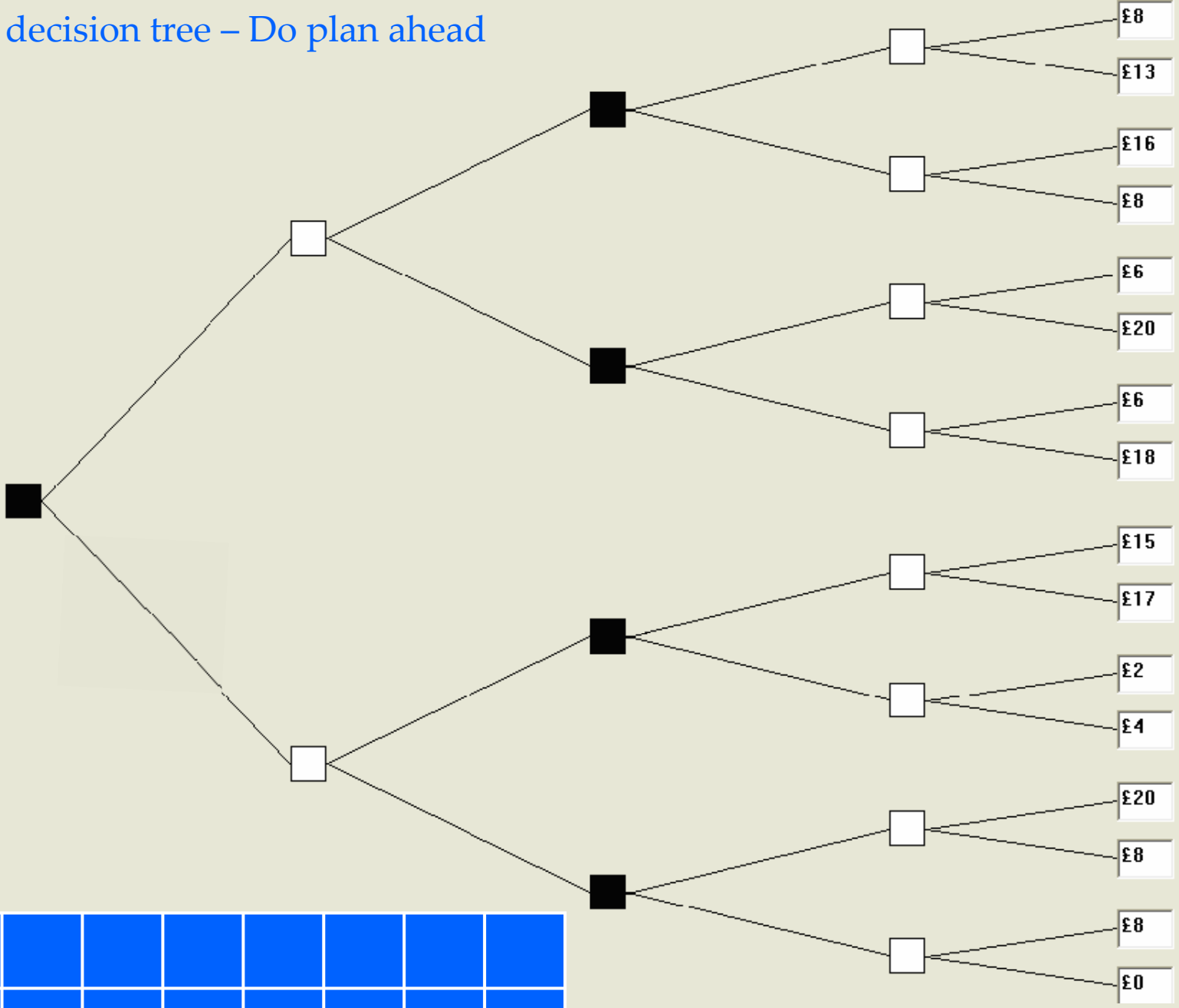
- … but the premise is to prove preference satisfies dominance.
  - If the majority choose dominance actions at the 2nd D-node → preference satisfies dominance → choice of U/D at the 1st D-node makes sense.

Decision tree – Do not plan



U								
D								

Reduced decision tree – Do plan ahead



U								
D								

2. What are the main features of the experimental design? What functions do they serve?

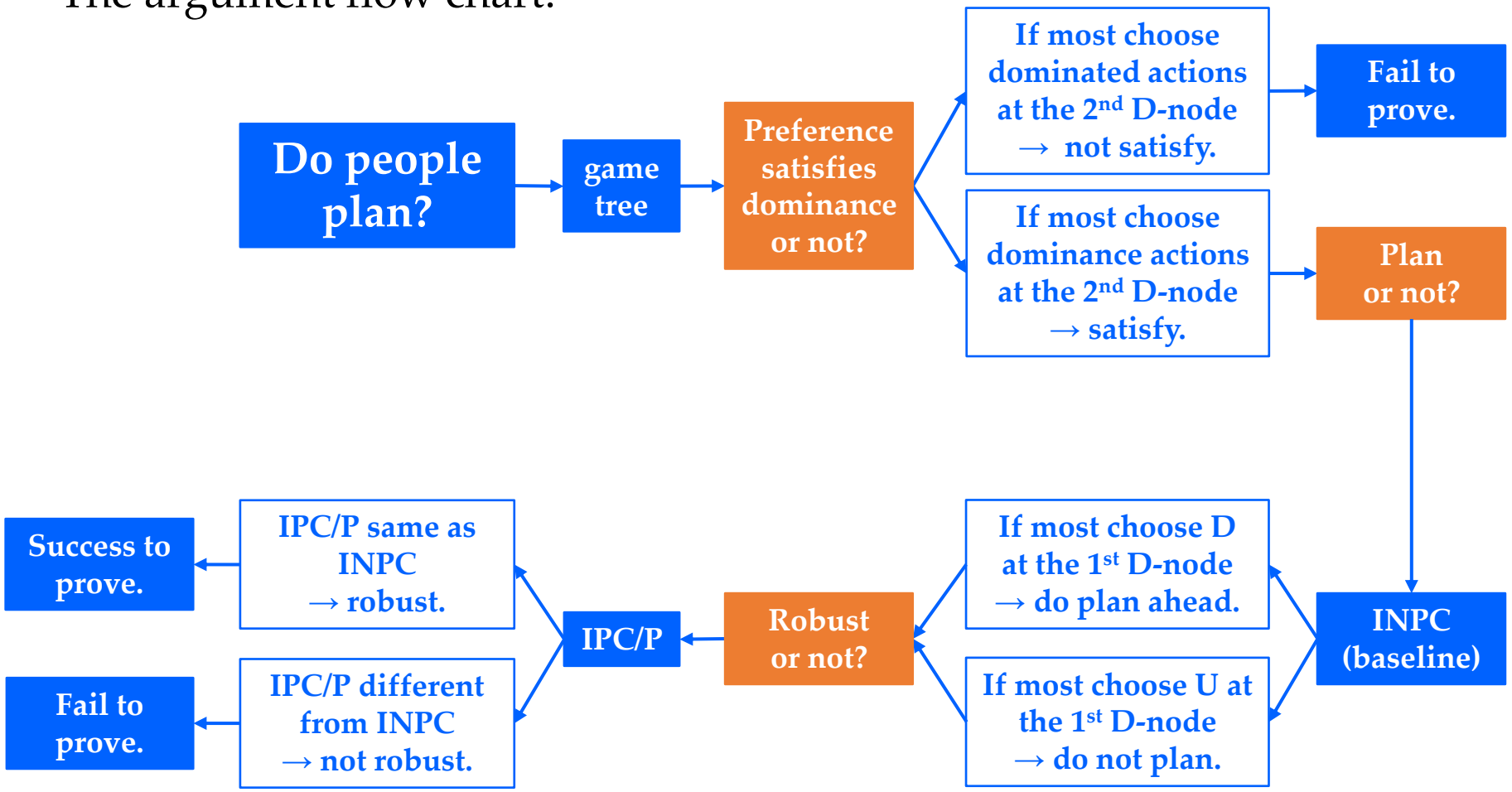
- Treatments: INPC, IPC, P.

Treatment	1st node (1st D-node)	2nd node	3rd node (2nd D-node)	4th node
INPC	Player 1	Nature	Player 1	Nature
IPC		Nature		Nature
P	Player 1	Nature		Nature

- INPC: baseline, [redacted] – "People do not plan".
- IPC: Will Player 1 plan ahead if he/she is forced to decide the 2nd D-node?
  - [redacted] If the percentage of choosing D at the 1st D-node does not increase (significantly) → result in INPC is robust.
- P: Will Player 1 plan ahead if he/she loses the control of the 2nd D-node?
  - [redacted] If the percentage of choosing D at the 1st D-node does not increase (significantly) → result in INPC is robust.

3. What are the main findings of the experiments?

- The argument flow chart:



3. What are the main findings of the experiments?

- Aggregate result: the majority of these subjects do not plan.

Table 2 Decisions

Treatment	First attempt		Second attempt		Third attempt		Fourth attempt		All attempts	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
Decisions at Second Decision Node										
INPC	52	3	54	1	54	1	54	1	214	6
	95%	5%	98%	2%	98%	2%	98%	2%	97%	3%
IPC	43	2	41	4	44	1	40	5	168	12
	96%	4%	91%	9%	98%	2%	89%	11%	93%	7%
P	25	1	24	2	24	2	24	2	97	7
	96%	4%	92%	8%	92%	8%	92%	8%	93%	7%
Decisions at First Decision Node										
INPC	19	36	21	34	19	36	15	40	74	146
	35%	65%	38%	62%	35%	65%	27%	73%	34%	66%
IPC	13	32	14	31	15	30	18	27	60	120
	29%	71%	31%	69%	33%	67%	40%	60%	33%	67%
P	5	21	9	17	9	17	9	17	32	72
	19%	81%	35%	65%	35%	65%	35%	65%	31%	69%

overall percentage of choosing "dominance" by treatment

overall percentage of choosing "do plan" by treatment

- Individual variations: it is a minority of these subjects always plan ahead.