Conducting an Experiment at CeDEx

In general, every researcher wishing to use the Centre's facilities has the freedom to decide the optimal way of designing and conducting experimental research. However, some potential externalities should be kept in mind. The Centre's reputation depends crucially on the quality of the experiments conducted. This includes issues regarding how subjects are recruited and treated during the sessions, as well as other important methodological issues. For this reason, experiments run at CeDEx must fulfil a set of basic rules outlined in this document. This leaflet outlines the CeDEx facilities, as well as the guidelines for conducting experiments at CeDEx.

I. The CeDEx facilities

- The Centre's Experimental Lab facilities are located in room C41 at the School of Economics, Sir Clive Granger Building, University Park, Nottingham, NG7 2RD.
- The laboratory is a state-of-the-art facility with thirty-two subjects' computer workstations and two separate experimenter's computer workstations.
- The laboratory is primarily for use by CeDEx Staff members plus CeDEx PhD students. Other parties interested in running experiments at the CeDEx laboratory should contact CeDEx Director, Prof. Chris Starmer (chris.starmer@nottingham.ac.uk), to discuss this.
- CeDEx maintains a subject pool consisting mainly of students at the University of Nottingham.
- The administration of CeDEx lab and subject pool is supervised by CeDEx Lab Manager Jose Vicente Guinot Saporta (jose.guinotsaporta@nottingham.ac.uk).

II. Rules and Procedures for Conducting Experiments at CeDEx
II. A. Procedures

These following important (chronological) steps in preparing, running and reporting experiments should be followed for any experiment conducted at CeDEx.

1. **Preliminary requirements for using the CeDEx facilities:** New users of the lab should complete the CeDEx induction course which normally runs each Autumn. Users with little or no prior experience of running experiments will also be expected to have undertaken suitable prior training (e.g. new PhD students will normally be required to take the MSc module Experimental methods in Economics before running an experiment in the CeDEx lab).

2. **Ethics committee approval**: All the experiments using the CeDEx lab or subject pool must attain approval from the Nottingham School of Economics Research Ethics Committee (read the section below on *Ethical guidelines*).

3. **Preparing the experiment**
    - Testing the program: All programs must be thoroughly tested in advance (read the section on *Lab usage guidelines*).
    - Lab booking and recruitment of subjects (read the section on *Lab usage guidelines*).

4. **Conducting the experiment –** (read the section on *Lab usage guidelines*)

5. **Research paper -** When the results of an experiment are reported or published, the CeDEx lab should be referenced. Moreover, all the programs used to recruit subjects (ORSEE) and design experiments (e.g. zTree) should be properly cited.

II. B. Rules

ETHICAL GUIDELINES

Ethical Review procedure
All experiments conducted using the CeDEx lab or subject pool must attain approval from the Nottingham School of Economics Research Ethics Committee. Researchers must complete the School's Ethics Approval Form and submit it, along with any necessary supporting documents, to the School Office, B30 Sir Clive Granger Building. More information is available at http://www.nottingham.ac.uk/economics/research/research-ethics.aspx.

Protection of Participants and their Rights
- All participants have the right not to participate in any investigation and this right must be respected. There should be no coercion of subjects to participate in the research. Students and others in a dependent relationship with investigators must be assured that any decision not to participate will not prejudice their academic or other progress in any way.
- Each participant must have the right to withdraw easily from the project whenever and for whatever reason without explanation or penalty. That is, participants should be free to leave the experimental room at any point if they wish to do so.
- All participants have the right to expect that the information supplied by them will be treated as confidential and will be protected as such.
- All participants have the right to expect that their identity will be protected.
- Researchers should ensure that data is stored in an appropriate way, protecting the confidentiality and anonymity of participants.
- The data collected in the experiments should only be used for scientific purposes.

Informed Consent
All participants must sign a form of consent before participating in an experiment. Subjects who have registered with ORSEE to participate in experimental research sign a once and for all form of consent at the time of registration. Thus, all experiments conducted using subjects recruited through ORSEE have automatically obtained participants' consent. Researchers who wish to use alternative recruitment procedures should first seek the approval of the CeDEx Management Group, and must independently obtain consent from their participants.

Deception
Under no circumstances should subjects be lied to or deceived in any way. The laboratory is very concerned about developing and maintaining a reputation for honesty among the student population. This rule of no deception applies to the recruitment process, the instructions provided during the experimental sessions, and the economic compensation subjects receive for taking part in the experiment. Experiments that involve deception and then later truth-telling (i.e. debriefing) are also proscribed.

LAB USAGE GUIDELINES

Testing your experimental software

Only experiments that have been previously tested at the lab may be run. Ideally, researchers should test their software outside the hours usually dedicated to running experimental sessions (typically 10am to 5pm on weekdays), but regular lab time may also be reserved using the calendar page of our recruitment system, ORSEE (if you do not have an ORSEE username and password yet, please contact the Lab Manager. You must read the CeDEx ORSEE Guide - https://workspace.nottingham.ac.uk/display/cedex/Welcome+to+CeDEx+Intranet - before you start using ORSEE).

Lab booking and subject recruitment

- <u>Booking a session.</u> Experimental sessions can be booked using ORSEE. Researchers should book the lab only with sessions that they intend to run. Provisionally booking the lab with sessions that may not be run is not acceptable. PhD students must have the agreement of their supervisor(s) and inform the Lab Manager before they can book lab time.

- <u>Coordinate with other researchers.</u> When different researchers run sessions on the same day, they should coordinate among themselves regarding the booking of session slots (ensuring that enough time is left between sessions) and the recruitment of subjects.

- <u>Recruiting subjects.</u> Recruitment of subjects should occur through ORSEE. Researchers who wish to use alternative recruitment procedures should first seek the approval of the CeDEx Management Group. Recruitment of subjects must be completed in advance of the scheduled experiment (typically 3-4 days before your first session is sufficient) in order to avoid cancelling a session.

- <u>Sending invitations.</u> It is recommended that you only send a sensible number of invites when you recruit subjects. For example, a good rule of thumb may be to send about 10 invitation emails for each place available in your sessions. If you have doubts about the number of invitations you should send, please do not hesitate to contact the Lab Manager for discussion.

- <u>The default invitation email.</u> When recruiting subjects, ORSEE will use a default invitation email text that contains information about the experiment date, time, location, and expected duration. You can change this default text if you wish to (please refer to the ORSEE Guide for details). PhD students must have the agreement of their Supervisor(s) before making any changes to the default invitation email.

- <u>Checking CeDEx mailbox</u>. It is your responsibility to follow the recruitment for your experiment. This implies that you have to constantly monitor the CeDEx email account (CeDEx@nottingham.ac.uk) from the day when you send the first invitation emails until a couple of days after your last session. During this period students will write emails asking all sort of information about your experiment, and you should reply to each email in a timely and professional manner. The CeDEx email account is accessible via https://legacy.nottingham.ac.uk/owa/le-cedex@exmail.nottingham.ac.uk/ using your University username and password (please contact the Lab Manager if you cannot log on). It is recommended that you gather your correspondence with subjects in your own folder. Having your own folder in the CeDEx email account avoids cluttering CeDEx's main mailbox. Please create the folder under Cabinet -> Experiments.

- <u>Replying to subjects' cancellation requests</u>. In some of their emails students will ask to be removed from the list of participants to a session and/or apologize for their absence from sessions. You should remove subjects from the ORSEE register as soon as they ask so, and let them know that you have done this.

Conducting a session

- <u>Early arrival</u>. Experimenters must be at the CeDEx lab at least thirty minutes before start time to prepare the lab for their sessions.
- <u>Professional atmosphere</u>. Experiments should be run in a relaxed but professional atmosphere. It is particularly important that subjects should not perceive experiments as games or examinations.
- <u>Incentives</u>. Experimental subjects should get on average an economic incentive that would motivate them to take part in the experimental sessions. The expected average payment should normally be between £8 and £15 per hour.
- <u>Negative payments</u>. In no circumstances should the subjects earn negative payments. Researchers must have a procedure in place to deal with the possibility of subject bankruptcy (such as providing a higher flat fee).
- <u>Reserve participants</u>. If you need to run sessions with an exact number of participants, it is advisable that you invite slightly more subjects than you actually need. This is because sometimes subjects do not show-up or cancel their participation at the last minute. However, over-recruiting subjects means that some subjects who do show-up to a session on time may not be allowed to participate. Unless well defined experimental reasons exist, subjects should be allowed to participate on a first-come first-served basis. It is your responsibility to ensure that this procedure is correctly implemented. For example, you may let subjects enter the lab in order of arrival. In all cases, extra-participants who show-up on time but are not allowed to participate should be compensated with at least £3.
- <u>Receipts</u>. Participants should sign a receipt form for the payment they receive after the experiment. These are available at https://workspace.nottingham.ac.uk/display/cedex/Welcome+to+CeDEx+Intranet.
- <u>Cancellations</u>. If a session has to be cancelled or rescheduled, all the participants present should receive compensation commensurate to the time they spent in the lab.
- <u>Cancellations</u>. You should only cancel a session under exceptional circumstances (e.g., because of severe and unanticipated network or computer malfunctions). Sessions should not be cancelled beyond these circumstances, and you should do anything in your power to run sessions as planned. For example, you must carefully follow the recruitment process and ensure that you have enough subjects signed up for a session in order to avoid cancelling the session.
- <u>Cleanup</u>. After using the CeDEx lab we expect all researchers to leave it in the state it was in upon arrival. No experiment-related papers should be left on any desk, and all experiment-specific software and files must be removed from the computers.

Updating ORSEE show-up and participation data

Once you finish a session it is very important that you remember to enter the show-up and participation data in ORSEE, and that you tick the "Session Finished" box after doing so. Also, do not forget to tick the "Experiment Finished" box once you complete your experiment. Please refer to the CeDEx ORSEE Guide for details.

Data Storage

Once you have finished collecting data for your experiment, you must contact the Lab Manager and provide an electronic copy of any output produced in the course of your experiment. This includes all data collected as well as an electronic copy of any material used in the experiment (instructions, scripts, experimental software, questionnaires, media files, etc.). If you used z-Tree to run your experiment, you should let the Lab Manager have a copy of <u>all the data generated by z-Tree</u>. This is stored in ztree Data folder on the Master PC in the Lab. Please refer to the CeDEx Lab Guide for details.

II. C. Costs of running an experiment at CeDEx

Anyone writing grant proposals that involve the usage of CeDEx experimental lab facilities should build in appropriate costings for contributing towards the operation of these facilities. As a guidance fee, we estimate that the costs of running a session with 20 participants are approximately £100 (this figure constitutes a contribution towards the running costs of the CeDEx and does not include subject payments).