Overview

This booklet has been developed to provide guidelines on the use of the Harvard Decision Science Laboratory for investigators planning experimental protocols.

The Harvard Decision Science Laboratory is a University-wide research resource available to researchers from all faculties and units. We provide

- A world-class biobehavioral research facility with capabilities for monitoring a broad spectrum of physiological functions.
- A subject pool maintained and managed by the lab for the use of researchers.
- Expert staff and access to a community of researchers able to provide input and consultation on questions of experimental design and programming.

These guidelines have been drafted to help you receive the optimal benefit from your use of our laboratory. Researchers are reminded, however, that University policies and statute law requires that all experimental protocols be compliant with three basic regulatory regimes:

- **Human-subject protections.** University policies require the review and approval of all experimental protocols by the Committee on the Use of Human Subjects (CUHS), often referred to as the “IRB.” In addition, University policy requires all investigators involved in research using human subjects to have completed basic certification in the on-line Harvard Ethics Training in Human Research, or (after June 26, 2010) training in the Protection of Human Subjects provided through the Collaborative Institutional Training Initiative (CITI).

- **Tax reporting requirements.** Experiments involving compensation to human subjects must provide means of recording and reporting information regarding compensation amounts. Specific reporting requirements are determined by the Financial Dean of your faculty.

- **Data security requirements.** Both experimental data and records relating subject payments to specific identifying information (for example, a Social Security Number) may be considered High Risk Confidential Information under the University’s Policy on Confidentiality and Information Security. Principal Investigators should be aware of the University’s Information Security Mandates (http://www.security.harvard.edu/university-security-mandates) and should insist that all members of their research teams complete the University’s on-line training course for High-Risk Confidential Information.

Please note that approval by the IRB of an experimental protocol is not an assurance of compliance with all of these areas of regulation. The IRB focuses only on the first of these three areas in granting approval of proposals.

Please note also that while they may be approved by the IRB, experimental protocols involving the use of deception are not permitted in the Decision Science Laboratory.
Policies Guiding the Use of the Laboratory

It is understood that each experimental study is unique and imposes a specific set of requirements on both experimenter and the lab itself. The staff of the Decision Science Laboratory will always work to make our facility as useful and responsive as possible to researchers bringing their studies into the lab.

At the same time, recognizing that researchers from different faculties, departments, and disciplines use our facility, we offer these policies as a way of assuring equal treatment to all researchers and an optimal research environment for the university.

I. Research Proposal Process

- All researchers wishing to use the Decision Science Laboratory (HDSL) must submit a “Lab Use Application.” This form may be found at http://decisionlab.harvard.edu/lab-use-application
- The principal investigator of all research projects bringing experiments into HDSL must be a member of the Harvard faculty qualified by their respective faculties to serve as a principal investigator. The rules that determine which members of a faculty may serve as a principal investigator are determined by the separate faculties of the university.
- All members of a research team conducting experiments in HDSL are required to have completed the on-line Harvard Ethical Training in Human Research (HETHR) training at the baseline level, or, after June 26, 2010, through the Collaborative Institutional Training Initiative (CITI). This training may be found at https://www.citiprogram.org
- For each member of an experimental research team, the lab must receive a print-out of HETHR’s “Trainee Profile” page showing the date of HETHR certification, or evidence of Certification must be valid on the date proposed for the experiment to be conducted.
- It is not required that an experimenter filing an application to use the Decision Science Lab have already received approval from Harvard’s Institutional Review Board (IRB) in order to file an application. However, it is required that IRB approval be secured and submitted to the Lab’s manager at least two weeks before the conduct of the experiment. Even if the Laboratory Manager has scheduled an experiment on the lab’s calendar, it may not go forward unless IRB approval has been secured and forwarded to the lab manager.
- Final authority for approving all requests for the use of HDSL resides with the faculty directors of the lab.
II. Costs for the Use of HDSL

- For the majority of its studies, HDSL does not charge researchers a cost for the use of the lab. The support provided to researchers beyond the use of our facilities is detailed below in Section IV.

- There are some conditions under which HDSL must charge researchers in order to recover costs the lab incurs in maintaining its facility. These charges are as follows:
  - In cases in which researchers are using the HDSL subject pool to generate subjects for their work and require more than 80 subjects for their experiment, there will be a $2.00 charge per subject beyond 80 subjects. This cost helps us to broaden and strengthen our recruitment activities in order to have available a sufficient pool of subjects for all researchers.
  - In cases of experiments requiring biophysical measures, HDSL charges $5.00 per subject to recover the costs of expendable equipment (biogel, alcohol swabs, electrodes, etc.). Experimenters may provide their own supplies.
  - HDSL will also provide, for a cost of $15.00 per subject, the services of a trained laboratory technical assistant who will correctly place electrodes for biophysical measures and assure the initial quality of the signal being received from these sensors before the commencement of an experiment.
  - Experiments that are conducted past the close of office hours (5:00 p.m. Monday through Friday) will be charged $50.00 per session to cover the cost of providing security and the presence of a member of the HDSL staff, which is required at all times an experiment is being conducted in the lab. All experiments conducted in the lab must be completed, and both subjects and experimenters out of the lab, by 8:00 p.m.

III. Guidelines for Experiments in HDSL

- HDSL does not permit the use of deception in experimental protocols. Faculty associated with HDSL are willing to work with researchers in order to help change experimental designs based on the use of deception into protocols acceptable for use in the lab.

- In general, the Lab reserves the hours of 9:00 to 11:00 a.m. for researchers to design experiments, test experimental protocols, and retrieve and analyze experimental data. Experimental sessions are scheduled between 11:00 a.m. and 5:00 p.m. All scheduling is done by the lab manager.

- When necessary for reasons of experimental design, HDSL will work to make arrangements to provide access to the lab in the evening hours. As our ability to do this depends on the availability of staff able to work after
hours, we cannot guarantee our ability to provide evening access on specific days requested by a researcher.

- In all cases, all experiments conducted in HDSL must be completed, and both subjects and experimenters out of the building, by 8:00 p.m.
- The lab is not open on weekends for experimental work.
- Researchers conducting the experiment must attend a training session on the lab equipment at least two weeks before the first date of their study. At this session researchers will learn how to use the lab’s equipment and will be given an access card to the lab. Each card is uniquely coded, allowing the lab to track when individual researchers enter the lab. All researchers must return the lab access card to the Lab Manager after their study is completed.
- All experiments conducted in HDSL must offer subjects:
  - A $10 minimum “show-up” fee. (If a subject registers for the study in the usual way and appears on time for the study, they must receive at least $10 even if the experimenter is unable to use them as a subject.)
  - Minimum compensation of $15 per hour of the study. This figure is to be calculated as incorporating the $10 “show-up” fee. Thus, any subject utilized for a study must receive at least $15, even if their participation is only for a portion of an hour.
  - Minimum compensation of $30 per hour in the case of studies using physiological equipment.
  - Total compensation not greater than $75.00*. (Some studies use a lottery system promising the award of a specific sum to a single winner in a given experimental session. Under no circumstances can the total of minimum compensation and the sum of this lottery be in excess of $75.)
- If an experimenter is using the HDSL subject pool in conducting an experiment, records must be kept of:
  - The names of subjects who register and appear on time.
  - The names of subjects who register and fail to appear.
  - The total dollar amount paid to each subject.

**IV. Support Provided By HDSL**

- With the exception of charges for cost recovery noted above, HDSL provides the use of its laboratory free of charge to all qualified researchers. There is no per-session or per-subject charge for the use of the laboratory.
- HDSL maintains a subject pool that researchers may utilize to find subjects
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for their experiments. Access to the subject pool is controlled by HDSL staff. Experimenters will be asked to complete, or to assist in completing, an on-line experiment registration form, which will in turn create a notification to members of our subject pool that a new study is available in which they may wish to participate.

- It is important to remember that in posting a study for consideration by members of the HDSL subject pool, a given study is competing for attention against other studies already posted. Each study offers certain incentives to participants to encourage participation. Your success in recruiting candidates will depend on how your incentives compare with those being offered in other studies.

- For all studies utilizing participants in the HDSL subject pool, a research assistant associated with HDSL will be assigned to your study to do subject check-in, orientation, and ID verification. If you choose to use your own subject pool, HDSL will only provide this support on request.

- During normal office hours, the HDSL Information Systems Officer will be generally available in the event that a specific problem arises requiring IT support. N.B., however, that the availability of this support depends on the schedule of this staff member. Experimenters anticipating needing this support should indicate this need well in advance of their scheduled lab sessions, in order to assure coordination of schedules.

The Decision Science Laboratory is equipped with MediaLab for the conduct of experiments, and with a suite of software for physiological data collection and analysis published by MindWare Technologies, Ltd. This software permits analysis of heart-rate variability (HRV), impedance cardiography (IMP), electrodermal activity (EDA, also known as skin conductance), electromyography (EMG), as well as blood pressure (BP). Specific questions regarding software available in the lab for the conduct of experiments, data collection, and data analysis should be directed to the Information Systems Officer.

V. Responsibilities of Experimenters

- Experimenters must arrange for, and manage, the provision of cash for payments to subjects. HDSL will provide all experimenters conducting research in the lab with a cash box in which to store these funds securely. Experimenters are responsible for supervising the disbursement of cash to subjects, recording the specific amount of all disbursements to individuals, and reconciling subject-payment accounts with their respective financial offices. A receipt template is available at the reception desk to be photocopied for each experiment. Laboratory staff are not responsible for performing these tasks and may not accept such responsibility in their personal capacity.
Experimenters are responsible for the repair or replacement cost of any lab equipment damaged or destroyed in the course of a study. The decision of whether the repair or replacement of damaged equipment is necessary lies solely with the staff of the lab.

VI. Concluding a Study

The Laboratory Manager will determine when experimenters may collect data generated by experimental sessions. N.B., because experimental sessions of different researchers can be scheduled nearly back-to-back during high-demand periods, it may be necessary for experimenters to return to the lab at a later time determined by the Laboratory Manager to collect subject data. Under no circumstances will researchers be required to wait longer than two working days to retrieve data from the lab.

The use of HDSL’s systems to perform analysis on data generated by experiments conducted here is not included in the time scheduled for the conduct of experiments. If your experiment requires the use of our systems to conduct this analysis, you will need to schedule time for this purpose with the Lab Manager separately from your experimental sessions.

We ask that experimenters publishing studies that arise from research conducted in the Decision Science Laboratory notify the Laboratory Manager when their work is published, and provide the laboratory with a .pdf copy of the published work.