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Detailed Allocation Procedure vs. Advice. A natural experiment

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Motivation: The rates of truthful preference revelation vary dramatically between lab experiments in matching. Information, explanations of the algorithms, presence of advice, and many other factors can explain the difference. Experimentalists face a trade-off between delivering the features of the mechanism to subjects in the lab and not making the decisions trivial to them because of the presence of the dominant strategy.

Goal: Test the **Top Trading Cycles Mechanism** in a **real environment**. Test the effect of **advice**.

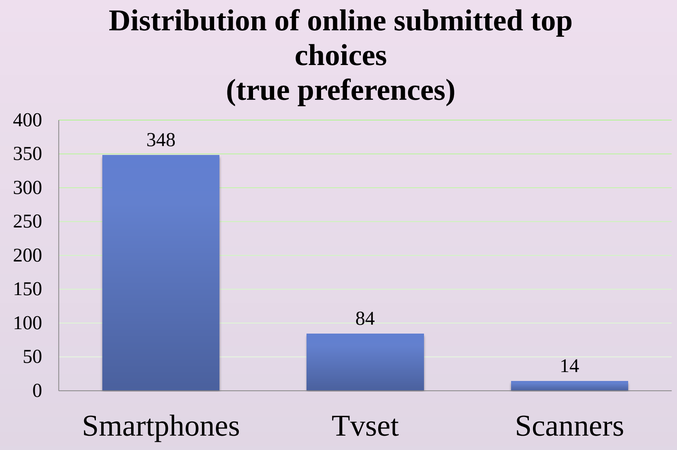
The experiment:

We **allocate topics for a seminar paper** of first year business students for Introductory Microeconomics course. The grade for the paper is 20% of the final grade. Three topics to choose from:

Smartphones

Tv sets

Scanners



Preferences are **highly correlated preferences**.

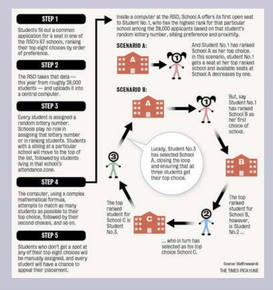
In class procedure: The lecturer announces that submitted choices of topics are too correlated. As the equal split of topics is needed the allocation procedure is performed.

Priorities: We randomly assign a tentative topic to students. The tentative topic is printed on the instruction sheet, so every student knows her topic at the moment of submission of the decision. The tentative topic is an equivalent of the highest priority group (an analogue of the district school which can accommodate all local students). Priorities below the highest priority group are purely random.

Treatments (implemented between subject in three different streams of the class):

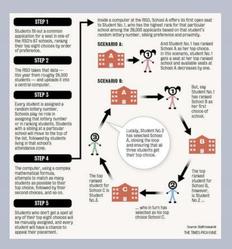
T1. **Allocation procedure.** T2. **Features and advice only.** T3. **Allocation procedure and advice.**

Results



T1	N	Top!=Submitted	Proportion of truth
Tent Smartphone	74	4	94.6%
Tent Tvset	91	28	69.2%
Tent Scan	76	13	82.9%
Total	241	45	81.3%

T2	N	Top!=Submitted	Proportion of truth
Tent Smartphone	37	1	97.3%
Tent Tvset	37	4	89.2%
Tent Scan	22	2	90.9%
Total	96	7	92.7%



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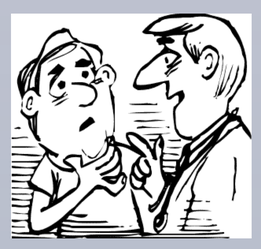

T3	N	Top!=Submitted	Proportion of truth
Tent Smartphone	32	0	100.0%
Tent Tvset	43	9	79.1%
Tent Scan	32	1	96.9%
Total	107	10	90.7%

P-value=0.01

P-value=0.11

P-value=0.10

Summary:

- The percent of truthful preference revelation is higher than it is typically in the lab.
- In the presence of the reliable professional advice, students behave more optimally.
- The detailed explanation of the procedure, which is supposed to convince them to submit true rankings, has the opposite effect.