Tutorial 1 Notes Testing whether people plan*

1. General information

Welcome to the tutorial. The main objective of the tutorial is in two folds: to extend our understandings beyond lecture topics, and to learn how to critically evaluate studies in the field of Experimental and Behavioural Economics. To achieve these, we will take 3 research papers as examples. These papers are highly related to the topics covered in our lectures. In each of the Tutorial 1, 2 and 4, we will discuss one of the papers together. Papers and tutorial notes will be uploaded on Moodle in advance with an email notification. Please make use of the tutorial notes to get familiarize with the reading content and prepare your discussion draft in advance.

In addition, we will visit CeDEx Lab and participate a pilot session in Tutorial 3, which enables us to grasp some ideas about how the Economics experiment is conducted in the lab. No extra preparations are required for Tutorial 3. Details are summarized as below:

	Time	Venue	Content	Preparation	Tutor
Tutorial 1	week 28*	normal classroom*	Discuss the 1st assigned paper.	Yes.	Ying Chen
Tutorial 2	week 30*	normal classroom*	Discuss the 2nd assigned paper.	Yes.	Ying Chen
Tutorial 3	week 32*	Teaching building 106	CeDEx Lab visiting & pilot experiment.	No.	Zengbao Hu
Tutorial 4	week 33*	normal classroom*	Discuss the 3rd assigned paper.	Yes.	Ying Chen

^{*} Please refer to individual timetable for exact time and venue.

2. Today's paper and task

The topic explored in this tutorial is connected to the discussion of dynamic decision making in Topics 3 and 4 of the lectures. In economic theory, the analysis of dynamic decisions typically refers to the concept of a 'plan'. It turns out, however, that it is quite difficult to observe plans. The purpose of this tutorial is to examine, in some detail, one experimental paper that aims to assess whether people make plans.

The paper is:

"Do People Plan?" by John Bone, John Hey and John Suckling, *Experimental Economics*, 2009, 12, 12-25. Henceforth, BHS09. The paper has been uploaded on Moodle or your can download here.

Your tasks are:

Please carefully read the paper, write down replies to the following questions, and come to the tutorial to discuss your replies with classmates.

^{*}Tutor: Ying Chen. Email: *ying.chen2@nottingham.edu.cn*. Office hour: Tuesdays 2-3pm (week 28-34), IEB-320 (subject to change).

- 1. What research questions motivate the paper? How does this topic relate to the real world?
- 2. What are the main features of the experimental design? What functions do they serve?
- 3. What are the main findings of the experiments?
- 4. Do you see any reason to query the interpretations of the findings offered in the paper? Are there any limitations of the experiments conducted?
- 5. Can you think of any additional experiments on this topic that would be worthwhile?

How to prepare, discuss, and ask for feedback for our tutorial?

[**Before you come**] Preparation before class is essential because it helps you more easily and confidently involved in discussion with your classmates and Ying during the tutorial. To help you prepare, you may want to draft some short-written answers to these questions with the help of *Appendix 1: Guidelines to write discussion draft*.

[During the tutorial] The tutorial will take the form of a broad discussion. A high-quality discussion needs everyone to participate and engage in it. Note that, in class, Ying will not directly provide you with answers to these questions.

[Ask for feedback] Unfortunately we cannot cover all questions in discussion. If you would like to obtain more feedback about one (or more) question, please email your drafted paragraphs of that question to Ying. Ying is willing to give you oral feedback in office hours.

Besides that, you are cordially invited to suggest anything that should be covered in the seminar discussion. You can directly email your questions to Ying or fill in this anonymous <u>form</u> (QR code is displayed below). Your questions will only be covered in the seminar group you belong to. When Ying show your questions in the seminar, your name will not be presented (ddl: 23:59 March 17, 2023).



Appendix I. Guidelines to write discussion draft

Note: This guideline is written to organize short-written answers. The words in *blue italic font* are general solutions to these questions then some key points for todays paper are listed. You are welcome to expand your writings according to this. However, you are more than welcome to go beyond this.

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

- Question 1 asks you to identify research questions, and think about why these research questions (or the behaviour) are worth studying in the field of Economics. Research questions usually will be stated at the beginning of a paper, i.e., in the abstract, introduction, motivation or literature review. To show the importance of a research question, you may want to consult your own experiences. For todays paper, you may want to clarify:
 - 1.1 What are the research questions?
 - 1.2 The behaviour studied here is "plan". What is the definition of this behaviour in the paper?
 - 1.3 Is this behaviour highly related with economic decisions in our daily life? If you would like to say "yes", can you provide some examples? The source of examples can be yourself, your friends, or what you have seen from news media as well as books and magazines.

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

Question 2 asks you to describe experimental design and explain the aim of each design feature. In general, key design features include the task, the treatment, the session and the payoff structure. It is also worth mentioning any feature that does not follow the tradition of experimental design (e.g., when a study uses a non-standard participant pool, like farmers), or the feature that does follow the tradition but has special meanings towards solving the research question. Every design feature is used for answering (at least part of) the research questions, or for ensuring the robustness of experimental results. For today's paper, you may would like to cover the following aspects:

2.1 The task is *a decision tree*.

- 2.1.1 How is the task played by the Nature and players?
- 2.1.2 How does the experimenter know whether a subject "does not plan" or "does plan ahead" by observing his/her choice at the first decision node being "Up" or "Down", respectively? Use the example decision tree in Figure 1 of BHS09 (pp.16) to explain. (Aim 1 of task design).
- 2.1.3 The authors argue that this decision tree avoids dynamic inconsistency if preferences satisfy dominance. How do they plan to achieve this? (Aim 2 of task design).
- 2.2 There are *three* treatments: *INPC*, *IPC* and *P*.
 - 2.2.1 What are the differences between INPC and IPC? What is the aim of having IPC?
 - 2.2.2 What are the differences between INPC and P? What is the aim of having P?
- 2.3 Session: Why is each participant given four attempts? Why the four attempts are independent of each other?
- 2.4 Payoff structure: How are participants paid by the results?

3. What are the main findings of the experiments?

Question 3 asks you to summarize the experimental results. Do not worry if you are unable to fully understand the econometric analysis applied in the paper. In this tutorial, you only need to outline the results themselves,

while the process of reaching those results is the secondary purpose. You may would like to use the Table 2 of BHS09 (pp.21) to point out the key results:

- 3.1 At the first decision node, what are the proportions of participants that choose correct decisions (the "plan" decision) in INPC, IPC and P, respectively? What does it imply?
- 3.2 At the second decision node, what are the proportions of participants that choose decisions respecting dominance in INPC, IPC and P, respectively? What does it imply?
- 4. Do you see any reason to query the interpretations of the findings offered in the paper? Are there any limitations of the experiments conducted?
- Question 4 asks you to evaluate limitations of this study. Limitation exists for various reasons and it is normal for a work to have some limitations. In general, the authors will spend some paragraphs to defend their works against queries. The first half of the Question 4 is about this. Even if the findings across the three treatments all conclude subjects do not plan ahead, other researchers may question the IPC treatment which aims at forcing participants to think carefully about their first decision node but failed to do so was caused by inappropriate experimental design. You may organize your reply by commenting on their defence:
 - 4.1 In Section 5 of BHS09 (pp.23), how the authors defend the experimental design, as well as the robustness of the findings of IPC treatment? Can their explanations convince you? Why?
- However, not all limitations will be discussed by the authors. The second half of Question 4 then ask you to think about this. Since this is a high-quality paper which has been published in a peer-reviewed journal, luckily only a few extra limitations might be presented. Here is a list of potential limitations to be considered when it comes to an experimental study, you might want to check whether this paper has these limitations. It would be great if you can suggest how to improve the limitation you pointed out.
 - 4.2 A list of potential limitations (but not limited to these):
 - The list of the related literature is inappropriate to the topic; or the contribution of a certain strand of literature towards the topic is not admitted.
 - The logical argument of developing experimental hypothesis is not tight, including incorrect application of economic concepts or erroneous model derivations.
 - The experimental design does not cover all research questions; or the function of the design is not proper serve the research questions.
 - The interpretation of experimental results is inappropriate given the experimental data and econometric analysis used or goes beyond what has actually been proven.
 - The conclusions are incorrectly made or expressed.
 - The contributions to the literature are over described.
 - There are spelling and grammatical errors, or typos on tables and figures.
- 5. Can you think of any additional experiments on this topic that would be worthwhile?
- Question 5 encourages you to suggest some extensions beyond this study. Every paper is a stepstone to inspire future research works. This is an open question like Question 4, thus below are two possible ways to think about:
 - 5.1 Are there any unsolved research questions followed by this paper that can improve our understanding of this topic? Can you propose some experimental designs?
 - 5.2 Are there any new research ideas regarding the findings and the conclusions of this paper? Can you propose some experimental designs?