SPINS Experimental Procedure

*Instructions that begin with an * are specific to the UC Davis Political Science lab and should be ignored or modified depending on the location in which the experiment is conducted. All instructions are formatted to run two sessions, X and Y, simultaneously. If the number of computers available allows for additional sessions or only one session to be run, adjust the instructions accordingly.*

At least 30 minutes prior to session start time:

1. Turn on all computers needed, and log-in.
2. On hub computer for Session X, open session file in z-Tree.
    a. *File is located in Phillips folder on the Political Science/Graduate Students shared drive.
3. Open z-Leaf from the Phillips folder for each computer in order (A, C, E, G, I, K if running 2 simultaneous sessions; A, B, C, D, E, F otherwise) that will link to hub computer for Session X.
4. On hub computer for Session Y, open session file in z-Tree.
    a. *File is located in Set2 folder in Phillips folder on the Political Science/Graduate Students shared drive. IMPORTANT: Be sure to use Set2 folder for all files and programs for session Y.
5. Open z-Leaf from the Set2 folder for each computer in order (B, D, F, H, J, L) that will link to hub computer for session Y.
6. *Ensure lab doors are unlocked, blinds are opened, and lights are switched to permanent "on" position.
7. Prepare paperwork for participants:
    a. 16 copies of Study Information Form
    b. 16 copies of Consent Form
    c. 12 copies of Pre-questionnaire Form
        i. Fill out the Subject ID section for each participant ahead of time so they do not accidentally write their student ID in the spot. The standard format for the Subject ID is: (#1-6)(a or b, with `a' for session X and `b' for session Y)-(Session#)) For example: 1a-22sp will be the first person assigned in session 22sp (session X), while 1b-23sp will be the first person assigned to session 23sp (session Y).
        ii. Affix a post-it note to each pre-questionnaire form that states what computer the participant will use.
    d. 12 copies of Debriefing Questionnaire Form
    e. 16 copies of Receipt Form
    f. 12 copies of Debriefing Form

When participants arrive:

1. Ask the participant for their name and confirm they are registered for the session by locating the participant on the Qualtrics registration data for the relevant session.
    a. If the participant is not registered, they cannot participate in that session. Inform them to access the registration survey through the form posted to their course Canvas page and register for a session (if you have open space in the current session, inform them to go on to Qualtrics and register for the current session).
2. *Find the participant's name on the master roster for the quarter and indicate with a `1' that they have attended and then type which session they are attending in the next column; if they are an alternate, mark their participation as "ALT" instead of "1"
3. When at least 12 participants have arrived (enough to run both sessions), begin distributing paperwork in this order:
    a. Give a Study Information Form to everyone, instruct them to review the information and come back to the desk to receive a consent form when they are through.
    b. Give a Consent Form to each participant after they have completed reading the Study Information Form; if they are an alternate, be sure to write ALT on the form when it is returned.
        i. Alternates are determined by the order in which students complete the paperwork. The first 12 participants (or interval of 6 depending on how many sessions are being run simultaneously) to receive a Consent Form will participate. Any remaining participants are alternates. If there are only 5 participants in attendance, they are all alternates.
    c. Retrieve the Consent Form from the participant, then distribute a Pre-questionnaire Form to the participant. Instruct them to complete and return the form, but to hold on to the post-it note.
        i. If the participant is an alternate, they do not need to fill out a pre-questionnaire form.
4. When all paperwork is completed, ask everyone who has been assigned a computer to follow you. Walk to the end of the hall, count to make sure you have 12 participants.
    a. Instruct the subjects that they are not to use their cell phones at any time while in the lab, cannot get anything out of their bag, and cannot talk to each other. If they have any questions, they should review the instructions on the computer page and if the problem still cannot be resolved, then come and get the administrator.
    b. *Tell them computers A-F are in room X and computers G-L are in room Y.
5. Let participants enter the room and find their assigned computer. When you have verified everyone is at the right computer, begin the experiment by pressing F5 on each of the hub computers and close the doors. Glance to make sure the experiment has come up for both sessions.
6. Return to the office, and distribute receipts and money to alternates (if any). Alternates receive $10 for showing up.
    a. **If any registered participants arrive after the experiment has begun, they are not considered alternates and should not receive $10.** Instead, inform these late arrivals that the experiment has already begun, then encourage them to register for a new session if they would still like to participate.

After the experiment:

1. When the completion screen has appeared for both sessions, enter the room and ask everyone to fill out the Debriefing Questionnaire, and to bring it and their post-it note to the lab office one at a time to get paid.
    a. **IMPORTANT**: Make sure everyone has clicked through to the "Please Wait" screen, otherwise the final turn will not be recorded!
2. Access the output file for Session X from the hub computer for Session X.
    a. *The file is located as the most recent Excel file in the Phillips folder.
    b. Go to the second-to-last subjects table output and find the "Dollars" column.
        i. This is most easily done by first, pressing `Control-downarrow' to go to the bottom of the page, scrolling up to the next subjects table, then highlighting the title row for the relevant table, typing 'Control-F' and typing 'dollars' in the search box.
    c. Record the dollar values for each computer (the subjects should match up with the computers in order if you accessed z-Leaf in the correct order). Round-up all decimal points (e.g. 31.001 rounds to 32).
3. Access the output file for Session Y from the hub computer for Session Y.
    a. *The file is located as the most recent Excel file in the Set2 folder in the Phillips folder.
    b. Go to the second-to-last subjects table output and find the "Dollars" column. Record the dollar values for each computer (the subjects should match up with the computers in order if you accessed z-Leaf in the correct order). Round-up all decimal points (e.g. 31.1 rounds to 32).
4. Return to the lab office and have participants enter one at a time. Retrieve their post-it note (which tells you which computer they were and thus what payment they are to receive) and completed Debriefing Questionnaire. Fill out a Receipt Form according to their earnings and ask them to sign it. Retrieve the signed Receipt Form and give the participant their earnings and a Debriefing Form. Repeat for all participants.
5. *Update the payment file with the total amount received by the participants, the total amount received by the alternates (if any), and the total amount spent on the session.
    a. Verify you have the correct amount of cash remaining, then upload the updated file to Dropbox.
6. Return to the hub computer for Session X. Enter the pre-questionnaire information for the session's participants in three new columns labeled 'Gender', 'Class', and 'Major' in the final subjects table output of the Excel file. Use the first three blank columns to record this information. Then save the file as a .csv according to the following format: session_X_mm_dd_hhmm (if the day or month have a zero as the first digit, leave out the zero). For example: session_1sp_1_1_1300.
    a. *The session number should be the master number as recorded in the SPINS Experiment Schedule file in Dropbox.
    b. Gender is coded as M for male and F for female.
    c. Class is coded Fresh, Soph, Junior, Senior
    d. Major is coded Human, Social, Math, Bio, Eng, Agri, Other

7. Open a new Excel file and record the debriefing questionnaire information for all of the participants in both sessions (one file for both sessions). Save the file as an .xlsx file according to the following format, where X and Y are the session numbers for session X and session Y, respectively: debrief_X_Y_mm_dd_hhmm (if the day or month have a zero as the first digit, leave out the zero). For example: debrief_1sp_2sp_1_1_1300.
8. *Create a folder in Dropbox in the correct experimental period (i.e. all files conducted during Spring Quarter of 2017 should be located in the Spring 2017 folder in the Experimental Data Files folder). The new folder should be labeled according to the following format: session_X_mm_dd_hhmm. For example: session_1sp_1_1_1300.
    a. *Upload the .xlsx file of debrief information, .csv file of session output, and the session treatment file (i.e. the z-Tree file) to the folder.
9. *Go into the Phillips folder and transfer all the files for session X into the Completed Files folder with the correct period (i.e. all files conducted during Fall Quarter 2017 should be located in the Completed Fall17 Files folder). Repeat for Set2, but in this case you will only need to move the z-Tree file for session X.
    a. *For session Y, transfer all files for session Y from the Set2 folder into the Completed Files folder with the correct period. Then repeat for Phillips folder, but in this case you will only need to move the z-Tree file for session Y.
10. Repeat steps 6-9 for hub computer for session Y.
    a. Note that step 7 only needs to be completed once as it should contain the information for both sessions.
11. *Verify the Dropbox has the updated quarter master roster file to indicate who participated, the updated payment file, and the session folders with the three relevant files in each.
12. *Finally, update the SPINS Experiment Schedule by highlighting the completed sessions in yellow. Upload the updated version to Dropbox.
13. *Turn-off all computers, close blinds, switch lights back to motion-sensor and turn the lights off, lock all doors, and close the lab doors.
    a. If you have more sessions to conduct, simply close out of z-Tree and z-Leaf for each computer, then begin from Step 2 of the “30 minutes before” procedure.
14. *Lock the lab office door, turn off the light, ensure you have all of your things (including the remaining cash), and close the door.

Common Hot Keys when using z-Tree/z-Leaf:

F5 = starts the experiment
F12 = pauses the timer on the experiment, but not the experiment (useful for debugging)
Shift-F12 = restarts the timer
Alt-F4 = closes z-Leaf (useful to quickly reset computers for next session)

SPINS Recruiting Procedure

These instructions are specific to the UC Davis Political Science lab, but could be adapted to any location.

1. Prepare Qualtrics form by updating information to reflect the proper times/dates.
2. Update quotas to associate with the correct dates and double-check the correct quota is assigned to the correct session option so that the option will no longer show as available once the quota is met.
    a. I usually begin with each session set to a quota of 8, which allows for most sessions to fill quickly. Any that really languish, are prime targets to cancel. Then, I'll expand the sessions that filled up most quickly to 14 or 16, and continue to do so with other sessions until they are filled. Following this procedure forces students to register in all of the sessions instead of clumping in a couple.
3. Update extra credit options to be accurate for the new period.
4. Update link on the information sheet so the correct survey is linked.
5. Update information sheet with correct dates and courses.
6. Request the rosters from each class in our pool.
    a. Combine the rosters, sort by last name.
    b. Make a new column for each course, mark a '1' if the student is in the course.
    c. Make a column for Alternative Activity
        i. Mark this column a '1' if the student has previously participated in the experiment (check the master list to determine if this is the case)
    d. Leave two blank columns; the first will be to record attendance by the subject, the second to record which session they attend.
    e. This sheet will be used to report extra credit at the completion of the quarter's experiments. Reporting of extra credit needs to be sent out within 24 hours of completion.
7. Send the information form to each instructor and request it be posted on the course Canvas page.
8. Check the Qualtrics `Data' section daily.
    a. Delete any blank responses.
    b. E-mail any incomplete responses to request they re-register, then delete the incomplete response.
    c. Sort by last name and determine if there are any duplicates. If so, e-mail the individual to ask for clarification as to which session they will attend; delete the other options.
    d. When an alternate registers for a new session, delete the old response.
9. The day before a session, e-mail the registered participants to remind them of the time and location of the session. Request they arrive a few minutes early to complete paperwork.
10. If, on the day before, a session has not reached 6 participants, cancel the session by e-mailing the registered participants that the session was cancelled due to the lack of sufficient registrants and encourage them to register for a new session. When they submit a new registration, delete the old response.

SPINS Key Experimental Variables Codebook

Number of players == NumNodes
Pre-shock cost == startCostAll
Post-shock cost == shockCostShocked **only applied to shocked nodes, otherwise the startCostAll variable still applies
==subj_cost_of_next_tie_multiplier **can use this variable to determine the cost for each individual player (i.e. this will indicate if a player is receiving the shocked cost or the base cost)
Round the shock occurs == shock always occurs at period 43
Number of pre-shock rounds == there are always 7 rounds (or 42 periods) of pre-shock rounds, including the 2 (or 3 beginning with variable spillover sessions) rounds (12 or 18 periods) of training. The exception is during control group sessions. The variable that identifies the type of session is preShockRounds which will be equal
to 5 if it is a treatment session, and 100 if it is a control session.
Spillover payoff == benefit_of_spillover
(actual_benefit_of_spillover for variable spillover sessions)
Triangle payoff == benefit_of_closed_triangle
Number of nodes shocked == numShocked
Which nodes are shocked == shocked (1 indicates shocked, 0 otherwise)
Profit (and, if possible cumulative profit) for each node
== DisplayProfit ** for the specific period
== TotalProfitDisplay ** cumulative profit
Who is connected to whom
== fill_S#_1 & fill_S#_2 & fill_S#_12 indicate if a red arrow (e.g. a completed link, rather than simply an ignored or rejected offer) exists between the player and the node indicated by the S# in network 1, network 2, and both networks, respectively.

VARIABLE SPILLOVER ADDITIONS:
actual_beneift_of_spillover == spillover benefit received by those chosen to receive it
numShockedN1 == number of nodes to be shocked in network 1 (always a 6 or a 0)
numShockedN2 == number of nodes to be shocked in network 2 (always a 6 or a 0)
numSpilloverElig == number of nodes eligible to receive the spillover benefit (2 or 4)