A Guide to Using Sona-Systems

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at
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**What is Sona-Systems?**

In 2011 the Psychology department at WPUNJ purchased and began use of Sona-Systems – the most popular and most effective software for organizing and using a subject pool. The adoption of this system is multifarious: we seek to give our students a convenient and organized system to experience psychological research -- the lifeblood of our discipline; we seek an effective and functional system to improve our research productivity; we seek an efficient system for filtering our research-related involvement (both from researchers needing to select participants with particular characteristics and participants needing to select from studies that meet their schedules and interests). At its best, Sona-Systems will enable us to meet these goals. The software is served and maintained by Sona-Systems, who provide us with server space and access to this software.

**Sona Systems can be found at:** [http://wpunj.sona-systems.com/](http://wpunj.sona-systems.com/)

**Account Types:**

- **Participants** are associated with an active course/instructor. They are able to view any experiments for which they meet the prescreening criteria, sign up for active experiments, and participate in experiments to produce a case of data. Many of the policies in Sona-Systems are designed to protect the identity and personally identifiable and/or confidential information of the participants.

Here are the directions to access Sona-Systems as a participant:

2. Click “New Participant? Request an account here.”
3. Enter the requested information (name, user ID, email address, course)
   a. The courses are listed by professor and section. Students can highlight more than one course, if appropriate.
4. Login info is then sent to the student using the email address provided. This is automated and immediate. After logging in students receive a brief summary of their rights as a participant, and contact info for IRB/Martin Williams’ office. They click “Yes” to agree, or “No” to exit the system.
5. Using the User ID you create and the password that is automatically sent via the email address you provide, you will be able to login and begin using the system. In addition to signing up for experiments (either online or in-person at research labs), you are able to modify your password, course affiliation, monitor your progress and more.
6. Help is available by clicking the link provided on the login page (for login info, change of account info, etc). Help is conducted by the Sona-System administrators and not by the course professors, so please contact help directly rather than your professors if you have difficulty accessing or using Sona-Systems.

- **Researchers** are any individuals (faculty, student, staff member, etc) with the access to create experiments within Sona-Systems and collect data. Researchers may associate other researchers to
view their experiments. Every listed researcher that is associated with an experiment can alter its parameters, schedule availability of the experiment to participants, and remove the active status of an experiment. Researchers can not view the prescreen history or demographic information about participants (including participant names). However, researchers can use filters to prescreen for a subset of qualifying individuals that may be eligible/desirable for inclusion. Researchers can also post a call on Sona-Systems to attract any qualifying participants for possible inclusion with their study.

To create an account as a researcher you or your faculty mentor should directly contact the subject pool administrator, Michael Gordon (gordonm10@wpunj.edu) with a preferred user name, full name, and active email address.

- **Instructors** are any individuals designated as included as an active course with Sona-Systems. While every faculty member is welcome to include their course(s), only the PSY1100 (General Psychology), PSY 2300 (History & Systems), and PSY 4800 (Senior Seminar) are being automatically included at the start of each semester. Any faculty would like to include their course in Sona-Systems, and to include a research experience with his or her curriculum, should email gordonm10@wpunj.edu to make the request. Instructors can view their class roster to determine the activity of their students. This class roster will only display students that have successfully signed up for an account – if a student did not sign up for an account then they will not be included on the class roster in Sona-Systems. In addition, instructors can only view the amount of activity a student has completed, and not which specific studies. This is an important participant protection to prevent direct coercion on participants for their involvement in any one study. Instructors can vary the credit requirement for their courses. Many courses are set to a default value (e.g., PSY 1100 participants have a 4 credit requirement), however instructors have the capacity to modify this value as needed for a given course.

To create an account as an instructor please directly contact the subject pool administrator, Michael Gordon (gordonm10@wpunj.edu) with a preferred user name, full name, and active email address. All faculty members with current or past active courses on Sona-Systems already have an account.

Here are instructions on accessing your course rosters using Sona-Systems.

2. Login using your instructor information. (These were generated by the system administered and can be resent if needed)
3. Click “Course reports” to view all courses associated with you. Each course can be viewed to include “All participants (students)”, “Completed Participants” or “Incomplete Participants”. Note that if a student has NOT requested an account, they will not show up in this system. Sona-Systems can only recognize the students who have enrolled for an account and identified with a particular instructor or instructors.
4. If desired, at the bottom of the course report are links to download the data to CSV (i.e., a MS Excel—friendly format).

- **Administrators** are the principle Sona-System administrator (Michael Gordon) and a graduate assistant (Krista Herbert). Administrators have the capacity to add and modify user accounts; add, view and
modify all studies; add, view and modify courses and instructors; and to change system properties. These administrators are also solely responsible for all technical support. While Sona-Systems is available for consultation on complex issues, all day-to-day trouble-shooting, inquiries, and issues are handled by the local administrators. Administrators do not fabricate or initiate research participation policies, nor do they arbitrate on research activities. These functions are handled by departmental committees and the Institutional Review Board, respectively. In addition to the direct administration of the system, the administrators function to provide system tutorials, demonstrations, guidance to facilitate use of Sona-Systems.

System Use for Researchers:
• If you are a new user, you must first request an account:
  Contact Michael Gordon (gordonm10@wpunj.edu) if you require a new research account.
• Researcher accounts allow MULTIPLE experiments to be listed, so you will no longer need a separate log-in for each experiment you have. If you are working with collaborators it will be important for them to adapt their Experiment Properties to include you in order for you to gain access. Alternatively, for any experiments you create be sure to include your collaborators and/or faculty mentors to ensure that they have access to your study.

Welcome screen:
Here you will be able to make selections such as:

  My Studies
  -view and edit all your studies
  -view, add, or change timeslots
  -grant or deny participant credit
  All Studies
  -view all studies available to participants
  Add New Study
  -create a new study
  Prescreen (pretest) Results
  -analyze participant prescreen results (demographic data)
  My Profile
  -change your password
  -modify contact information
  -change your e-mail address
  FAQ
  -access important guidelines and documents
  -get answers to some common questions
1. Create your experiment and make it visible to participants

NOTE: Your experiment will need to be “approved” by the subject pool coordinator before it becomes visible on the experiment listings. When approved, an experiment # will be assigned to your individual experiment.

Add new study:

Create a new study:
• To create a new study, click on “Add new study” along the top menu bar.
• Select which type of experiment: standard or two part.

Setting up the details:

Study Name:
You are welcome to select any name appropriate to your study. It is important to consider that you, your collaborators, and any putative participants will be able to view your study name, so it is encouraged that you use names that are clear, succinct, and intriguing to attract participants.

Brief Abstract:
Participants in Sona-Systems will have access to this description right under the study name when they view the list of experiments. Please be informative and clear in this description, and use descriptions that adhere to the spirit of ethical practices and informed consent that our discipline and department uphold.

Detailed Description:
This is an optional field if you wish to describe your experiment in more detail.

Eligibility Requirements:
List any requirements in this field, such as “Must be a native English speaker”, “Female-only”, “In a relationship”, etc. Note that these requirements only advertise your preferences to putative participants, but will not prescreen participants. Hence using the eligibility requirements may not eliminate ineligible participants from viewing and signing-up for your research as use of the prescreening can (see more details on prescreening below).

Duration:
You must follow the Subject Pool Guidelines when selecting your experiment duration. Appointment time slots must be in 30 minute intervals, with each 30 minutes credited for 0.5 credits. All lab-based/in-person studies should include an additional 0.5 credit for transportation and logistics if a participant must travel to your lab (even if that lab is on-campus). Hence an online 30 minute study should be advertised as 30 minutes, and 0.5 credits. An in-person/lab-based 30 minute study should be advertised as 30 minutes and 1.0 credit.
Credits/Pay:
Input how many credits your experiment is worth up to a maximum of 4 credits. Keep in mind that credits are issued at a rate of 1 credit per hour. See the table below for a summary of study duration and study type relative to credits offered.

<table>
<thead>
<tr>
<th>Total Duration</th>
<th>Advertised Duration</th>
<th>Credits for Lab Study (participant is asked to show up at a specified time/place)</th>
<th>Credits for Online Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30 minutes</td>
<td>30 minutes</td>
<td>1 credit</td>
<td>0.5 credits</td>
</tr>
<tr>
<td>31-60 minutes</td>
<td>1 hour</td>
<td>1.5 credits</td>
<td>1.0 credits</td>
</tr>
<tr>
<td>61-90 minutes</td>
<td>1.5 hours</td>
<td>2.0 credits</td>
<td>1.5 credits</td>
</tr>
<tr>
<td>91-120 minutes</td>
<td>2 hours</td>
<td>2.5 credits</td>
<td>2.0 credits</td>
</tr>
<tr>
<td>121-150 minutes</td>
<td>2.5 hours</td>
<td>3.0 credits</td>
<td>2.5 credits</td>
</tr>
<tr>
<td>151-180 minutes</td>
<td>3 hours</td>
<td>3.5 credits</td>
<td>3.0 credits</td>
</tr>
<tr>
<td>181-210 minutes</td>
<td>3.5 hours</td>
<td>4.0 credits</td>
<td>3.5 credits</td>
</tr>
</tbody>
</table>

Preparation:
List any information a participant must know before coming to the appointment, such as “do not eat for 3 hours prior”, etc...

Principal Investigator:
Select the PI for this experiment. If you are a graduate student, select your Faculty Advisor. If you are a Faculty member, select yourself.

Researcher:
Select which researchers you would like to give access to this particular experiment. Hold down the Ctrl key to select more than one researcher. Individuals who you select as a researcher on this experiment will see the experiment listed when they log into Sona Systems. All researchers on your experiment, including the PI, will be able to view and edit that experiment. If you would like to have an “RA Account” for your lab’s research assistants to use, please contact Michael Gordon (gordonm10@wpunj.edu) to have one created.

IRB Approval Code:
Type in your IRB approval number and expiration date here. Experiments will be removed from view once the expiration date has passed, so keep this number up to date once you receive your approvals. Note: this information will be verified by the Subject Pool Coordinator, so do not enter false information.

For experiments not subject to direct IRB approval, and run as part of a course with a faculty mentor, please use the following code for the IRB approval number: Faculty initials + Month/Year the study was initiated. E.g., if the faculty mentor is Michael Gordon and he is running a study that starts September 2015, then use:

MG09-2015 as the IRB code.
Active Study?: Choose YES if you want this study to be viewable by students. The study will not be listed until the Subject Pool Coordinator approves the study. Once approved, the study will be visible and will be assigned an experiment number. An “active” study will be viewable by students ONLY if it is also set to “visible” and timeslots are available.

Advanced Settings: Make any advanced settings that you wish to make, then click “Add this study” when you have finished. You can edit these settings at any time in the “My Studies” section along the top menu bar.

Making your study VIEWABLE:

Visibility of your experiment:
• Your experiment will not be viewable immediately. The Subject Pool Coordinator must verify your CORIHS approval information before students will see your experiment listed. This typically takes less than 1 day.

• You may edit your experiment and create appointment time slots while awaiting this approval.

• IRB Approval Code = IRB approval number from Martin Williams.

• IRB Approval Expiration = the date your IRB approval expires and requires renewal. This information was provided to you when you received your original approval letter. If you do not know this information, check with the Compliance Office (973-720-2852).

2. Set up your experiment schedule

Creating appointment time slots:
Appointment Time Slots:
• From the “My Studies” area, select “Study Info” next to the experiment for which you would like to create time slots.
• Time slots can be made to accommodate single students or groups of students.
• Select View/Administer Time Slots (if you have a 2-part experiment, it will give you the Part 1/Part 2 option)

Adding timeslots:

Add single or multiple timeslots:
• Here you will see a list of all timeslots that have been created.
• Towards the bottom of this page you will see the option to add single or multiple timeslots. If you have a two part experiment, it will give you the option to work on the slots for Part two.

NOTE: Two-part experiments will be allowed to indicate the criteria for the second timeslot, such as “one week from the first timeslot”, etc.

Single time slot:
Adding a single timeslot:
• When you choose “add a timeslot”, you will be creating single timeslots for any given day.
• Set the details of the timeslot you are creating.
• When you initially set up your experiment just moments ago, you set the length of your experiment. The end time will automatically reflect this.

Multiple timeslots:

Adding multiple timeslots:
• You may create a series of timeslots on any given day.
• Set the number of timeslots.
• Set the date and time of the first timeslot.
• Set the time between timeslots.
• When it asks you if you would like to move timeslots to business hours, select NO in most cases.
• Set the number of participants allowed at each timeslot.
• Set location.

Copy a previous week of time slots to another week:

Copy timeslots from one week to another:
• This feature is found when you select the CREATE MULTIPLE TIMESLOTS option.
• This is a very helpful feature if you would like to copy all of the timeslots from any given week to a new week.
• Select the week which you would like to copy the timeslots of.
• Select the new week that you would like to create.

Manual Sign-Up:
Here, you can manually sign up a participant who has not already made an appointment:
• This option is available in the timeslot management area.
• If you wish to make an appointment for a participant in a timeslot that already exists, go to that timeslot and choose “Modify”.
• At the bottom of the page, you will see the Manual Sign-up option.
• Use either their User ID/Login (not their 855#) or their last name.
• If the timeslot that you wish to register a participant for does not exist, you will need to create the timeslot first.

3. Set any restrictions on who can participate in your study

Eligibility Requirements/Course Restrictions:
This can be useful if you wish to restrict potential participants based on some known criteria. For example, if you previously performed mass testing and wish only to allow people who attained a particular score to participate in your experiment you could set an “invitation code” for your experiment and then provide that code only to people who meet your eligibility criteria, or you may want to restrict your study to a
particular group students based on the class they are enrolled in such as restricting your study to PSY 2030 students.

Instructions:

- When creating a study click “Add New Study”
  1. After entering all the “Basic Information” scroll down to the “Advanced Settings”
  2. Enter on any of the restrictions you want placed on students signing up for your study
  3. Click on “Add This Study”
- If you have already created a study and want to place restrictions as to who can sign up for the study after it has been created then:
  1. Click on “My Studies”
  2. Click on the study for which you want to place sign-up restrictions
  3. Click on “Change Study Information”
  4. Scroll down to “Advanced Settings”
  5. Enter on any of the restrictions you want placed on students signing up for your study
  6. Click on “Save Changes”

Prescreening of Participants:

You can use the results of the prescreen to restrict your experiment to only those participants who answered a particular question a certain way. For example, in the prescreen, participants are asked about their age, handedness, gender, and other qualities. If you are interested in adding questions to the prescreening, you are welcome to do so. Please contact Michael Gordon for details and/or suggestions.

To enable use of a set these prescreening restrictions:

- You must have already created your experiment.
- Click on “My Experiments”
- Click on the title of the experiment that you wish to set prescreen restrictions on.
- You will now see an option called “Prescreen restrictions”, and a View/Modify Restrictions option. Click this.
- Choose which question you would like to use in restricting participants. Click “set restrictions”.
- Choose which answer you require the participants to have chosen, then click “save changes”

Note: If you select more than one question to restrict participation on, the system will require that the student meet BOTH criteria, not either/or.

4. Set restrictions on when participants may sign up for your study

You may wish to prevent participants from signing up for your study just moments before it is scheduled to begin. You can specify a time, after which it will not be possible to sign up for a session.
Instructions:

- When creating a study click on “Add New Study”
  1. After entering all the “Basic Information” scroll down to the “Advanced Settings”
  2. Next to “Participant Sign Up Deadline” enter the time you would like, in hours, prior to which participants must sign up
- If you want to set a time restrictions in sign ups for a study already created
  1. Click on “My Studies”
  2. Click on the study for which you want to place sign-up restrictions
  3. Click on “Change Study Information”
  4. Scroll down to “Advanced Settings”

Next to “Participant Sign Up Deadline” enter the time you would like, in hours, prior to which participants must sign up

5. My Studies:

In the My Studies area, you can manage each experiment:

To view study information: Click on any of your experiments to show the details.
To issue credits & penalties: Click on “View Your Uncredited Timeslots”.
To work on timeslots: Click “Timeslots”

6. Managing Credits:

Click on “My Studies”, then “View Uncredited Timeslots”.

- Here you will see a listing of all timeslots which have not been issued a credit or penalty for ALL of your active experiments.
- To simply grant the credit, select the “Grant Credit” option for the selected student, and update the selections by pushing “grant credits” on the bottom of the page.
- Hit “Update Sign-Ups” at the bottom when you are done.
- The “No Action Taken” option is used when you do not wish to grant a credit or penalty at this time.
- Use the “Comments” area if you wish to explain the action taken. Students will see the comment.
- As per current policy, our department is not penalizing no-show students if they fail to show-up without canceling prior to an experiment. However, if you enter that no-show participant as “un-excused” they will no longer be able to access and sign-up for the experiment that they missed.

Changing Credits & Penalties:

If you should need to change a credit or penalty at any point:

- Go to “My Studies” on the top menu bar.
- Click on the “Timeslots” next to the experiment in question.
- Click on “View All Timeslots”
- Locate the timeslot in question.
- Choose “Modify”.
- Make any necessary changes and comments.
7. All studies:

View all studies that are visible to students:
• This is a listing of ALL the studies that are available and viewable to participants at this time. This includes not only your experiments, but the experiments of all researchers.
• You can only edit your own study.

9. Inviting subjects:
You can use Sona-System’s internal email option to send invitations to subjects who might meet your specific criteria. Warning: This option is monitored and Dr. Gordon will receive a copy of the message sent to participants. Any abuse or “over-inviting” of participants may result in the censure, restrictions and/or suspension from use of Sona-Systems.

To send invitations to potential subjects:

• Click “Prescreen Results” on the top menu bar
• Click on “Prescreen Qualification Analysis” in the second paragraph on this page
• Select the questions that matter to your experiment. You MUST also click on the last question regarding contact permission. After you have made your selections, click the button at the bottom
• You now see a list of the questions that matter to your experiment. Select the answers that you would like the potential participants to have chosen. NOTE: You MUST select YES on the question about receiving invitations to experiments
• Select “analyze”
• On this next page, select how many of the potential participants you would like to contact, and any experiments exclusions (if you do not want participants who have participated in certain experiments already)
• Compose your message
• Click “send”

10. Cancellations:

How to cancel a scheduled appointment:
* Canceling and deleting the appointment time slot requires two steps.
• If you need to cancel an appointment that has already been scheduled, view the timeslot of the appointment and select “Modify”.
• Select “Cancel” next to the participant’s identifying code. The participant will receive an automatic e-mail from the system announcing the cancelation.
• Remove the time slot - Canceling an appointment will not remove the time slot. If you only “cancel” an appointment, the time slot will still remain for another to use. If you wish to remove this time slot from view, you need to do that in the managing time slots area. Select “Delete multiple timeslots” and delete the appropriate time slot.
• BEWARE: If you cancel without giving 24 hours notice, the participant is due ONE CREDIT by default. Do this on the same page, with a comment.
When canceling an appointment, it is always best to email that participant first.

11. E-mailing a participant:
To E-MAIL a subject who has signed up for your experiment, follow these steps:

1. Log into Sona Systems
2. Go to "My Studies"
3. Select which study you are working on
4. Click on "View/Administer Timeslots"
5. Locate the timeslot for the subject you looking to modify and click "Modify"
6. Scroll down to the area where you can give credit, penalties, etc, and you will see several blue links --> a link to "Cancel" this participant, and a link to send an email.

12. My profile:

Changing your information:
• "My Profile" along the top menu bar will allow you to change personal information, such as your password and the email address that participants will be able to contact you at.
• You can also set your daily appointment reminder to on/off here.

13. Web Survey / On-line studies:

The system includes a rather extensive online survey feature. It allows you to set up an online survey as a study within the system, and participants who sign up for the study will be asked to immediately complete the survey. Upon their completion of the survey, they will be granted credit automatically by the system. You may then analyze their survey responses on an individual basis, or download the raw data across all participants who completed the survey, for further analysis. There is a slight chance that you may notice a discrepancy in the number of responses when analyzing a single question compared to downloading the entire set of responses. This can occur if a participant is currently taking the survey, but has not completed it. Their data is included in the single-question analysis (when available) but not in the full download of responses, as there is not a full set of data for an in-progress participant. The system will prevent participants from completing the survey more than once, so there is no risk of duplicate entries for the same participant.

To comply with research ethics guidelines, the participant is given the opportunity to withdraw from the survey at any time. If they withdraw, they are taken to a form where they can submit any comments (this is optional), and their withdrawal is then noted and all their responses are deleted. The researcher receives an email when this occurs, with some other information, including how much time was spent on the survey, and how many questions were answered. You should then grant credit to the participant as appropriate.

There is a space to provide closing text for the survey, which is displayed to participants after they successfully complete the survey (after they have saved all their responses and cannot go back). This is an
ideal place to include any relevant debriefing information. The online survey feature is rather complex due to the many features it contains. In addition, your ability to modify the survey after participants have started to take the survey is quite limited. Because of this, you should plan out your survey well in advance, to make sure it is finalized before you make it available to participants. Do not hesitate to contact the administrator if you have any questions. You may find it helpful to plan out the survey on paper before entering it into the system.

A survey may have an unlimited number of sections and an unlimited number of questions per section, though we recommend limiting surveys to fewer than 300 total questions and 15 sections, to reduce participant fatigue. This can be an issue since they must complete the survey all at once. The system will make participants aware that their session may time out because of inactivity, in cases where the survey contains many sections that have more than 15 questions (since participants are likely to spend a lot of time on those sections and thus risk being logged out for inactivity).

Questions may be free-entry (requiring the participant to type in an answer) or multiple choice (pick only one or pick many from the list of choices). You may also specify that the system computes a participant’s results for an entire section, as either a section sum or average score. This computed sum or average can be computed only for numeric, multiple-choice (pick only one) questions in the section. Such a computation is often useful when a participant’s aggregate score is more important, such as with a depression battery.

For free-entry questions where the participant is asked to enter a free-form text answer, the size of the entry field (as it is displayed) cannot be resized in terms of dimensions (only by length). Participants may enter up to 255 characters in their response.

Sections can be displayed in a specified order or random order, or a combination of both. Every section may contain introductory text introducing the section, and the survey itself may also have introductory text introducing the survey, as well as closing text that is displayed upon completion of the survey. You may specify that questions within a section are displayed in random order. If you do not specify random ordering for questions in a section, then the questions will be displayed (in each section) in the order they were entered and cannot be reordered later. Multiple choice questions can have their choices displayed in the entered order or random order (this is specified on a per-question basis). Multiple choice question choices can be displayed horizontally (across the page) or vertically (down the page).

It is important to realize that while the survey feature is quite extensive, there are some things it does not support. It cannot do timings, where the speed of a participant’s response (typically in milliseconds) to each question needs to be measured. It also cannot do branching, where the questions being presented to a participant will vary depending on their answer to other questions within that same survey (an example being asking a question like “Do you smoke cigarettes?” and then presenting a different set of questions based on their response). The reason advanced features like this are not currently supported is that our software is primarily a subject pool software product that happens to have an online survey feature within it. We asked our customers which features in an online survey were most important to them, and those features exist within the product. There are numerous products on the market specifically for doing online surveys (with no subject pool component), which contain more advanced features, and can easily be linked to from the Sona-Systems product by setting up your study as an online study conducted outside the system.
The online survey feature meets the needs of most researchers, but if you need more advanced features, there are hundreds of survey-specific products out there, and you can link those to the system by setting up an online external study.

To create an online web study to be hosted from within Sona Systems, follow these initial steps:

1. Click on “Create new study”
2. Select “On-line survey study”
3. Read the information and click “continue”
4. The next step is the same as creating any other experiment. (see Section 1 for general experiment set-up details)
5. Click “save changes”

Creating or Modifying a Survey
To create a survey, first create an online survey study. After you create it, you will see the option Update Online Survey when you view the study information. You may not create 2-part online survey studies.

It is important to note that while you are making changes to a survey, it is deactivated so participants may not participate in it. When you go to the Finalize Survey option after you have finished your work with the survey, you will have the opportunity to save your changes and make the survey active (available to participants) or inactive (not available to participants). You should always choose the Finalize Survey option when you finish your work with the survey, as the system saves all changes and computes some other important data when you finalize the survey. If you would like to continue work on the survey at a later date, you should still choose the Finalize Survey option to ensure your changes during the current session are properly saved (most likely you would choose to keep the survey inactive in this situation).

General Survey Information
Choose the General Information option (if creating a new survey, this is the first page you will see) to provide some basic information about the survey. The fields are explained below:
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Text</td>
<td>Optional. Provide a set of text that will be displayed when a participant starts the survey. You may include HTML in this area if you are knowledgeable of those techniques. For example, if you would like to add a carriage-return (paragraph break), simply type in “&lt;p&gt;” (without the quotes). When you first create the online survey, the system will automatically insert some basic default text in this area. For a more complete listing of HTML tags see: <a href="http://www.w3schools.com/html/html_basic.asp">http://www.w3schools.com/html/html_basic.asp</a> and <a href="http://www.quackit.com/html/tags/">http://www.quackit.com/html/tags/</a> You may change any of this text as much as you like – the system will not change it back later as long as you save your changes. This is a good place to place any text for informed consent purposes. You may view how this text is displayed to participants by saving it, then going to Preview Introductory Text, which is available from the Section List page.</td>
</tr>
<tr>
<td>Closing Text</td>
<td>Optional. Provide a set of text that will be displayed after a participant completes the survey and saves their responses. This is an ideal place for debriefing information. Again, you may include HTML in this area. You may view how this text is displayed to participants by saving it, then going to Preview Closing Text, which is available from the Section List page.</td>
</tr>
<tr>
<td>Display sections in random order?</td>
<td>You may specify a specific ordering for sections, have the system randomize the order for all sections, or specify the order of some sections, and a random order for other sections. If you specify the order for only some sections, you may also specify, for each section, whether it should be displayed before or after the random ordered sections. The system does not keep track of the random ordering for sections for each participant.</td>
</tr>
<tr>
<td>Participant response review/change</td>
<td>If set to Yes, then participants may review and change their responses just before they complete the online survey. They are given this opportunity after they complete the last section of the survey, and before any closing text is shown. At this point, they can see all their responses and go back to any section to change their responses. Once they complete the online survey, they cannot go back at a later date and change any responses. It may be useful to set this option to No (so that they are not allowed to review or change their responses at the end of the survey) if sections are somehow dependent on one another, such that allowing participants to change their responses may affect the integrity of data collection.</td>
</tr>
</tbody>
</table>

**Section List**

Depending on if you are adding or editing the survey, you will be taken to the list of sections for the survey. Here, you can change the order that sections will be displayed (if you have not enabled full random section ordering for the survey), and see a quick review of each question. From here, you can add a question to any section and edit any question. To add a new section, choose the Add a New Section choice at the bottom of the page. If you have enabled partial random section ordering, then you can specify a section order for the sections you would like to be displayed in a specified order. For the sections you would like to be displayed in random order, leave the Section Order area blank. When you specify a section order, use each number once, and use the numbers 1-98 if you would like the section to be displayed before the random-ordered sections, and the numbers 100-199 if you would like the section to be displayed after the random-ordered sections. Be sure to use each number only once, or leave the number blank to make the section part of the random-ordered section. Sometimes it is useful to use partial random ordering if you want to ask basic (e.g. demographic) information in the first few sections, while asking more analytical questions in the random-ordered sections. Likewise, you may want to ask about the previous random-ordered sections after they are completed. It is not possible to intersperse ordered sections within the set of random sections, like having 2 ordered sections, then 3 random sections, the 1 ordered section, then 2 random sections, etc., as these would not be considered a set of random sections.
sections, etc. The random sections are treated as an entire block of sections, and other sections cannot be placed at specific places within that block. There is also a Preview Section option so you may preview the survey as participants will see it.

**Adding or Modifying a Section**

To add a new section, choose the Add New Section link at the bottom of the Section List page. To modify an existing section, choose the Edit Section Information link next to the section you would like to modify, from the Section List page.

There are three pieces of information you may provide for each section. First, you may specify some introductory text to be displayed at the beginning of the section. When participants take the survey, they view one section at a time, and all the questions in that section. The introductory text may be helpful in explaining the purpose or topic of the questions in that section. You may include HTML with the text in these sections.

You may choose if the questions for that section are displayed in random order or the order in which they are entered.

You may also choose to have the system compute a section sum or average (for each participant) for the section. These scores are computed only for all the multiple-choice, numeric questions in a section. Think carefully about setting this value, because you are very limited in your ability to change it after participants have started to take the survey.

Computed section sums or means are often useful when all the questions are using a unidimensional scale (1-5, for example), but a participant’s average score response to the section is more useful to account for their outlier responses.

Depending on if you are editing or adding a section, after you save your changes, you will be taken to a page to add a new question or to the section list.

**Adding or Editing a Question**

To add or edit a question, choose the appropriate choice from the Section List, next to the desired section. Questions will be displayed in the order they are added to a section, or in a random order, depending on the section settings. Questions cannot be reordered after they are added, so this should be planned carefully. Depending on the state of the section and if participants have taken the survey, some options will be automatically set for you, and not changeable. All fields must be filled out.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Text</td>
<td>The text for the question. This will be displayed above each question’s choices.</td>
</tr>
<tr>
<td>Abbreviated Question Name</td>
<td>A 15-character label for the question. This is not displayed to participants and is used to name the columns that appear when the data is exported in CSV format. Many statistical analysis programs limit column names to 15 characters.</td>
</tr>
<tr>
<td>Question Type</td>
<td>Multiple Choice (select one), Multiple Choice (select many) or Free Entry. If the section has a computed average or sum, you may be limited in your ability to add Multiple Choice (select one) non-numeric questions. Free entry choices may contain a response up to 255 characters in length.</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Display length of Free-Entry field</td>
<td>Specifies the length (size) of a free-entry field when it is displayed. Acceptable values for this setting are 5-85, and the field will always allow participants to type in up to 255 characters. The height of the field cannot be adjusted, and this setting only applies to Free Entry questions.</td>
</tr>
<tr>
<td>Display choices in random order?</td>
<td>If set to Yes, the choices for this question will be displayed to participants in a random order. This option only applies to multiple choice questions.</td>
</tr>
<tr>
<td>How should the choices be displayed?</td>
<td>Horizontal (across the page) or vertical (down the page) are the two options for how the choices for a multiple-choice question should be displayed. Often, the horizontal display is effective when the question involves a scale. This setting applies only to multiple-choice questions.</td>
</tr>
<tr>
<td>Can participants decline to provide an answer for this question?</td>
<td>If set to Yes, participants will see a choice below this question that allows them to opt out of answering the question. If set to No, they must answer the question.</td>
</tr>
<tr>
<td>Are all choices numeric?</td>
<td>If set to Yes, all choices must be numeric whole numbers (e.g. 1, -2, 10). This only applies to multiple choice questions. Sections with a computed section sum or average may not contain non-numeric multiple choice (select many) questions.</td>
</tr>
<tr>
<td>Display numeric value?</td>
<td>If set to No, the numeric value of the choice is not displayed to participants. This only applies to numeric, multiple choice questions where each choice includes both a numeric value and associated text (e.g. “5 Strongly Agree”). This is useful when running a reverse scale.</td>
</tr>
</tbody>
</table>

If the question is a multiple choice question, you must also fill out the choices section that is part of the same form. A minimum of 1 choice must be provided for the question. Each choice may be up to 255 characters in length. If the question is specified as numeric, you must provide a numeric choice, and that choice must be a whole number (e.g. -5, 1, 0, 349). If you would like to provide descriptive text to
accompany each numeric choice, you may do so by typing in the numeric choice and leaving one blank space after it, then typing in the descriptive text, for example: “5 Strongly Agree”. If you provide descriptive text along with the numeric choice, then you have the option of hiding the numeric value from participants, by choosing No to the “Display numeric value?” setting for the question. This is useful in reverse scale or other situations where the numeric value for the choices is not important. If the choices you specify when adding a question do not conform to the configuration of the question (e.g. specify a non-numeric choice for a numeric question), the system may change the question configuration to ensure that the choices are then valid.

Copying a Section
You may copy a section from any of your own surveys into your current survey, by choosing Copy From an Existing Section in the Section List. You will see a list of eligible surveys to copy from. After you choose which survey to copy from, you will see a list of eligible sections in that survey. Once you choose a section, it will be copied into the survey you are currently editing. You may copy only one section at a time, because of the system performance impact when copying sections.
The administrator also has the ability to copy to or from the prescreen, so ask the administrator to do this for you, if you need it done.

Copying a Question
For multiple-choice questions, it is often the case that many questions have the same measures (choices). To make entry of similar questions easier, you may use the Copy Question feature to copy a question. Such an option is only available for multiple choice questions. To copy a question, select the question you would like to copy (when viewing the Section List). You will then be taken to a list of sections where you may copy this question to. After you decide which section you would like to copy the question to, you will be taken to a page where you can make any final changes to the copy of the question before saving it.

Saving Your Changes
When you are done, you should go to the Final Review and save your changes. Even if you plan to do further editing of the survey later, it is imperative that you go to the Final Review step, as the system needs to save certain special changes and make some computations. If you do not want participants to participate in the survey yet, you can save changes but keep the survey inactive. When you save your changes, it may take a moment to save all the changes, as the system is performing a number of computations on the survey. Please be patient, as these computations are done to make performance for participants as fast as possible.

Viewing a Survey as a Participant
If you would like to see how the survey will be displayed to participants, that can easily be done while setting up the survey. Next to each section (in the section list), there will be a Preview Section link so you can view the section exactly as participants would see it. You may also view how the introductory and closing text will appear to participants, by choosing the Preview Introductory Text and Preview Closing Text options which appear on the Section List page.

Participants will see a basic progress display on the top right corner of each page, listing the section they are on (ordinal counting), and how many sections total are in the survey. When using Preview Section, you will see this progress display as well, except the current section number will appear as “X” in preview mode since it is not an actual participant taking the survey (and randomization of section order may be involved).
If you find it necessary to go through the entire process as a real participant, you can do so by creating a test participant account. Set the online survey study so it has an invitation code, so no other participants can sign up (since they will not know this invitation code). Then, sign up with your test participant account and take the survey. You can remove the invitation code later if necessary.

**Viewing Survey Data Usage and Deleting Survey Data**
The system has a limited amount of storage space, and you are expected to download the survey data you have collected on a routine basis, and then delete it from the system. By going to View Survey Data Usage, you can see how much database space is being used. You can then download the survey data (a link is provided), and delete it from the system.

When you delete the data from the system, all survey data collected within the last 5 minutes will *not* be deleted, as a safety feature. This is to ensure you have had adequate time to download the survey data before deleting it. If you choose to delete the survey data in this manner, the record of participant sign-ups will be retained, so you can ensure they do not complete the same online survey again.

**Deleting a Single Participant’s Survey Responses**
On rare occasions, you may want to delete a participant’s survey responses, usually so they can participate again. To do this, cancel their sign-up and that will delete their responses. Note this will also remove any credit they earned. See Manual Cancelation for more information.

**Analyzing Survey Responses**
You may analyze a specific survey question on-screen by selecting the survey and choosing the Analyze Survey Responses option. From there, you may choose a specific question and view or download the response data. This will include data from participants who are still in the process of completing the survey, but have not yet completed it. The Download Survey Responses option, which provides the entire set of survey responses for all participants, includes only data from participants who have completed the survey to ensure easier data analysis.

In rare cases, you may notice that a few responses for certain questions appear (or disappear from) the Analyze Survey Responses while never showing up in Download Survey Responses. What happens in this situation is that a participant started an online survey but never fully completed it or withdrew from it (they probably just closed their web browser). The system goes through all “orphaned” responses in this situation and clears them out once they are more than 2 days old. More likely, you will want to analyze the survey data across all questions. In this case, you should choose the Download Survey Responses option. To successfully analyze the data, you will need to download two sets of data. The first is the question key, which lists a unique numeric identifier for each question, along with the question text and abbreviated question name. It also includes the section number each question was in. Note the section number listed is merely a unique identifier for each section, and has no correspondence to the order in which sections were presented. Also note that section mean and sum values, if calculated, will normally be at the end of the list of questions. This data is in CSV format, and is available by clicking the Download Question Key link on the Download Survey Responses Page.

After you download the question key, you can download the survey data. The system may require that you download the data in sections if there is too much data to be downloaded as one file. The data is in CSV format, and is presented as one row per respondent, with each of their responses in a different column.
The first row includes the column headings, and the column heading maps to the abbreviated question name. Since there is no facility to specify an abbreviated question name for the computed section sum/mean item, the system automatically assigns a unique name to those columns. The naming convention is SECXXX where XXX maps to the system’s internal section identifier for that section (section_id). You can use the question key to determine which question maps to which column. The data also includes the exact time the participant started and completed the online survey. You can use any common data analysis tool to compute how long it took the participant to complete the survey, using this information. There will be an option to include only the numeric response portion of questions that are multiple-choice with numeric choices. This is useful if the numeric question was set up with associated text, but that text should not be included in the analysis file. One example would be where the response selected was “5 Strongly Agree” but only the number 5 (and not the associated text) is useful during analysis. If you choose this option and download data and find that the associated text is included with the numeric response, then have a closer look at the survey – most likely the question was not actually set up as a numeric question. The easiest way to deal with this downloaded data is to use a data analysis tool to do a search and replace to change the response in your downloaded data into a numeric format (e.g., SPSS, MS Excel, etc).

**More fun with Types of questions:**
Sona-Systems supports free-entry and multiple choice questions only. You can use some creativity to make them work for you too.

**Questions that require an image:**
You can use an externally hosted image (you have to host the photo somewhere else and know the URL) to enhance your question. If you need to host an image you can request web space from the university HELP or from your own external sources.

For example, if you would like your participant to refer to a set of diagrams throughout the entire section, you can create introduction text that says:

For the questions below, please refer to the following diagrams:

![Diagram A](http://www.yourphotoURSgoesHERE.jpg)

![Diagram B](http://www.yourphotoURSgoesHERE.jpg)

![Diagram C](http://www.yourphotoURSgoesHERE.jpg)

![Diagram D](http://www.yourphotoURSgoesHERE.jpg)

You would insert the photo into the introductory text with HTML code exactly as written here in the blue text:

**For the questions below, please refer to the following diagrams:**

You will need to know the location of the image you are using.
You would then add your questions to this section, giving multiple choice options with the choices of A, B, C, & D.

Questions with Likert scales:
You can create Likert scales by using the multiple choice feature. You have a choice to show the numeric value next to each choice, or you can hide the numeric value of the selection while still retaining the ability to add up the total score of the participant.

The following is an example of some multiple choice answers.

| Choice 1 | 1 Strongly disagree |
| Choice 2 | 2 |
| Choice 3 | 3 Neither agree or disagree |
| Choice 4 | 4 |
| Choice 5 | 5 Strongly agree |

You can choose to display or hide the numeric value next to each multiple choice answer:
IMPORTANT NOTE: You MUST display the numeric value if you have un-named values as choices, such as in the example below (choices 2 and 4), otherwise you will not know which option they chose when the data simply shows you “…..” as the answer they gave.

<table>
<thead>
<tr>
<th>Display numeric value?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

(only applies to multiple-choice, numeric questions)

Another example of multiple choice answer options.

| Choice 1 | 0 Not true at all |
| Choice 2 | 1 ........ |
| Choice 3 | 2 Sometimes true |
| Choice 4 | 3 ........ |
| Choice 5 | 4 True nearly all of the time |

Below is how it would be seen by the participant, with horizontal display of answers:

I prefer diet soft drinks over full calorie soft drinks:

Not true at all

Sometimes true

True nearly all of the time

Or you can choose vertical display of answers:

-I do not feel sad
-I feel sad much of the time.
- I am sad all the time.
- I am so sad or unhappy that I can't stand it.

14. Contact Information:

If you have any questions or concerns about the use of the Sona-Systems Experiment Management System or the Subject Pool in general, please contact:

Subject Pool Coordinator:
Dr. Michael Gordon
Department of Psychology
William Paterson University
Gordonm10@wpunj.edu

For more severe issues that cannot be handled internally, please coordinate with Michael Gordon to directly contact Sona-System support.