

Sona Systems, Ltd.

Experiment Management System

Researcher User Manual

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About This Manual

This manual covers usage of the system from a variety of perspectives: Participant (Student), Researcher/Principal Investigator, Instructor, and Administrator. The manual is broken out into sections based on the type of user. In cases where the administrator has access to features also available to the researcher/PI, the functionality is documented in the Researcher/PI section of the documentation. Only administrator-specific features are covered in the Administrator section of the documentation.

As a user of this software, you are granted the right to copy, modify, and distribute this documentation within your organization. You may not distribute it outside of your organization without prior written permission from Sona Systems, Ltd.

You are encouraged to modify this documentation to suit the needs of your organization. You will find that this documentation covers every feature of the software, while your organization may have chosen to disable certain features during your implementation. Your users may prefer to read documentation that covers the system exactly as they will experience it, as opposed to this documentation, which may cover features that may not be enabled for them.

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RESEARCHER/P.I. DOCUMENTATION

Introduction

The Experiment Management System is used for the scheduling and management of research participants and the studies they participate in. Participants, researchers, principal investigators, and instructors all use the system for their respective purposes. As a researcher, you can set up your studies in the system, schedule the sessions (timeslots) when participants may participate, and grant or revoke credit after the session. All of this is handled through a simple web-based interface that you can access at any time, from any popular web browser.

The system is highly configurable by the administrator, to enforce the rules for the research participant pool exactly as your organization desires. It should be noted that the documentation herein might refer to features that are not enabled on your system. Contact your local administrator, whose contact information appears at the bottom of every page on the system, for more information.

System Basics

In the system, you create <u>studies</u>. Each study may have a number of <u>timeslots</u>, which are the times you plan to run the study. <u>Participants</u> can <u>sign up</u> for the timeslots by viewing a list of studies and available timeslots. You can grant or revoke credit to participants after the session occurs.

Principal Investigator Special Note

This documentation applies to both researchers and principal investigators (P.I.s), when the administrator enables P.I. Support. A P.I. can perform all the same functions on a study as a researcher. This allows a P.I. to operate as an overseer and monitor the progress of their studies, as well as step in on behalf of the researcher when necessary. Because the privileges are the same, throughout this documentation the term "researcher" can be used interchangeably with "principal investigator" except where noted otherwise. If the P.I. feature is enabled, then all studies must have a P.I. specified. The main difference between a P.I. account and a researcher account is that researchers have the option to receive routine emails from the system about their study, for example, receiving a notification any time a participant signs up or cancels, while the P.I. has no such option.

Participant ID Codes

If enabled by the administrator, the system will identify participants to you only by a unique, system-assigned ID code, and not by their name or email address for privacy reasons. Participants are made aware of this, and they are reminded to bring this code along with them when participating in studies, since the researcher will not know them by name.

Getting Started

The system works best if you use any popular web browser that is less than 2 years old, like Internet Explorer, Firefox, Chrome, and Safari. It will work with other web browsers, and with older versions of

the web browsers noted above, however the layout may not be as clean. No functionality will be lost by using an older web browser.

Ask your system administrator if you need help with installing or using a web browser. This documentation presumes that you have a basic knowledge of how to use the web. While using this system, it is not necessary to use the Back button. You can use the toolbar on the top of every screen to navigate the site.

Single Sign-On (SSO)

In some cases, the system will be configured so you can log in through your organization's existing login process, known as single sign-on (SSO), instead of needing to remember a separate username and password to use this system. If that is the case, you will see an option on the front page of the system. Note that you will still require an account in the system to successfully log in to the system, even if you authenticate using SSO.

Logging In

Your administrator will provide you with a username and password to log in to the site (if SSO is not enabled), as well as the URL (web address). When you go to the front page of the site (the login page), you may see a link to request an account. This form is *only* for participants. Do not use this form to request an account, as participant accounts have an entirely different set of privileges, which are not appropriate for a researcher.

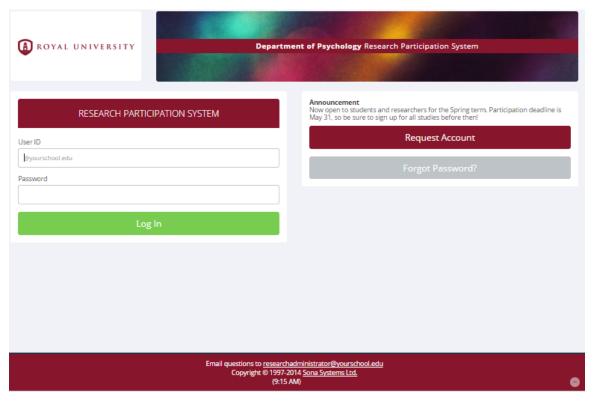


Figure 1 - Login Page

Once you log in, you may be asked to review and acknowledge your organization's human subject policy. If required by the administrator, you will need to acknowledge this once every 6 months. You will see the Main Menu after you acknowledge the policy.

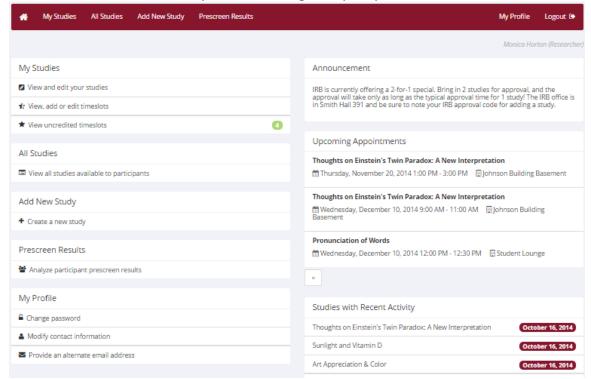


Figure 2 - Main Menu

Your login (also known as a session) will expire after a certain period of inactivity, which is usually about 20 minutes. The system will warn you a few minutes before the expiration. This is done for security purposes. If this happens, you can always log in again. Once you are done using the system, it is better to fully log out, to prevent any problems that may arise if someone uses your computer before the session expires.

Retrieving a Lost Password

If you forget or do not have your password, and the feature is enabled on the system you are using, then you may choose to reset your password. With this option, a link to reset your password will be emailed to you after you make the request. This link is valid for 24 hours. Once you click the link, a new password will be generated and emailed to you. If you have provided an alternate email address (see the Email Address Options section of this documentation), it will be sent there. Otherwise, it will be sent to your main email address, which is derived from your user ID. If you requested a password reset and no email from the system has arrived after 30 minutes, then check your email program's junk mail folder in case the email was delivered there. Typically, the email is sent within a few seconds of the request, but sometimes there can be a delay on behalf of some recipient email servers.

Logging Out

Once you are done using the system, choose Logout from the top toolbar on the right side to log out. You are now logged out. It is always a good security measure to close all of your browser windows, especially if you are using a computer that is shared by others.

Changing Your Password and Other Information

If you would like to change your password or other information about yourself, choose My Profile from the top toolbar. If you would like to change your password (and the option is enabled), type your new password (twice, for confirmation) in the provided boxes. If you do *not* want to change your password, simply leave these boxes empty.

If you change your password, please be sure to select a password that you do not use on any other systems or websites, following good computing practice.

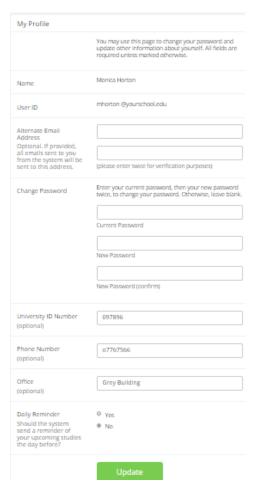


Figure 3 - Updating Your Profile

It is recommended that you provide your phone number and office location, as this information will be made available to research participants who sign up for your studies. If you are a researcher, this contact information will be displayed to participants when they view information about the study. If

you are a principal investigator, this contact information will be displayed if a participant explicitly chooses to view it (since the researcher is the primary point of contact for a study).

Researchers (but not PIs) may also choose to receive a daily reminder via email with information about all of their study sessions scheduled for the following day. If this is turned on, then a notification will also be sent about any uncredited timeslots that are awaiting action.

Email Address Options

There are certain events in the system that will cause an email notification to be sent to you. Most often, these are notifications that a participant has signed up or cancelled their sign-up for your studies, but there are a few other cases where it may be used as well. The email address is also displayed to the participant when they view information about the study, in case they need to contact you with questions.

You have two choices for your email address. When you update your personal information, you will see a box where you may provide an alternate email address. If you provide such an address (this could be a Gmail account, for instance), this is the address where all notifications will be sent and will also be displayed to other users (including participants in your studies).

If you do not provide an alternate email address, the system will derive your email address from your username. Typically, it will add your organization's Internet domain (if there is one) to the end of your user ID to form the address. For example, if your user ID is "jsmith" and your organization's Internet domain is "yourschool.edu" then the system would save your email address as "jsmith@yourschool.edu".

In situations where the system is configured so you may enter an email address on this page, you will be asked to enter it twice, to ensure it is typed correctly.

In some cases, depending on how the system is configured, you will be required to provide an email address (which will be listed as "Email Address" instead of "Alternate Email Address") and all emails to you will go to that address.

Working with Studies

Most of your time on the system will be spent using the study-related features of the system. Be sure to read this section closely and in its entirety, as there are special features and situations you should be aware of.

Web-Based (Online) Studies

If enabled, you may set up studies that are web-based (online). These studies may be set up internally in the system (online internal survey study) or outside the system (online external study). The options will vary depending on how your system is configured.

There are a few things to note about web-based studies:

- Once you indicate to the system that the study is web-based, you will not be able to change it to where it is no longer web-based. However, you can copy the study and convert it to a lab study (if it was an online external study).
- Web-based studies are typically set up so that there is one timeslot. That timeslot contains the maximum number of participants you would like to participate, and the *last* date and time when they can participate (this is often at the end of the term). It is not recommended that you set up multiple timeslots for web-based studies. Though the system will support it, it confuses participants. It is acceptable to have multiple timeslots, where only one study is active at a time. For example, one could have had a deadline date at the end of the previous semester (currently in the past), while the current timeslot has a deadline date at the end of the current semester (i.e., in the future).
- It is generally presumed that participants will participate in an online study shortly after they sign up. In this case, the system will expect you to grant credit to them soon after they sign up. If you are creating an online survey within the system, credit will be granted automatically, immediately after the participant completes the survey.
- In the case of an external web study, if you are using a survey product like Qualtrics, SurveyMonkey, LimeSurvey, SurveyGizmo, etc., then you may be able to set up credit granting, where it occurs automatically as soon as the participant completes the study. See External Study Credit Granting for more information.

Throughout the sign-up process, participants are notified that the study is online.

If the study is not administered by the system (online external study), then participants are not given the URL for the study website until they have signed up. This is to ensure they complete a sign-up in the system for the study. Participants can see the URL after sign-up, while the timeslot they signed up for is still in the future. Once the timeslot they have signed up for is in the past, they will no longer have access to the study URL. There is also an option when setting up the study where the URL will no longer be available as soon as the participant is marked as having participated in the study (regardless of the timeslot date). This restriction regarding viewing the study URL applies only to participants and to web-based studies administered outside the system. Online external studies are discussed in more detail in the section Online External Studies, later in this document. Also see Multi-Part Online Studies, as the behavior of when URLs are visible to participant is slightly different in that situation.

Online internal survey studies (surveys administered by the system) are discussed in great detail in the section Online Survey Studies, later in this document. Please read it carefully before setting up an online survey study.

Studies for Pay

In cases where participants are compensated for their participation in the study, you may set it up as a paid study and specify the compensation amount. The payment field is text, so you do not need to type in an exact amount, but can type in anything like "Amazon Gift Card", or even indicate a variable payment based on performance.

If participants are compensated *and* they receive credit, you should set it up as a credit study and indicate additional compensation in the study's information section.

Regardless of the type of study, after a participant participates in a study (including studies that are for pay only), you should still go into the system and indicate their participation by noting either their participation or no-show when viewing their sign-up. This allows the system to properly enforce certain restrictions on the participant and their studies, such as pre-requisite and disqualifier study restrictions. It also ensures a proper record is kept in the system of their participation.

Videoconference Studies

If you would like to conduct your study over videoconference (Zoom, WebEx, etc.), set up the study as a standard in-person study. Videoconferences are set up at the timeslot-level and not study-level, and appear as an option when adding a timeslot for a standard study. For additional flexibility, you can set up some timeslots as videoconference and others as a typical in-person location.

When setting up a videoconference timeslot, you will need to supply the URL of the online meeting. You may use the same URL for multiple timeslots. We recommend configuring the videoconference (on the provider side) so that there is a "waiting room" and you can admit participants into the meeting. By using the waiting room feature, you can control who can enter the meeting, and it can also alleviate the need for a password. If you set up a password to join the meeting, be sure to provide it to participants either by email or in the study details.

Participants will have access to the URL 10 minutes before the appointment, and will continue to have access until the timeslot is finished. For example, if the timeslot is scheduled for 9:00 - 9:30, they will have access to the URL from 8:50 - 9:30.

Participants may access the URL from the following sources:

- In the confirmation email sent immediately after they sign up for the study.
- In the reminder email send the day before their appointment.
- From the My Schedule page when they log in to the system.

The URL that participants receive is not a direct link to the videoconference URL, but instead a link to the system, which then runs some checks and sends the participant to the correct URL if it is now available for them, and otherwise they will receive a message stating when the videoconference will be available.

Multi-Part Lab Studies

You may create a multi-part lab study in the system, up to 4 parts. Often these are studies involving memory research, where the participant must return a specified number of days after the previous session. When creating a study, you may specify the day range for the each part of the study (e.g. 7 to 10 days after the previous part). Participants are required to sign up for all parts at the same time, to

reduce the chance of forgetting to sign up for all parts. Each part of a multi-part study may have a different credit or payment value, and duration, but each part must be the same compensation type. All parts must be for credit or all parts must be for compensation. The system also supports multi-part online studies (see Multi-Part Online Studies). If you have a study where one part is in-person and the other part is online, you will need to set up two separate studies and link them using pre-requisites.

With multi-part lab studies, you may specify that each part of the study must be scheduled to take place at exactly the same time as the previous part, or at any time on the dates that are within the specified number of days after the previous part. You may also specify that the next part take place on the same day as the previous part, by setting the day separation to 0 days. In that case, the system will ensure the next part takes place on the same day, but after the previous part.

You should ensure that there are enough available timeslots for all parts of the study or participants will be prevented from signing up for the study. Participants may cancel any part of their sign-up if necessary. If they cancel the one part, all subsequent parts are automatically cancelled as well. If they cancel any part other than the first part, you will need to manually sign them up (if you are allowed to do so) to participate in the cancelled parts of the study at a later date. You may also ask the administrator to handle this.

If you grant a no-show for the one part of a multi-part study, the subsequent parts of that participant's sign-up will *not* be cancelled automatically. However, you will be reminded of the situation in case you would like to cancel the subsequent parts. The cancellation is *not* automatic as there are some situations where automatic cancellation is not desirable.

Multi-Part Lab Study Configuration Scenarios

Listed below are some common scenarios and how to configure them in the system. The example used below is for a two-part study for simplicity, but would apply just as well to studies with more parts.

Scenario	Configuration (Part 2)
Second part to take place a week later, at any time during that day.	Scheduling Range: 7 and 7 Scheduling Leniency: No
Second part to take place three days later, at exactly same the same time as part 1.	Scheduling Range: 3 and 3 Scheduling Leniency: Yes
Second part to take place one to two weeks later, at any time during the day.	Scheduling Range: 7 and 14 Scheduling Leniency: No
Second part to take place later on the same day as the first part.	Scheduling Range: 0 and 0 Scheduling Leniency: No

The system will enforce the configuration for the each part in terms of ensuring participants only sign up for timeslots that meet the multi-part study restrictions. As the researcher, you also have additional control in deciding which timeslots to create for each part of the study. You want to ensure that there

are sufficient timeslots for each part. For example, if you have a two-part study set up so the second part must occur exactly one day after the first part, and you have set up the Part 1 timeslots on Monday, then ensure you have some Part 2 timeslots set up on Tuesday. Participants will have trouble signing up for the Monday timeslots for the first part because there is no corresponding timeslot for the second part to sign up for.

Multi-Part Online Studies

You may create a multi-part online study in the system, up to 4 parts. Often these are studies involving memory research, where the participant must participate a certain number of hours or days after the previous part.

There are a few constraints to be aware of when setting up this type of study:

- This feature is only supported with online external (web) studies, not the internal online survey feature.
- The Study URL for each part of the study must be unique, so the system is clear about which URL applies to which part of the study. For example, the URL for part 1 and part 2 can't point to the same Qualtrics URL. If you intend to ask the same questions in each part of the study, make a copy of the survey so each part has a unique URL.
- The time separation between each part is based on when the participant was granted credit (participation marked) for the previous part. For this reason, setting up the External Study Credit Granting feature is highly recommended since then the participation is marked automatically. When setting up this integration, be aware the crediting URL is also unique to each part of the study.
- When specifying time separation between each part of the study, it is based on hours and not
 days, but you may specify large numbers like 168 hours for a 7-day separation. You specify the
 number of hours after the previous was completed that the next part will become available,
 and for how many hours it will remain available. We recommend having it available for at least
 12 hours, so participants have enough time to access the study.
- You may use different survey products for each part (e.g. Qualtrics for part 1, SurveyMonkey for part 2), or the same product for each part.
- When setting up timeslots, the timeslot for part 1 functions as the participation deadline for
 just that part, similar to with single-part online external studies, and it effectively functions as
 the deadline when participants can start the process of completing all parts of the study
 (though in practice they will all sign up a lot earlier). You also need to set up timeslots for the
 other parts of the study. For simplicity, you can set the timeslots for the other parts to the same
 date and time as part 1.

Participants are given access to the URL for each part of the study at the appropriate time. They are provided a URL that does not point directly to the Study URL, but instead to the system, which then redirects them to the correct URL after first checking it is OK to send them to that URL (based on the time separation between parts).

Participants receive a link to each part of the study in the confirmation email after they sign up for the study. They also receive an email with a link to the next part, as soon as they are given credit for the previous part, and that email details when the next part will be available. They also receive an email reminder if the next part became available in the last 24 hours and is still available. This reminder is sent daily when the usual study appointment reminders are sent. They can also log in to the system and go to My Schedule to access the URL.

When creating a study, you may specify the scheduling range for the each part of the study in hours (e.g. 72 hours after the previous part, and available for 24 hours). Participants are required to sign up for all parts at the same time, to reduce the chance of forgetting to sign up for all parts. Each part of a multi-part study may have a different credit or payment value, and duration, but each part must be the same compensation type. All parts must be for credit or all parts must be for compensation. If you have a study where one part is in-person and the other part is online, you will need to set up two separate studies and link them using pre-requisites.

You should ensure all parts of the study have a timeslot available, or participants will be prevented from signing up for the study. For online studies, since the timeslot date functions as a participation deadline, it's often easiest to just set up a single timeslot for each part all with the same date, time, and capacity.

Participants may cancel any part of their sign-up if necessary. If they cancel the one part, all subsequent parts are automatically cancelled as well. If they cancel any part other than the first part, you will need to manually sign them up (if you are allowed to do so) to participate in the cancelled parts of the study at a later date. You may also ask the administrator to handle this.

If you grant a no-show for the one part of a multi-part study, the subsequent parts of that participant's sign-up will *not* be cancelled automatically. However, you will be reminded of the situation in case you would like to cancel the subsequent parts. The cancellation is *not* automatic as there are some situations where automatic cancellation is not desirable.

Multi-Part Online Study Configuration Scenarios

Listed below are some common scenarios and how to configure them in the system. The example used below is for a two-part study for simplicity, but would apply just as well to studies with more parts.

Scenario	Scheduling Range Configuration (Part 2)
Second part to take place a week later, and be available for 24 hours.	Available After: 168 hours Available For: 24 hours
Second part to take place immediately after completing first part, and be available for 12 hours.	Available After: 0 hours Available For: 12 hours

Adding a Study

Some researchers choose to set up their studies in the system before they have received the proper approvals (usually from their IRB) to run the study. This is supported in the system. You can set up a study but specify that is it not visible to participants (this is the Approved setting). That way, as soon as your approval is received, you can simply make the study visible and everything is already prepared. You can also post a study and make it visible immediately, if that is appropriate. Some systems will be configured in such a manner that only the administrator can approve the study, in which case you will need to contact the administrator to do so.

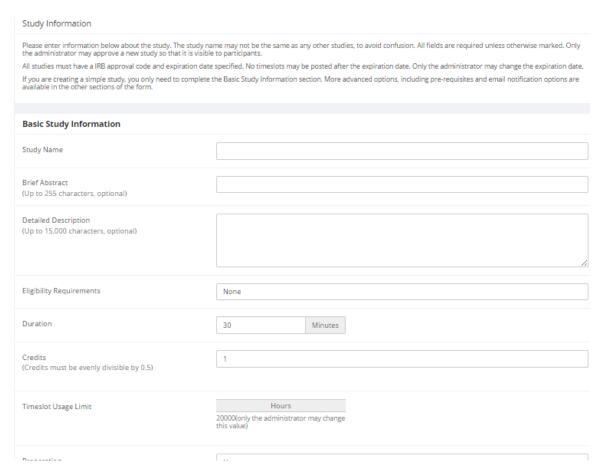


Figure 4 - Adding a New Study

To add a study, choose the Add New Study option from the top toolbar. You will have the option to pick from four possible types of studies. You may need to specify if the study is for credit or payment. Please choose these options carefully as you will not be able to change them later.

After you choose the study type, you will see a form asking for more information. You will need to fill out a number of fields, which are explained in the following table. Some of the fields listed below may not appear depending on how your system is configured, and the type of study you selected. All fields in the Basic Study Information section must be filled out unless otherwise noted.

Basic Study Information	
Field	Explanation
Study Name	A short name for the study. This is how the study is identified throughout the system. Most systems are configured so studies show in a random order to participants (choose Your Studies on the toolbar and it will state at the bottom of the resulting page if they are displayed in random order), so there is no advantage in choosing a study name that might put it at the top of an alphabetical list. You should consult with your administrator if there is a naming convention to be followed when naming studies. Study names must be unique, and you will be prevented from adding a study if there is already another study in the system with the same name. A study name may be up to 100 characters in length.
Brief Abstract (this feature might be disabled on your system)	This is a short one or two line description of the study. This short description will be displayed to participants when they view the entire list of studies, so it may be beneficial to list the most pertinent details here. Studies configured for payment often have the compensation information included in this section, particularly if the payment varies based on certain outcomes. This field may be optional, and can be up to 255 characters in length.
Detailed Description (this feature might be disabled on your system)	This can be a more long-form description about the study, and it will show if a participants clicks on the study to get more information before they sign up. You may include basic HTML in this area (ask your IT department for help if you are unsure of how to do this). This field may be optional, and can be up to 15,000 characters in length.
Eligibility Requirements	If there are any restrictions on who may or may not participate (for instance, only those who are left-handed), list them here. Otherwise, leave the field as-is. If you list any restrictions, these will be displayed on the list of studies when participants view a list of all available studies. Note the system

	does <i>not</i> enforce these restrictions, but it is expected that a participant will only sign up for a study in which they are qualified, as they would otherwise fail to receive credit. In most cases, you will leave this field as-is and set prescreen participation restrictions instead (those are enforced automatically), which you can do after you add the study. This field may be up to 245 characters in length.
Duration	The amount of time, in minutes, that each study session will take. If you are setting up a multi-part study, then there will be the option to specify the duration for each part of the study.
	For online studies, this should be an estimate of how long participants can expect the study to take, so that they can plan accordingly.
Credits (applies to credit studies only)	Enter the number of credits a participant will earn for the study. A value of 0 is acceptable and may be desired in cases where the study is part of a set of studies, and only the final study is credit-earning. The credit value specified must be evenly divisible by the credit increment specified. For example, if the increment is 0.5, then the study can have credit values like 1 and 1.5, but not 0.75.
	If you are setting up a multi-part study, there will be options to enter credit values for each part of the study. The system will compute the total credit value of the study automatically.
	After a study has sign-ups, you may not change the credit value of the study. However, the administrator can still change the credit value of a study with pending sign-ups. If this is done, be sure to notify participants with pending sign-ups of the change, as the system will not notify them automatically.
	A study may not be changed between a study for credit and for payment, after it has been created.

	<u></u>
Payment (applies to paid studies only)	Enter the compensation for the study. This is a text field, so any text may be entered like "Amazon Gift Card" or "Up to \$20" and so on. Please see the Studies for Pay section of this documentation for more information on how to fill out this field in the case of paid studies.
	If you are setting up a multi-part study, there will be options to enter compensation values for each part of the study, as well as a total compensation value.
	You can change the payment text at any time. If this is done, be sure to notify participants with pending sign-ups of the change, as the system will not notify them automatically.
	This field may be up to 30 characters in length.
	A study may not be changed between a study for credit and for payment, after it has been created.
Timeslot Usage Limit	Depending on how your system is configured, you may see an item that specifies the maximum number of study session hours available to this study. The administrator sets this value, and is the only one who can change it. To determine the current session usage for a study, go to the Add A Timeslot page for the study, or to the Timeslot Usage Summary.
Preparation	Enter any advanced preparation a participant must do here (e.g. "do not eat 2 hours before session"). If there are no preparation requirements, leave this field blank.
Researcher(s)	Select the researcher for this study. Most likely, this is you, and your name will automatically be selected. If you are a researcher, you may not remove yourself as the researcher (the P.I. for the study, as well as the administrator can change the researcher). Depending on how your system is configured, you may be able to specify multiple

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	researchers for a study. If you specify multiple researchers, each researcher has full control over the study.
	The selection box lists only users who are researchers.
Principal Investigator (this feature might be disabled on your system)	Select the Principal Investigator for this study. The person you select will have full access to the study. If you see this option, then you must select a P.I.
	The selection box lists only users who are principal investigators.
IRB Approval Code	Enter the IRB approval code here. This field is displayed to the administrator to help them keep track of studies. Depending on how your system is configured, this field may be required. If it is required, then only the administrator can change the IRB approval code once it has been entered.
IRB Approval Expiration Date	The date when the IRB approval expires. This field may <i>not</i> appear, depending on how your system is configured. If it <i>does</i> appear, you must provide a valid expiration date. The system will prevent you from adding new timeslots to take place after this date, and your study will become inactive (not approved and thus not visible to participants) after this date. You may not make a study active if the IRB approval has expired. Only the administrator can change the IRB approval expiration date once it has been entered. This is the reason why it defaults to blank to force you to choose a date. You may specify a date up to 5 years in the future.
Approved?	Select Yes if this study should show up on the list of studies that participants might sign up for. Ensure you have received the necessary approvals to run the study before choosing Yes. A study must be Approved and Active to show up on the list of studies that participants may sign up for.

	If you select No, the study will not be visible to participants.
	Some systems are configured in a way that only the administrator can approve a study. If that is the case, you should contact the administrator when you are ready to make the study visible to participants (a form is provided on the page to do so). As a researcher, you can always make an approved study invisible to participants (by making it not approved), but you may need the administrator to make it visible again. In addition, if you change key items about the study, specifically the name or descriptions, the study will automatically be made invisible to participants until the administrator reapproves it (depending on how your system is configured). The reason for this is that many IRBs approve very specific language for study names and descriptions, so the administrator needs to ensure the study is in proper compliance.
Email Approval Notice? (Visible to administrators only)	This Yes/No option will appear if the administrator is adding or updating the study that is not already approved. If they select Yes to Email Approval Notice and they approve the study (set Approved to Yes) at the same time, then an email will be sent to all researchers for the study, notifying them that their study was just approved.
Active Study?	Select Yes if this study is in progress. You must select Yes and the study must be Approved if you want the study to available for participants to sign up for.
	If a study is Not Approved but <i>is</i> Active, then it does not show up to participants on the listing of studies, but it is accessible through other links if the participant has participated in it before and are viewing their participation history (in case the participant has follow-up questions about the study). It will also show up on the study information page (for an individual study) where it

is listed as a pre-requisite or disqualifier for a
study.

The reason to select No is if the study is being kept for historical purposes, but should not show up on the list of studies participants can sign up for.

Often, this is done so the system can enforce prerequisites where the inactive study is a prerequisite for an active study.

Advanced Settings

Field	Explanation
Pre-Requisites (this feature might be disabled on your system)	If there are studies a participant must participate in before participating in your study, choose them here. You may select multiple studies.
	You may specify that participants must have participated in <i>at least one</i> , if not <i>all</i> of the studies specified.
	The system will handle enforcement of the prerequisites in a strict or lenient fashion, depending on how your system is configured. In strict enforcement mode, the participant must have received credit for (participated in) the prerequisite studies. In lenient enforcement mode, the participant must only be scheduled to participate in the pre-requisite studies (it is presumed that they will go on to complete the pre-requisite studies). You can ask your administrator how this is configured, if it is of concern. If your system is in lenient enforcement mode and a participant cancels a necessary pre-requisite for your study (they are warned of this), and your study is configured so that the researcher will receive notifications of cancellations or sign-ups, then the researcher will receive notification of the pre-requisite problem and can contact the participant if necessary.

	Depending on how your system is configured (Pre-Requisite/Disqualifier Display setting), participants may or may not see which studies you have specified as pre-requisites when they view your study.
Disqualifiers (this feature might be disabled on your system)	If there are any studies that a participant must <i>not</i> have participated in, please select them here. You may select multiple studies. The system will handle enforcements of the restriction during the sign-up process. If a participant has signed up for, or participated in, at least one of the studies specified as a disqualifier, then they will not be eligible to sign up for your study.
	Depending on how your system is configured (Pre-Requisite/Disqualifier Display setting), participants may or may not see which studies you have specified as disqualifiers when they view your study.
Course Restrictions (this feature might be disabled on your system)	If you would only like participants enrolled in certain courses to participate in your study, select the eligible courses here. Participants who are not in at least one of the courses you selected will not see the study when they view the list of available studies. You may choose No Restrictions if you would like to make the study available to participants in any course.
	There is a limit to how many courses can be listed as course restrictions for a study, and the limit is somewhere between 60 and 80 courses. The limit is varied depending on a few factors, and the system will simply not save the course restrictions for any courses that would take it over the limit.
	Note that course restrictions do not function as a disqualifier but rather as a qualifier. For example, if a participant is in both Course A and Course B, and the study is restricted to only those in Course A, the participant is eligible because they are in Course A, despite the fact Course B is not listed as a

	course restriction. In addition, using the same example above, the participant may assign the credit from the study to any of their courses, including those courses not listed in the course restriction (Course B in this example). Course Restrictions function solely to qualify participants for a study, and not to restrict their ability to assign credits to courses.
Age Restrictions (this feature might be disabled on your system)	If you would like to limit to participants within a certain age range, you can specify it here, and participants who do not qualify will not see the study at all.
	For lab studies, the age restriction is enforced based on the date of the timeslot. For example, if a study has a minimum age limit of 18, and a participant is currently 17 but will turn 18 next week, the system will allow them to sign up for any timeslots that will take place after they have turned 18.
	For web studies, the age restriction is enforced based on their age at the time they sign up for the study.
Invitation Code (this feature might be disabled on your system)	If you would like to have a special sign-up password for this study, enter it here. This is known as an invitation code and applies just for this study. Participants must know the invitation code to sign up for this study. This is often used in cases where the researcher wants to personally select participants, so the researcher only provides the invitation code to the desired participants. Invitation codes are <i>not</i> case sensitive, and are in no way connected to any passwords users use to log in to the system.
	If you do not need an invitation code, leave this field blank.

This will list if the study is an online study, and the type of online study. This setting cannot be changed after a study is created.
If enabled, then researchers will not see participant names, but instead an ID code to identify them. This setting only applies for online studies, and only if ID codes aren't already enabled system-wide by the administrator. For external web studies, this setting is useful primarily in conjunction with placing <code>%SURVEY_CODE%</code> in the Study URL. Once this setting is enabled (to show ID codes), it cannot be changed back to showing names again, even if you remove <code>%SURVEY_CODE%</code> from the Study URL.
The URL (web address, usually starting with https://) for your study. This is only required for web-based studies administered outside the system.
If you are setting up a web-based study outside the system and would like the system to pass a unique identifier in the URL so that you may easily identify participants and even have the system grant credit automatically, add the text <code>%SURVEY_CODE%</code> in the URL where you would like the identifier to be placed. This feature is most commonly used with online survey products like Qualtrics, SurveyMonkey, LimeSurvey, SurveyGizmo, and similar products. This is discussed in further detail in the Web-Based (Online) Studies section of this documentation.
If you are setting up a multi-part online study, you will need to specify the URL for <i>each</i> part of the study, and the URLs should be unique.
If set to Yes, then participants may still access the Study URL even after they have been marked as having participated in the study. If set to No, the URL will not be available to them.

	In all cases for external web studies, the URL will not be displayed until they have signed up for the study. Regardless of this setting, the URL will not be displayed after the timeslot is in the past.
Participant Sign-Up Deadline (this feature might be disabled on your system)	Enter the deadline date (before the study is scheduled to occur) that is the last possible date a participant may be allowed to sign up, in whole hours.
Should the Researcher receive an email notification when a participant signs up or cancels?	If set to Yes, the researcher for this study will receive an email notification whenever a participant signs up or cancels their sign-up for this study. The email notification will be sent to an email address based on the information the researcher has provided. See the Email Address Options section of this documentation for more information on how the email address is determined. Emails will contain the first 50 characters of the study name as part of the subject line in order to make it easier to sort the emails within an email program.
	If set to Yes, researchers will also receive a notification if the system is in lenient pre-requisite enforcement mode; and a participant cancels a study that was a pre-requisite for the current study. Read the section on Pre-Requisites in this table for more information about this situation.
	Emails are sent to all researchers specified for the study, unless a specific researcher is assigned to the timeslot that the email notification is being sent about. See Timeslots Linked to Specific Researchers for more information.
Researchers at Timeslot-Level	If set to Yes, it will be possible (but not required) to assign a specific researcher from the list of researchers for the study to a specific timeslot. If set to No, then it is presumed that all researchers assigned to the study are responsible for all timeslots. See Timeslots Linked to a Specific

	Researcher for more information. This option only appears if the system is configured to allow multiple researchers per study.
Automatic Credit Granting	If set to Yes, timeslots that are more than a specified number of hours old and still in the Awaiting Action state will be changed to a credit grant. The check for timeslots in this situation is made only once per day. If an automatic credit grant is done, you may still change it later if necessary.
	For online external web studies, the credit grant will take place (the specified number of hours) after the timeslot (participation deadline) has occurred (as opposed to being based on when the participant signed up. This feature is generally not useful in this situation. The option will not appear for online survey studies (within the system) because credit granting generally occurs automatically, immediately after the participant completes the survey.
Can a participant sign up for this study more than once? (This feature might be disabled on your system)	If you would like to allow participants to sign up (and receive credit) for your study more than once (at different times), choose Yes. Otherwise, choose No.
	If No is chosen, participants may only sign up for the study more than once if they had previously failed to show up for the study (a no-show).
Shared Comments	This is an optional area where you may enter any comments or notes about the study. These are visible to any researchers and PIs in the system, but not to participants. This field is useful if you want to make the technique used in the study visible to other researchers, so they can set your study as a disqualifier if necessary. This field can be up to 1,000 characters in length.
Private Comments	This is an optional area where you may enter any comments or notes about the study. These are only

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	visible to the researchers (and PI) for this study. These are not visible to participants or to other researchers or PIs in the system. This field can be up to 1,000 characters in length.
Research Alternative?	If set to Yes, then this study is considered a research alternative study. For various reasons, some participants may be restricted to participate in regular studies (typically, for accruing too many unexcused no-shows or being unable to consent), meaning that they can only sign up for research alternative studies. Only an administrator may change this value (the default is No).
Multi-Part Study Settings (only applies if you select Multi-Part Standard Study or Multi-Part Onlien External Study on the Select Study Type page)	
Field	Explanation
Total Payment (paid studies only)	Enter the amount of total compensation for the study, typically the sum of the payment values for each part. The system cannot compute this automatically since it is possible to enter non-numeric values (e.g., "Amazon Gift Card") in the other payment fields.
Part X Scheduling Range	For multi-part standard studies:
	Specify the number of days (as a range) after the previous part is scheduled, that this part should be scheduled. The range may be the same value (e.g. "between 7 and 7 days") if desired, but must be a whole number. See Multi-Part Lab Studies for more information.
	For multi-part online studies:
	Specify the number of hours after the participant receives credit (participation is marked) that this part will become available, and for how many hours it will remain available. The value can be a large number like 168 hours for 1 week, but it must

	be a whole number. See Multi-Part Online Studies for more information.
Part X Scheduling Leniency (multi-part standard studies only)	In some cases, you may want to ensure that the participant schedules the next part of the study to take place at exactly the same time (on a different date) as the previous part. If so, choose Yes for this option. If there is some flexibility to sign up any time within the Part X Scheduling range, choose No for this option.

Once you have filled out the appropriate information, save it and the system will be updated immediately with the information. If you would like to add participation restrictions based on prescreen responses, you can do so when you update the study (see Prescreen Participation Restrictions). Otherwise, your next step is to add timeslots (sessions). See the Working with Timeslots section of this documentation for more information.

If you need to update this study, see the Updating a Study section of this documentation.

Updating a Study

You may update any of your studies at any time. To do so, choose My Studies from the top toolbar and you will see a list of your studies. Click on the desired study, and choose the Change Study Information link.

You will see a form similar to the one you used to add the study. A few options may no longer be editable depending on the status of the study (e.g., if participants have already signed up for it). The fields shown are all the same as when you added the study. See the Adding a Study section of this documentation for an explanation of those fields.

The changes you make will take effect immediately after they are saved. When changes are made, if administrator re-approval is required before a study is made visible to participants, then you should contact the administrator to request re-approval once you have made all your changes. Changing the following fields may require a re-approval: study name, brief abstract, detailed description, eligibility requirements (the text field, not specific restrictions like prescreen restrictions, study pre-requisites/disqualifiers, or course restrictions), duration, preparation and credit value (for credit studies only). There will be a notice on the Change Study Information to warn if re-approval may be required. The system will also notify you after making changes if the study is now in need of re-approval. If re-approval is required and you are ready to request such approval, you may use the option to send such a request via the system, which is the same function you would have used to request initial study approval.

If you need to change the credit value for a study and there is no option to do so, this means the study already has at least one participant signed up for it. You cannot change the credit value when a study is

in this situation because there is no way to handle past credits for the same study (e.g. should old credit grants for the same study be adjusted to reflect the new credit value or be kept the same?). If the study is nearing the end of its run and variable credit granting is enabled, then the easiest solution is to grant the new credit value to participants who sign up in the future. If you prefer that the credit value be changed for the entire study, contact the administrator who can make that change for you. Note that if the study's credit value is changed while there are pending sign-ups, those participants are not notified of this change. You will need to notify those participants of the change in credit value if necessary.

Deleting a Study

You may delete a study only if there are no pending sign-ups (awaiting action) or active (non-zero) credits linked to it. If you need to delete a study that already has pending sign-ups or active credit grants, a better option may be to make it Inactive if you do not want it to be visible to participants.

If you want to delete a study that has sign-ups and are unable to do so, please contact the administrator. The administrator can delete a study with sign-ups, but only if the sign-ups are all without credit values (this usually occurs when study participation history from a previous semester was retained, but credits were zeroed out). If the study has sign-ups where the sign-ups have (non-zero) credit values linked to them, then the administrator cannot delete the study until all those credit grants are changed to a 0 value (or the participants for the sign-ups are deleted). This restriction is to ensure that the credit count for participants and where they have earned credits is accurate. This also means that the studies that contributed to their credit earnings must be kept intact.

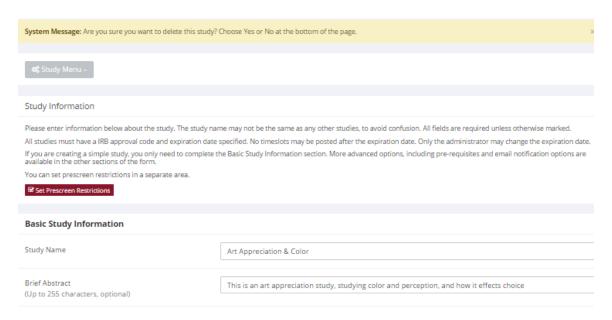


Figure 5- Deleting a Study

To delete a study, choose My Studies from the top toolbar and click on the desired study. Then choose the Delete Study option. You will see a confirmation page. Choose Yes (at the bottom of the page) to delete the study.

Once a study is deleted it cannot be restored, so use this feature very carefully. If you delete an online survey study, the survey and all data collected will also be deleted.

Advertising Your Study

Sometimes it may be useful to advertise your study on social media channels or by other methods outside the system. Go to Study Information and copy the Direct Study Link URL. Participants who go to that link will be taken directly to your study after they log in, assuming they are qualified for the study. If they are not qualified, they will be taken to the participant dashboard as usual.

The Direct Study Link URL is also displayed on Invite Qualified Participants for your convenience.

Timeslot Usage Summary

When viewing your study, the timeslot usage summary will be available. This gives some basic information about timeslot utilization in the past and in the future, as well as some basic no-show information. It also gives information on timeslots for the study by location (if the study is not an online survey study or external web study) and by researcher (if the study is configured to allow researchers to be assigned to specific timeslots).

For credit studies, the system also provides a summary of how many credits were granted. This summary accurately computes credit usage, taking into account any variable credit grants (if Variable Credit Granting is enabled in System Settings). This summary is useful in cases where some participants may have received credit in a different amount than the study's listed credit value.

If timeslot usage limits are enabled, the system will provide an estimate of how many timeslots can be added. Note that if the study is a multi-part study, it will estimate based on allocating the entire limit to the each part (estimates for each part are provided). However in practice, it's more likely a researcher will want to add timeslots to all parts of the study. This should be taken into account when viewing these estimates, especially if each part of a multipart study has a different duration.

Download Participant List

The download participant list feature allows you to download or easily print a list of all participants for the study, including when they signed up for the study. You can restrict this list based on date range of the timeslots, and also on participation status.

If Participant Date of Birth Requirement is enabled in your system, so that the system collects date of birth from participants, then their age will be included to the nearest tenth decimal place (e.g. 20.2 years old). For lab studies, the age is computed based on their age on the date of the timeslot. For web studies, age is computed based on the current date (the date you run this report). Administrators who run this report will see full date of birth (not just age) for each participant. Date of birth is excluded from the data researchers receive to reduce the risk of identity theft.

The download also contains the date a participant signed up for the study, and in the case of external web studies and videoconference studies, it also shows the date they first clicked the link to participate in the study online.

Bulk Mail Summary

The system tracks whenever any type of bulk email is sent (by a user) related to the study. This includes inviting qualified participants based on the study's prescreen participation restrictions, or contacting those who have already signed up for the study. This information is kept for 6 months and is tracked to ensure that all users follow the generally accepted Internet practices for responsible use of email. The administrator also has access to this information.

Prescreen Participation Restrictions

If enabled on your system, the system might contain an online prescreen that participants may (or must, depending on your system configuration) complete. You may place participation restrictions on your study based on prescreen responses. Participants are unaware that such restrictions are placed on the study. These restrictions are never listed to them. If they do not qualify to participate in a study because they do not meet the prescreen participation restrictions, then the study will not be shown to them. This is important to note – participants never know why a study was or was not shown to them, because they are unaware of the prescreen restrictions.

You may restrict a study on any question or questions on the prescreen that allowed for a multiple-choice answer where only one choice could be selected. You may also restrict a study based on a computed section sum or average score for a participant, if the prescreen was set up in such a manner. You may restrict to one choice or many choices for any question. If you restrict on multiple questions, it is the same as a logical "AND." For example, if you setup the prescreen restrictions so that participants must have answered "Yes" to the question "Do you wear glasses?" question and "Blue" or "Grey" to "What color are your eyes", then they must meet *both* requirements to participate. In other words, only participants who wear glasses and have either blue or grey eyes are eligible.

There is no support for a logical "OR" restriction across multiple questions. The restrictions are inclusive, meaning that if you select a choice as a restriction, participants must have answered at least one of the choices selected for each question that is part of the restriction in order to see and participate in the study. This is as opposed to being exclusive where checking the choice as a restriction would exclude them from participation.

Participation restrictions may be placed on a study based on a participant's prescreen responses. Participants will be unaware that the study has such restrictions placed on it. They will see only the studies for which they qualify, and none of the studies for which they do not qualify. If you would like to determine how many participants meet a set of criteria, you may want to run a prescreen qualification analysis. Prescreen questions that may be used as part of a study participation restriction must be multiple-choice questions (where only one choice may be selected), so only eligible questions are listed below. In addition, the prescreen may have been configured such that a sum or average score was computed for an entire section (for each participant). Those will also be listed if there are any. If a participant signs up for this study, there will be an option to view that participant's entire set of responses to the prescreen. Listed below are all questions that are eligible for participation restrictions. Check the items that you would like to based the study's restrictions upon, and on the subsequent page there will be the option to define these restrictions down to specific responses for each question. Listed below are questions for this section of the prescreen. Please provide a response for every question. If you are given the option to decline to Section 1 (Do you wear gla) Do you wear gl (When writing, w) When writing, which hand do you prefer to use? Please rate how you feel about the following statement: I have a better time in social settings if I... (Please choose t) ease choose the best selection for the following statement: I sometimes forget part of the evening... Listed below are questions for this section of the prescreen. Please provide a response for every question. If you are given the option to decline to Section 2 answer a question, then declining to answer is considered a respons (What is your av) What is your average household income in a year?

Figure 6 - Prescreen Restrictions Question Selection

To set participation restrictions, view (do not choose edit) your study and choose View/Modify Restrictions. You will see a list of eligible questions that you may use for your restrictions. If the study already has some restrictions, those will be checked. You will see how many participants currently meet the restrictions. Choose the questions you would like to restrict upon (and keep the existing checked restrictions checked, unless you want to remove that restriction), and click on the Set Restrictions button. On the subsequent page, you can select each value that is acceptable for each question you have chosen. Once you have selected all the acceptable values, save your changes and they will take effect immediately. It is important to note that if you change the restrictions, it will *not* remove the study sign-ups for participants who qualified under the previous set of restrictions as restrictions are enforced at the time the participant signs up for the study. For this reason, you should decide on your restrictions before making the study available to participants.

If you have restriction requirements where you would like to restrict participation to a percentage of the population (e.g. the responses that were chosen by the top 25% of people), but you are unsure which responses meet this requirement, you can use the Prescreen Response Analysis feature to determine the valid responses. See Prescreen Response Analysis for more information. You may also use Analyzing Prescreen Responses to get an idea of how many participants are potential candidates for participation in your study, based on a specified set of restrictions.

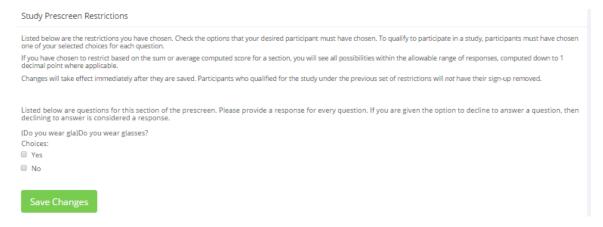


Figure 7 - Prescreen Response Restrictions

Inviting Qualified Participants to a Study

While viewing the list of prescreen restrictions currently set for a study and the number of participants who meet those restrictions, you may see the option to Invite Qualified Participants. Using this option, you are able to craft an email to be sent to all qualified participants. You can choose to exclude those who have already signed up for, or participated in any studies you specify. This disqualifier list will be pre-populated based on any disqualifiers already set for the study. The system will automatically exclude all participants who have participated or are signed up for the current study (no-shows are not excluded though, since they may sign up again). If the study is not a research alternative study, the system will also automatically exclude participants with limited accounts, as they are ineligible to participate in studies not marked as a research alternative study.

The system will pre-fill the email text with useful information like the name of the study and how many timeslots are currently open. If you include the text %FIRST_NAME%, %LAST_NAME%, or %USERNAME% in the email text, the system will substitute it with the recipient's first name, last name, or username. Note this text must be in upper case and surrounded by % symbols.

You cannot include attachments in the email, so if you have a document you would like to include, you should post it on some other website and provide a link to the document in the email that you send.

There is also a Direct Study Link URL displayed for your convenience, so you can easily copy and paste it into your message. See Advertising Your Study for more information.

If you have set participation restrictions for the study based on course enrollment and/or age, those restrictions will be taken into consideration (i.e. abided by) when determining which participants receive the email.

If the study invitation email feature is enabled on your system, and some participants have opted out of receiving study invitation emails, then they will also be excluded from the mailing.

There is also an option to choose a random percentage from the overall list of matching participants to email. It is important to note that the system only keeps track of who was emailed for 6 weeks, and

you must specifically choose a past emailing group to exclude that group. If you do not choose to exclude a group emailed in the past, then some who received it before may receive it again. In other words, choosing a random 30% will not exclude those previously emailed when determining the 30%, unless you specifically choose to exclude them.

The Sender address on the email will be the administrator's email address, which is done to prevent the email from being blocked by junk email filters. The "Reply To" address of the email will be that of the user who is actually sending the email. When a participant chooses to reply to the email, the reply will be sent to that "Reply To" email address.

There is an option to specify a delay in sending the email, based on the number of hours from when the emailing option is used. This is useful if you want to target a certain time of day (e.g., during the evenings) when the email will be sent. The emails are generated at the time you use the emailing function, but are stored on the server's outgoing email queue until the specified sending time. They cannot be removed from the queue once this emailing function is used.

The study must be approved in order to use this feature, if Study Approval is enabled.

In some cases, the administrator may have imposed a limit on how many participants may be emailed. This is often done to prevent abuse of the system. Such cases include when researchers invite too large a number of participants, which is not in accordance with the generally accepted Internet principles for sending email. If there is such a limit, the system will look at the number of participants the researcher plans to email and block the sending of the email entirely, if the number of participants is over the limit. To get around this limitation, the researcher can further restrict whom they plan to send the email to (perhaps choosing a smaller random percentage of users, or more closely defined prescreen participation restrictions). The researcher may also ask the administrator to send the email for them, as the administrator is not subject to such limitations. Regardless, any use of this bulk email function will be logged. That information will be kept for approximately 6 months. The administrator can also pull up a report of how many emails a specific researcher has sent, so it is wise to not abuse this feature. In addition, Sona Systems reserves the right to temporarily remove the right to log in from a researcher if there are verifiable reports of abuse of this feature. Typically before doing so, the administrator will be notified by Sona Systems as it is preferred to have the administrator deal with such problems.

Participant Contact		
Based on the selected choices. participants currently qualify to participate in a study with such criteria. This excludes those who have already participated in the study or are currently signed up to participate. Participants who have chosen not to receive study invitation emails are also excluded. You may choose to contact participants and invite them to participate in a study. If you would like to do so, please fill out the area below with your message. You may choose to send the message to all qualified participants, or only those qualified participants who have not already signed up or participated in specified studies. If you prefer to send mail to only a random subset of the matching participants, choose the percentage. Choosing 100% will email to all matching participants. The randomization percentage is approximate, and is not effective when contacting a small group. The system will only send the message to participants with active accounts (i.e. allowed to log in to the system). In order to prevent email abuse, information about the number of participants you sent to, as well as a summary of the email content, will be logged. The administrator has configured the system so you may only send an email if it will go to no more than 2 participants Percentage to Mail 100% - All 9 participants (participant estimates are approximations)		
Study Exclusions	Exclude participants who have participated in the following studies: My Studies All Studies Search Cat Observation Study Memory Study Available Selected	
Recipient Exclusions	Exclude participants who received the following invitations for the study: September 28, 2018 10:26 AM - 4 messages sent.	
Message	This is a special message regarding the study Concussion Study. The researchers are: Talec Highbridge, Nate Smith. At the moment, there are approximately 5 open timeslots for this study.	

Figure 8 - Contacting Qualified Participants

Viewing Your Studies

To view your studies (and not the studies of others), choose the My Studies option on the top toolbar. The system will list all your studies in alphabetical order by study name, then will be grouped by studies that are active and inactive. You may use the tabs along the top to toggle between viewing all your studies, to viewing only those that are active or inactive.

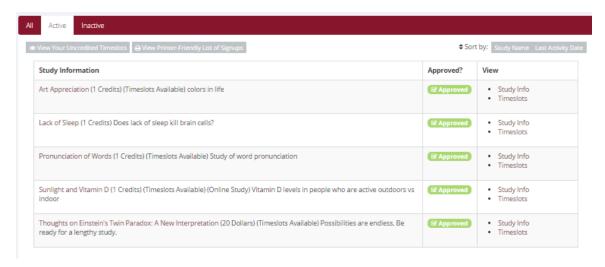


Figure 9 - Your Studies

Participant Study View

If you would like to see how your study appears when participants view it, find your study and choose the Participant Study View option. This will show exactly how the study appears to participants. With the exception of a participant who views a study, next to each pre-requisite and disqualifier study is a status indicator about whether they have met that requirement. In Participant Study View, the pre-requisite and disqualifier studies are listed, but there is no status indicator next to each study in the list.

If for some reason you think your study is not visible to participants, it may be due to various restrictions you have set on the study; such as prescreen participation restrictions where too few (or none) of the participants in the pool qualify. You can ask the administrator to use the Check Study Configuration tool (available to them when they view your study) to provide advice on why your study may or may not be visible to participants. Administrators there also have an option to input a specific participant to see if that participant would qualify for your study.

Study Modification Log

To view changes made to the study, you can access the Study Modification Log in the Study Menu for your study. It shows details about changes made to the study information, prescreen restrictions, stud credit value, and timeslot deletions. The system logs when the change was made, by which user, and their computer IP address. Data is retained for approximately 12 months.

Copying a Study

To make a copy of a study, go to the study you would like to copy, and choose the Copy Study option in the Study Menu for your study. Copying a study will copy all the study configuration, including any prescreen restrictions and other participation restrictions, but it will not copy the timeslots or study sign-ups. You may have the option to change the study compensation type (paid or credit study) and study type (convert a standard to online study and vice versa) for the new study.

Viewing Other Studies

To view all studies that are visible to participants, choose the All Studies option from the top toolbar.

You will first see a list of all Active studies. These studies will show up to participants on the list of available studies. The next group of studies (if there are any) is Inactive studies. These will *not* show up on the list of available studies (to participants) but participants are able to access information about these individual studies on links from the page that tracks their progress (if they have participated in the study) or if another study has the Inactive study listed as a pre-requisite or disqualifier.

Online External Studies

Online external studies are online studies that are not hosted within the system, but instead reside on another website. This is different from online internal survey studies (detailed later in this documentation), where an online survey is set up directly in the system and no other website is involved.

When it comes to granting credit (marking participation), by far the most popular method is to set up External Study Credit Granting, so that the participation is marked immediately and automatically, as soon as the participant finishes the study. If you are using one of the many products where this feature is supported, it is strongly recommended to use that. This is especially important in the case of multipart online studies, because the time separation between parts is based on when participation was marked.

Otherwise, you may want to develop a method of linking the participant's sign-up in the system to your online study, so you know who to grant credit to. One way to do this is to ask for the participant's name (or some other identifying information) that will make it easy to locate their sign-up within the system and grant them credit once they have completed your online study. Another method of tracking, which reduces the chance of human error, is to use the Survey Code feature described later in this section.

Note that if External Study Credit Granting is not used, the system will *not* automatically grant credit once the participant has finished the study. The reason behind this is the system does not know when something occurred on a website outside the system. In this case, researchers should routinely login and grant credit as necessary.

External Study Credit Granting

With External Study Credit Granting, a participant can receive credit as soon as they finish the online external study. This is accomplished by having the external study notify the system that the participant has completed the study and thus deserves credit.

If you are using a popular commercial product like Qualtrics, SurveyMonkey, Inquisit and many others, then skip this section and go to one of the following sections that provide specific instructions for each product. In addition, it may be easier to use the online integration instructions available for each product at http://www.sona-systems.com/help instead of this documentation. The reason is that those products may have been updated since this documentation was produced, and the online integration instructions are updated more frequently.

What follows in this section is a general description of the integration process if you are *not* using one of the commercial survey products listed in separate instructions below. If you *are* using one of those products, then skip to the relevant section (or the online integration instructions) instead.

Accessing the completion URL for the study sends the notification to the system. A properly configured study will have up to two Completion URLs:

- 1. **Client-Side Completion URL**: If this URL is loaded, the participant will receive credit. Typically, the participant clicking on this link in their browser, or the participant being redirected to this link after completing the study, would load this URL. This is the most commonly used method for a commercial survey product where there is not already a built-in integration.
- 2. **Server-Side Completion URL**: This URL would typically be loaded by the external study (not clicked on by the end-user participant) and is a server-to-server communication between the

external study and the system. The results are returned in XML format and may be parsed by the external study. This method is used when you have full control over the external study, like if it is programmed from a Perl script. It also provides more control and security than the client-side method.

You should use only *one* completion URL to achieve credit granting. For most commercial online survey products, and if you are not familiar with programming, the client-side completion URL is likely the most appropriate option. To avoid confusion, the system will only display the client-side completion URL if a commercial survey product is being used and is known to support only the client-side completion URL.

To see the completion URLs for your study, first you need to ensure the study is set up correctly as an online external study. Then, enter the URL for the external site into the Study URL field in Change Study Information and save your changes. Next, click on Change Study Information again and modify the Study URL to include <code>%SURVEY_CODE%</code> in the URL in the appropriate place. If you entered the URL for a commercial product like SurveyMonkey, Qualtrics, SurveyGizmo, Unipark, or Inquisit, then the system will display help text just below the URL with a suggestion for how to include this. Once you save your changes the completion URLs should now appear on the resulting study information page. In short, the completion URLs will appear as long as there is <code>%SURVEY_CODE%</code> anywhere in the Study URL.

The client-side completion URL will look like this:

https://yourschool.sona-systems.com/webstudy_credit.aspx?experiment_id=123&credit_token=9185d436e5f94b1581b0918162f6d7e8&survey_code=XXXX

The server-side completion URL will look like this (if displayed):

https://yourschool.sona-systems.com/services/SonaAPI.svc/WebstudyCredit?experiment_id=123&credit_token=9185d436e5f94b1581b0918162f6d7e8&survey_code=XXXX

In the example above, the XXXX at the end is to show where the survey code number should be placed (in place of XXXX) by the external study website.

The next step is you'll need to configure the online external study to receive the survey code number from the system at the start of the study, and also to load one of the completion URLs at the end of the study. You will need to replace XXXX with the survey code number and pass that to the system in the completion URL. Because this involves configuring the external study, which is not part of the system, how this is accomplished depends on the external study software. Usually it involves setting up the survey code number as some type of variable that is passed via the URL, and then configuring a redirect URL at the end of the study to be loaded, with this variable in the URL.

As this is a complicated feature, the best method to test it is to actually log in to the system as a fake participant. The entire credit granting process is not possible to test as a researcher, as researchers

cannot sign up for studies. To ensure other (real) participants do not sign up for the study while you are testing it, add an Invitation Code to the study (you can remove it later).

The configuration directions for some popular survey products are below, based on information from those vendors.

Testing External Study Credit Granting

Once you have external study credit granting set up, you will want to test it before going live with real participants. The best way to do this is to test with a real participant account. During testing, you can set up the study with an Invitation Code (password) so real participants can't sign up for it while you do your testing.

It's also possible to test while logged in as a non-participant (like a researcher). Go to https://www.sona-systems.com/help/integration test.aspx for information on how to test and troubleshoot any problems with credit granting.

The three most common problems when setting up external credit granting are:

- 1. Study is set up as wrong type in our system. Be sure to set it up as an Online External Study (where participants are not given the URL until after they sign up).
- 2. The URL participants get sent to at the end of the survey is incorrect. This URL is unique for each study in our system. So if you are re-using an old survey and created a new study in our system, be sure to update the URLs in that survey for crediting.
- 3. Typo when adding in %SURVEY_CODE% to the Study URL field. Read the instructions carefully, as it needs to be set up exactly as specified or it won't work.

External Study Credit Granting with SurveyMonkey

For the latest instructions on integration with SurveyMonkey, along with detailed screenshots, go to https://www.sona-systems.com/help/surveymonkey.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Qualtrics

For the latest instructions on integration with Qualtrics, along with detailed screenshots, go to https://www.sona-systems.com/help/qualtrics.aspx.The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with REDCap

For the latest instructions on integration with REDCap, along with detailed screenshots, go to https://www.sona-systems.com/help/redcap.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with SurveyGizmo

For the latest instructions on integration with SurveyGizmo, along with detailed screenshots, go to https://www.sona-systems.com/help/surveygizmo.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with LimeSurvey

For the latest instructions on integration with LimeSurvey, along with detailed screenshots, go to https://www.sona-systems.com/help/limesurvey.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Inquisit

For the latest instructions on integration with Inquisit, along with detailed screenshots, go to https://www.sona-systems.com/help/inquisit.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Unipark

For the latest instructions on integration with Unipark, along with detailed screenshots, go to https://www.sona-systems.com/help/unipark.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with QuestionPro

For the latest instructions on integration with QuestionPro, along with detailed screenshots, go to https://www.sona-systems.com/help/questionpro.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Fluidsurveys

For the latest instructions on integration with Fluidsurveys, along with detailed screenshots, go to https://www.sona-systems.com/help/fluidsurveys.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with SurveyLab

For the latest instructions on integration with SurveyLab, along with detailed screenshots, go to http://www.sona-systems.com/help/mysurveylab.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Gorilla

For the latest instructions on integration with Gorilla surveys, along with detailed screenshots, go to http://www.sona-systems.com/help/gorillasc.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Cognition Lab

For the latest instructions on integration with Cognition Lab from Berisoft, along with detailed screenshots, go to http://www.sona-systems.com/help/cognitionlab.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with PsyToolkit

For the latest instructions on integration with Psytoolkit, along with detailed screenshots, go to https://www.psytoolkit.org/lessons/sona.html. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Resultal

For the latest instructions on integration with Resultal, along with detailed screenshots, go to https://medium.com/@resultal/how-to-use-sona-systems-with-resultal-tutorial-76434cb2f5c4. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with PsychoPy (Pavlovia)

For the latest instructions on integration with PsychoPy (hosted on Pavlovia), along with detailed screenshots, go to https://www.sona-systems.com/help/psychopy.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Labvanced

For the latest instructions on integration with Labvanced, along with detailed screenshots, go to https://www.sona-systems.com/help/labvanced.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

External Study Credit Granting with Jitsutech

For the latest instructions on integration with Jitsutech, along with detailed screenshots, go to https://www.sona-systems.com/help/jitsutech.aspx. The product may change more often than we update our documentation, so the help page will contain the very latest information.

Client-Side Completion URL Responses

For help with testing, listed below are the possible messages that the participant will see when they are redirected to the Client-Side Completion URL. It is important to note that if the system has a language enabled other than English, then the message will be displayed in the participant's preferred language, instead of English (unless their language preference is English).

Status Message	Explanation
Web study credit successfully granted.	The credit was granted successfully.
No credit given because you are not a participant, and therefore cannot sign-up for this study.	A non-participant account (e.g., the researcher) accessed the URL, but the URL was accessed correctly. Usually this happens when a non-participant clicks on the Sample Link with Embedded ID Code link from the study.
	This message will occur when testing the credit granting setup. This signifies that everything is set up correctly.
Invalid experiment_id or credit_token.	The experiment_id or credit_token in the completion URL was invalid. As this does not change for each participant, this is most likely to occur if the completion URL was somehow incomplete or truncated.
Invalid survey_code.	The survey_code was not specified at all, or was blank. This may indicate the external study is not properly placing the survey_code in the completion URL.

Invalid survey_code. ## [some number]	The survey_code was provided, but is not valid for this study.
You have already received credit for this study. / You have already participated in this study.	The participant has already participated in this study and received credit/been marked as participated.
You are not eligible to participate in this study.	The participant has already signed up for this study, but has been marked as a no-show, and has no other signups for this study, which are in Awaiting Action state.
Web study credit grant error. ## [some number]	Some other generic error. Please contact Technical Support for more information.

Server-Side Completion URL Responses

For help in testing, listed below are the possible messages that the system will give if the Server-Side Completion URL is loaded. For consistency, this feature is documented using the same format as the general documentation for the API interface. See Automating Tasks – API for information about how to locate the API documentation.

Input Parameters

Below are the following input parameters for use with the WebstudyCredit API function. These are included automatically when the system generates the Server-Side Completion URL. Note the parameters must be specified as part of the URL (an HTTP GET) and not via an HTTP POST request.

Parameter	Description / Possible Values
experiment_id	The Experiment ID of the study.
credit_token	The credit token used to identify/reference the study.
survey_code	The code that identifies the participant from the external web study.

Error Codes

Below are the possible error messages encountered and their respective descriptions. If the request was successful, there will not be an Error object returned, only a Result object. See Sample Output for an example.

Error Type	Error Code	Description
Authentication failed	0	unspecified error
Invalid experiment_id	-1	An invalid experiment_id value has been
		entered

Invalid credit_token	-2	An invalid credit_token value has been entered
Participant already granted credit	-3	The participant has already been granted credit
Participant already marked participated	-4	The participant has already participated
Participant not eligible (no-show)	-5	The participant is not eligible for credit
Invalid survey_code	-6	An invalid survey_code value has been entered
Not a participant	-7	A non-participant user (typically the researcher) tried to get credit, but they are ineligible.

Sample Input

 $https://yourschool.sonasystems.com/services/SonaAPI.svc/WebstudyCredit?experiment_id=123\&credit_token=9185d436e5f94b1581b0918162e8\&survey_code=XXXX$

Sample Output

The output is in XML format. Below is an example of a successful request. Most of the Result object will contain null or empty values, as it is part of an object used for other API calls. There are two options to check that the credit grant was successful:

- 1. The Result object exists
- 2. The Result object exists and the credit_status field has a value of G

If there was an error, then the Errors object will contain data instead of being null.

```
<WebstudyCreditResponse>
       <WebstudyCreditResult>
              <a:Errors i:nil="true"/>
              <a:Result>
                      <a:anon_id_code i:nil="true"/>
                      <a:credit_status>G</a:credit_status>
                      <a:email i:nil="true"/>
                      <a:first_name i:nil="true"/>
                      <a:last name i:nil="true"/>
                      <a:phone i:nil="true"/>
                      <a:signup id>123</a:signup id>
                      <a:student_id_num i:nil="true"/>
                      <a:survey_code>XXXX</a:survey_code>
                      <a:user_id i:nil="true"/>
              </a:Result>
       </WebstudyCreditResult>
</WebstudyCreditResponse>
```

Security Considerations

There is one potential risk with using the Client-Side Completion URL. Because the URL is typically accessed directly by the participant (their browser is redirected to it), they also have access to view the parameters in the URL. The completion URL contains a key specific to your study, as well as an ID (the survey code number) to indicate which participant should be granted credit.

The risk is that a participant could use this URL and start trying other ID (survey code numbers) to grant other participants credit. In order for this scheme to work, *all* of the following must be true:

- They must be able to guess an ID number used by another participant. The ID numbers are not necessarily sequential.
- The other participant must be signed up for this study.
- The other participant must not already have received credit for this study (i.e. they are in Awaiting Action state).

It's fairly unlikely that all three situations will occur, and it's a lot of work for a participant to guess all possible ID numbers, although this can be automated. If this is of concern the best option is to use the Server-Side Completion URL, since that is a communication from server to server. Thus participants will not see the communication. The drawback is that most commercial survey products do not support the use of the Server-Side Completion URL; so additional programming would be required.

Using the SURVEY CODE Feature

Note: If you are only interested in external study credit granting, then this section may not be applicable. This section describes how to use the survey code feature to link a sign-up in the system to data collected in the external study. However, it also describes the foundation for how the survey code feature works, which is useful in better understanding the external study credit grant feature.

For web-based studies administered outside the system, there is a special feature available for advanced users to track sign-ups in their web-based study. All while still preserving confidentiality. This feature applies only to web-based studies administered outside the system.

Before going further, it is important to note that this is an advanced feature and may require some programming skills. Sona Systems is unable to provide technical support for any programming questions.

The way this feature works is that if the text <code>%SURVEY_CODE%</code> is placed anywhere within the Study URL field, the system will automatically replace this text with a unique number for the participant. This unique number will be displayed next to their sign-up within the system, making it easier to match sign-ups by this number. The number can be anywhere from 4-7 characters in length, and will not contain numbers leading with zeroes (1234 is possible, but 01234 is not).

The external study will then need to be set up to process this code and log it appropriately. Sona Systems cannot provide detailed technical support on how to program an external study, as that code is external to our software.

Here is an example of how this works. Let's say the study URL is:

http://www.myschool.edu/mysurvey.html

If the Study URL is entered in the system as:

http://www.myschool.edu/mysurvey.html?id=%SURVEY CODE%

Then when a participant clicks on that URL, the system will replace <code>%SURVEY_CODE%</code> with a unique numeric value to identify the participant. For example, the URL may be changed to:

http://www.myschool.edu/mysurvey.html?id=30039

If that is the case, on the page in the system listing sign-ups for this study (i.e., in the timeslot), the code 30039 will appear next to that participant's sign-up.

If this code is parsed and handled by the external study, the researcher can easily link up the sign-ups in the system with which they have collected data from within their external study, so they know who to give credit to. It is important to note that the crediting still will not occur automatically. The purpose of this feature is to provide a way to identify participants without compromising privacy, as the system can then be configured to not display names next to sign-ups.

If a participant is not viewing the URL (for example, the researcher is viewing the URL), this special survey code text will simply be removed. It is important to note that this special text must be in all capital letters, and surrounded by percent signs. You may confirm it was entered correctly because a sample URL will be displayed when you go to view (not edit) the study, below the normal study website link.

If you provide a SurveyMonkey, Qualtrics, Inquisit or other URL from any other product supported in the Study URL field, then the system will provide guidance (after saving your changes) about how to use the survey code feature.

Online Survey Studies

Introduction

This system includes a rather extensive online survey feature (if enabled on your system). It allows you to set up an online survey as a study within the system, so participants who sign up for the study will be immediately asked to complete the survey. Upon 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 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 survey. The system will prevent participants from completing the survey more than once, removing the risk of duplicate entries for participants.

In compliance with research ethics guidelines, the participant is given the opportunity to withdraw from the survey at any time. See Participant Withdrawal from a Survey for more information.

There is space to provide closing text for the survey, which is displayed to participants after they successfully complete the survey. This means after they have saved all their responses and cannot go back and edit. This is an ideal place to include any relevant debriefing information.

The online survey feature is 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 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. 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. We recommend limiting surveys to fewer than 300 questions total, 15 sections total, and 15 questions per section. This is to reduce participant fatigue and to ensure proper system performance. Participant fatigue can be an issue, as they must complete the entire survey all at once. In addition, you should make participants aware that their session may time out because of inactivity. Usually, this means they will be logged out after 15 minutes of inactivity. Inactivity would happen if they load up a section of questions but do not complete and save their responses for that section within that period of time. It is a good idea to structure sections accordingly, especially if a section contains lengthy text or complex questions. The system will warn participants a few minutes prior to this inactivity logout, and provide them with the opportunity to extend their session.

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 compute 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 computing 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 cannot be resized in terms of dimensions. It can only be resized in length. Participants may enter up to 255 characters in their response.

Sections can be displayed in any order, whether that is specified, random or combination of both. Each section may contain introductory text introducing the section. 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 be displayed in a random order, or in the order you specify. 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 note that while the survey feature is quite extensive, there are some things it does not support. It cannot do question timing, 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. For example, asking a question like "Do you smoke cigarettes?" and then presenting a different set of questions based on their response. The reason that advanced features like this are not currently supported is that our software is primarily a participant 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 participant pool component), which contain more advanced features. These products can easily be linked from the Sona Systems product by setting up your study as an online study conducted outside the system.

Creating or Modifying a Survey

To create a survey, first create an online internal survey study. After you create it, you will see the option Update Online Survey when you view the study information. You may not create multi-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 additional 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. It is presumed 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:

Field	Description
Introductory Text	Optional, up to 10,000 characters in length. Provide a set of text that will be displayed when a participant starts the survey. You may include HTML in this area, but please be sure you know what you are doing. If you would like to add a carriage-return (paragraph break), simply type in "" (without the quotes). When you first create the online survey, the system may automatically insert some basic default text in

	this area. 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.
Closing Text	Optional, up to 7,000 characters in length. 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. You may include HTML in this area, but please be sure you know what you are doing. If you would like to add a carriage-return (paragraph break), simply type in "" (without the quotes).
	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.
Display sections in random order?	You may specify a specific ordering for all sections or have the system randomize the order for all sections. You may also 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 order sections were displayed for each participant.
Mobile Devices Allowed?	If set to Yes, the participants accessing the system using the mobile version (app) on a mobile device like a smartphone or tablet will be allowed to participate.
	If the survey makes use of images or question and choice layout is important, it may be better to set this to No as the layout may be rendered differently on devices. Especially on devices like smartphones with small screen sizes.

		For technical reasons, there is no easy way to preview how questions will look on a mobile device except to login as a test participant using an actual mobile device.	
Participant response review,	/change	If set to Yes, then participants may review and change responses just before they complete the online survey. They are given this opportunity after they complete the last section of the survey, before any closing text is shown. At this point, they can see all their responses and go back to any section to change them. 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. Meaning that allowing participants to change their responses may affect the integrity of data collection.	
modify this to suit your needs.			
The closing text is also optional. If provided, it is displayed afte Introductory Text (optional)	This study consists of an online survey, which you may now participate in. You will receive credit immediately upon completion of the survey. The survey consists of a number of multiple-choice and/or free-answer questions, and may be divided into a number of sections. You must complete all sections in one sitting, as you are not allowed to resume at another time from where you left off. While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses.		
Closing Text (optional)			

Figure 10 - Survey General Information

Section List

Display sections in random order?

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

No (section order will be specified)

O Some sections in random order, some in specified order

There is an option on the Section List to preview how the Introductory Text and Closing Text will be displayed to participants.

also 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 displayed in a specified order. For the sections you would like displayed in random order, leave the Section Order item blank. When you specify a section order, use each number once. 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. You may also 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. 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 are able to preview the survey, as participants will see it.

copy from an existing section. You may change the ordering of the sections by changing the number next to each section. Use each number only once, and enter only whole (e.g. 1,2,3) numbers in the field.
Add a New Section
You may change the ordering of the sections by changing the number next to each section. Use each number only once, and enter only whole (e.g. 1,2,3) numbers in the field.
It is recommended that the survey contain no more than 300 questions total, to ensure compatibility with all web browsers, as well as ensure smooth performance. The (SEC###) listed next to each section refers to the unique internal system identifier for the section, which can be matched up to the Section ID field when downloading the question key. This identifier is not displayed to participants.
You may preview introductory text or preview closing text for this survey. If you are finished working with this survey, please go to the final review to finalize the survey and any changes you made to it.
Preview Introductory Text
Section List
Section Order
Section 1
1
Section 1 Settings: No sum or average score (across all questions in section) is computed. (SEC65)
Intro. Text: Listed below are questions for this section of the survey. Please provide a response for every question. If you are given the option to decline to answer a question, then declining to answer is considered a response.
What is your gender? (What is your ge)
☑ Edit Question ② Copy Question ② Delete Question
What languages do you speak? (What languages)
☑ Edit Question ☑ Copy Question ☑ Delete Question
3. In which state were you born? (In which state)
☑ Edit Question
3 question(s) in this section.
Add Question

Figure 11 - Survey Section List

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 with 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 in this area, but please be sure you know what you are doing. If you would like to add a carriage-return (paragraph break), simply type in "" (without the quotes). The introductory text is up to 15,000 characters in length.

You may choose if the questions for that section are displayed in random order or in the order you specify.

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, where only one choice may be chosen. 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.

Add New Section		
If you would like to add a new section, choose the type of section below to add, and also choose if questions in the section should be displayed in random order. Additionally, if you choose to have a sum or average score computed for the section, for each participant, then every question that is to be part of the score for that section may only have numeric responses. Note that once any participant has started the survey, you cannot change the score computation type (between average and sum, or from none to average or sum), nor can you add new questions to the sections that allow numeric responses. You may only turn off the computed score entirely. Plan your survey wisely before making it available to participants.		
You may also provide introd at the top, if provided.	ductory text for the section. Participants taking the survey will see all questions for one section on the same page, and the introductory text will be displayed	
In some cases, it may be ea	asier to copy From an existing section and then modify the questions in that section as appropriate.	
② Copy From an Existing Sec	ction	
Display Questions in Random Order?	○ Yes ● No	
Computed Section Type	 No sum or average score (across all questions in section) is computed. Average (mean) score for each participant is computed. Sum score for each participant is computed. 	
Introductory Section Text (optional)	Listed below are questions for this section of the survey. Please provide a response for every question. If you are given the option to decline to answer a question, then declining to answer is considered a response.	
	Add Section	

Figure 12 - Add New Section

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, and you may reorder the questions later. 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.

Field	Description
Question Text	The text for the question. This will be displayed above each question's choices. Up to 15,000 characters maximum.
Abbreviated Question Name	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.

Question Type Display length of Free-Entry field	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. 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 in length. The height of the field cannot be adjusted. This setting only applies to
Display choices in random order?	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.
How should the choices be displayed?	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.
Can participants decline to provide an answer for this question?	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. The default when adding a new question (not copying an existing question or section) is set to Yes for ethical compliance.
Are all choices numeric?	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.
Display numeric value?	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.
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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 one choice must be provided for the question. Each choice may be up to 255 characters in length. When adding a question, there is space to add up to 10 choices. If you need to add more choices than this, simply add the question and go back to update it, and there will be an option to add more choices.

If the question is specified as numeric, you must provide a numeric choice. 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 type 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.

When adding a question, if the choices you specify do not conform to the configuration of the question (e.g. specifying a non-numeric choice for a numeric question), the system may change the question configuration to ensure that the choices are then valid.

Question Information		
Question Text (Up to 15,000 characters)	What languages do you speak?	
Abbreviated Question Name	What languages (not displayed to participants)	
Question Type	Multiple-Choice (multiple choices may be selected)	
Display length of Free-Entry field (only applies to free-entry questions)	Not Applicable	
Display choices in random order? (only applies to multiple-choice questions)	○ Yes ● No	
How should the choices be displayed? (only applies to multiple-choice questions)	Vertical (down the page) Horizontal (across the page)	
Can participants decline to provide an answer for this question?	Yes	
Are all choices numeric? (only applies to multiple-choice questions)	No	
Display numeric value? (only applies to multiple-choice, numeric questions)	Yes No	

Figure 13 - Edit a Question

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. This is due to 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 in particular, 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 of any type. 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. The default is set to the section the question came from. 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. 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. Once 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. The system tracks which user last made the survey active or inactive and when they did this. This information is displayed on the setup page.



Figure 14 - Saving Survey Changes

Viewing a Survey as a Participant

If you would like to see how the survey would 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 that appear on the Section List page.

Participants will see a basic progress display on the top right corner of each page. This display lists 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. Everything 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, this way 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.

Participant Withdrawal from a Survey

At any time while participating in the survey, participants have the option to withdraw from the survey. A Withdraw button will appear at the top right corner of each page.

When a participant withdraws, they have the option to withdraw without the option to receive credit, or with the option to receive credit.

If they choose to withdraw *without* the option to receive credit, all their survey responses as well as the record of their sign-up will be deleted. Participants are told that this option should be used if they want to later participate in the survey. This scenario would likely be used when a participant starts a survey but realizes they won't have sufficient time to complete it at the moment, but would like the opportunity to participate later. Notification will not be sent to researchers in this scenario.

If they choose to withdraw with the option to receive credit, then all their survey responses will be deleted, but a record of their sign-up will be kept and be in awaiting action state. The researcher will receive an email about the withdrawal, as well as some basic information about how far along the participant was when they chose to withdraw, both in time spent and number of questions completed. This information is provided in case there is a policy of granting credit for early withdrawals based on time spent or percentage completed. Participants also have the option of including a message that will be sent to the researcher to explain their withdrawal. However, such a message is not required. The researcher should then grant credit to the participant if necessary, by going to the timeslot and finding that sign-up.

Participants are informed that if they are unsure which of the withdrawal options to choose, they should choose the withdraw option that retains their ability to receive credit.

The withdrawal option cannot be removed, as it is there to ensure compliance with research ethics guidelines.

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 precaution. This is to ensure that you have had adequate time to download the survey data before deleting it (to account for the time between downloading the data and deleting it).

If you choose to delete the survey data in this manner, the record of participant sign-ups will be retained. That way you can ensure the participant does 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 Cancellation 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. This is done 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. In this situation, a participant has started an online survey but never fully completed it or withdrew from it (they more than likely 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.

It is presumed that 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 2 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 that 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 data may be separated into parts if there is an excess of data to download. The system will adjust the size of each part based on how many questions are in the survey. A survey with a large number of questions will be broken into more parts, with fewer rows of data per part. The default option is to download the entire set of survey data, meaning all parts at once. If you receive an error when doing so, then download each part one at a time. There may be too much data in the combined download for the system to process.

You may also choose to limit the download based on date range. This is based on when the participant completed the survey. If you choose a date range, this merely filters each existing part of the

download. This means that some parts may be empty if no participants whose responses would normally be included in that part completed the survey during the specified date range.

There are three options for downloading and viewing the data (both the question key and responses):

- 1. <u>Download as CSV File</u>. This is the most popular option. It allows you to save the data on your computer and load it in your preferred data analysis tool.
- 2. View On-Screen (CSV Format). This option lets you view the data on-screen instead of downloading it. The data is still displayed in CSV format, and is a good way to view the format of the data, as well as ensure all the data you expect is there. Often with larger datasets, downloading and viewing the data with some tools like Excel may make it appear as if not all the data is there, when in reality it's a limitation of the tool and not a problem with the data download. The on-screen option is also useful if data was collected in a language that uses Unicode character sets, like Hebrew.
- 3. <u>View On-Screen (Table Format)</u>. This option provides an easy way to view the data on-screen (to visually analyze the data) but is not very useful for purposes of loading the data into an analysis tool.

The data 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 feature 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 order of columns (questions) in the data download is not necessarily the same as the order of questions in the survey. These columns are ordered based on how the data is stored internally in the system. 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 is also a column listing how many minutes it took the participant to complete the survey, rounded to the nearest minute.

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. More than 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. Your IT department can provide assistance with such tools.

If your survey has a lot of questions (and thus columns in the output file), you may have trouble loading the data with some spreadsheet programs. Those of which are not equipped to handle such large datasets. Your best option is to use a full-featured statistical analysis package, like SPSS or SAS. Those packages handle large CSV-format data imports with ease. Your IT department can help you to

select the best tools. In particular, Excel has trouble dealing with datasets with more than 250 questions (columns).

Frequently Asked Questions about Online Surveys

Is it possible to have multiple versions of an online survey? Will participants be randomly assigned to one version of the survey at the start of the survey?

The best way to do this is to create multiple online surveys and use a prescreen participation restriction that is unrelated to your research. To save time, you can easily do this by copying the entire survey using the Copy Study feature, then modifying the copy as needed. As for random assignment, if there is a prescreen question asking for the last digit of the participant's university ID number, assuming this is randomly distributed, then you can use that to easily break up the pool into random tenths by using that as a prescreen participation restriction for each version of the study.

Is there a way to post images, graphics, or videos in the online survey, so that participants can respond to questions referring to the image or video?

Yes. You will need to have the ability to post images on a webserver (most likely at your school), and know a small bit of HTML. Let's say your graphic is located at

http://www.yourschool.edu/myimage.gif

Put this in the place where you want the image to be displayed:

If you're unfamiliar with HTML, you may want to ask your IT department for assistance with this.

You can use a similar process to post videos, but you'll need to ask the person in charge of the webserver where you post the video for the best HTML method for linking to it, as there are several different methods to link to videos.

You cannot upload images or videos directly onto the Sona Systems server, but every university provides a facility to post content on webservers at the school. This method is better for participants as the data (images and videos are usually quite large) will be stored on the high-speed network within the university.

Can certain sections be presented for a specified period of time (e.g. 60 seconds)?

No, this feature is not offered. There are technical limitations and inaccuracies in how web browsers interact with web servers, as well as Internet latency factors that make this difficult to do.

Can I make an online study a multi-part study?

Yes, but only if it's an external (web) study, and not an online internal survey study.

Is there a method to upload a survey into the system (from Word, Excel, etc.)?

For online survey studies, there is no method to upload the data. There is no standard format for survey data representation, so there was no format to support for uploading.

In the online survey feature, there is the ability to copy questions and sections. This may make it easier to set up the survey if many questions have the same sets of choices, for example.

When a participant is taking an online survey study, when is their sign-up actually recorded in the system?

The system will not record completion or sign-up of an online survey study until it is actually completed, or if the participant chooses to withdraw early. Participants are shown the closing text as the last step of the online survey study, just after their responses have been saved and their sign-up is recorded.

When they start the online survey study, it is noted to participants that their responses are not fully saved until they complete the study. Only then will they be properly recorded. This is for both technical and IRB reasons.

I have created my online survey and participants cannot see it. I have ensured that all the prescreen restrictions, course restrictions, and pre-requisite/disqualifier restrictions are set correctly. Why is it not showing up?

You need to set up at least one timeslot. The standard method for an online survey is to set up only one timeslot for the survey, to specify the participation deadline. If you still have problems, contact the administrator and ask them to run Check Study Configuration on your study. That will explain why a study is or is not showing up.

My online survey had 5 spaces in a timeslot, and somehow 6 people signed up and received credit. How did this happen?

This is a rare situation that occurs, usually with online surveys that take a long time to complete on a system with a high rate of study sign-ups. What happens is that all 6 people, or at least the last 2 people, started the online survey at around the same time, before any of them could finish it. The system checks at the point of sign-up to see if there are open spaces for the online survey, but does not consider someone who has already started the online survey but not finished it, as taking up one of those places. This is done just in case that person abandoned early without properly withdrawing. In this rare situation, there is no choice but to credit all participants who successfully completed the survey. It is the only fair outcome for participants. It is important to note that this situation is quite rare. It is most likely to occur when the survey is lengthy, and there are many participants vying for a limited number of available timeslots in the system.

Working with Timeslots (Sessions)

Timeslots, also referred to as Sessions, are the available times when a participant may participate in the study. If you are setting up timeslots for a web-based study, please read the section in this documentation on Web-Based (Online) Studies for additional information. If you are setting up timeslots for a study conducted over videconference, see Videoconference Studies for more information.

Timeslots allow you to specify date, time, location, maximum number of participants, and researcher information for a session.

Timeslot Usage Restrictions

If enabled on your system, you may find that there is a limit to the amount of time available for scheduling timeslots. This usage is computed by adding up all the past timeslots where credit was granted (or participation marked in the case of paid studies) or is in awaiting action status, then adding all timeslots in the future, regardless of credit status. Depending on how your system is configured, the system may only look at all timeslots after a certain date, instead of all timeslots.

You may find that the usage goes down over time, as time progresses and timeslots that were in the future, which had no sign-ups are now in the past and no longer count towards usage (empty timeslots). The timeslot usage and limit is listed whenever you add a timeslot, if usage restrictions apply. It may also be listed when you view your profile, depending on how your system is configured.

Timeslots Linked to Specific Researchers

If your system is configured to allow multiple researchers per study, you will also have an option to link timeslots to a specific researcher. This is done primarily for organization purposes, and has no effect on who can view and modify the study, as well as any timeslots for that study.

This feature is useful when there are a number of researchers running a study, and researchers are responsible for running specific timeslots. If a timeslot has a specific researcher linked to it, then only that researcher will be listed as the point of contact when a participant receives any emails related to their participation in that timeslot. Only the researcher connected to that timeslot receives related notification emails, such as participant cancellation notifications, and reminder emails, assuming such emails are enabled.

It is also possible to have some timeslots where a specific researcher is linked to them, and others where all researchers who are assigned to the study are responsible for the timeslot. It is not possible to link more than one, but not all of the researchers for the study to a specific timeslot. The options are to either link one researcher to the timeslot, or all of them.

If a researcher were removed from a study, then any timeslots that were linked to them for that study would be changed. In this case, all researchers for the study are now responsible for those timeslots.

To use this feature, the system must be configured to allow multiple researchers per study. Then the study itself must be configured to allow researchers to be linked to specific timeslots. The study must have more than one researcher connected to it.

Creating Timeslots

To add a timeslot for a study, you must first choose the study that you would like to add a timeslot for. To view your studies, choose the My Studies option on the top toolbar. Click on the desired study and choose the Timeslots choice.

You will see a list of any existing timeslots, and the Add a Timeslot option on the top of the page. Click on Add A Timeslot.

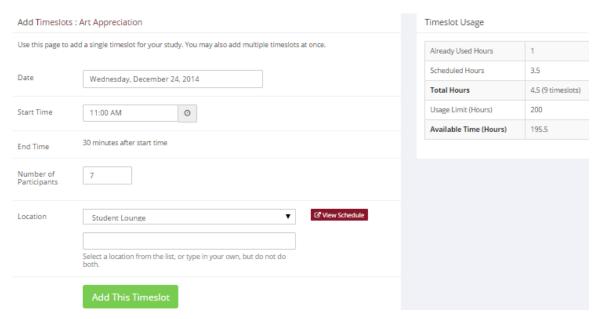


Figure 15 - Adding a Timeslot

The following table lists the information you may enter about a timeslot, along with an explanation. All fields are required.

Field	Explanation
Date	The date for the timeslot.
Start Time	The time when the timeslot will start. A sample time will be provided. If you want to change the time, please use the same format as the time you see presented. Note in particular how "a.m." and "p.m." are handled (if such a format is enabled on your system).

End Time	The time when the timeslot will end. This is computed automatically based on the duration you entered when you set up the study.	
Number of Participants	The number of participants for this timeslot. This number is <i>not</i> visible to participants. They will only see whether the timeslot is full or not. The maximum number is 999.	
Location	The physical location where the study will take place for this timeslot, or the videoconference URL if the timeslot will be conducted over videoconference. It will be automatically filled with the location of the previous timeslot, when available, to assist in data entry.	
	Depending on how your system is configured, you may see a list of pre-configured locations. You may choose any of those locations and click on View Schedule to see the schedule for a location. The system will automatically prevent you from adding a timeslot using a location that is already in use at the time you try to schedule the timeslot. If you do not see the location in the list that you plan to use, simply type in the location in the text field below it.	
	You may enter a videoconference URL or a physical location, but not both.	
	The location field (including videoconference URL) does not apply for web-based studies.	
Researcher	The researcher assigned to this specific timeslot. The list will contain a list of all researchers for the study. Choose ALL if all researchers for the study should be assigned to this timeslot. See Timeslots Linked to Specific Researchers for more information.	

To assist in data entry, the system will automatically fill in the date, time, and location based on the ending time of the last timeslot for this study. If applicable, your current timeslot usage will be listed, and you will be prevented from adding a timeslot that would exceed your timeslot usage time limit. A convenient calendar is provided next to the form, and you can click on any date and that date will be transferred to the form.

If you add a timeslot and there is another timeslot, for any study, which occurs at the same time and location, you will receive a warning. The addition will be allowed, unless the location was chosen from the pulldown list of locations, in which case the addition will be blocked. If you add a timeslot that will take place outside of normal hours (for example, at 1:00 am), the system will provide a warning but will allow it to be scheduled. You may not schedule a timeslot to occur after the IRB expiration date for your study, if Strict IRB mode is enabled by the administrator. The system allows adding timeslots to a study that is not available to participants, meaning not active or not approved. However, it will give a warning because participants are not able to sign up for the timeslot.

If you are running a web-based (online study), you should create a single timeslot with the participation deadline equal to the last day you would like to run the study. For number of participants, specify the maximum number of participants who may participate. If you are running a web-based study and you plan to collect data from more than 999 participants (999 is the maximum allowed in one timeslot), then once that timeslot is close to filling up, create a second timeslot at a slightly different time and/or date as the first timeslot.

Creating Multiple Timeslots

If you would like to add multiple timeslots at once, choose the Add Multiple Timeslots link. You may choose to add a specified number of timeslots, or copy the timeslots from another week to a specified week. If you choose to copy timeslots, the system will copy the time, location, and number of participants for the specified week to the desired week, for each day of that week (starting with Monday).

If you choose to create a specified number of timeslots, you can choose the number of timeslots you would like to add, the start time and date, and the amount of time between each timeslot (to allow for breaks). You also may specify timeslots that would occur outside normal business hours be shifted to the next business day, and specify when business hours occur. The system considers Monday-Friday to be business days.

On the subsequent page, you may change any of this information to deal with special cases. Timeslots that you attempt to add that either have errors, or would result in exceeding the timeslot time usage limit will not be added. This feature is not available for web-based (online) studies, as web-based studies rarely have more than one timeslot.

If you do not want to add a specific timeslot that is listed, choose No in the Add This Timeslot? column.

Timeslots

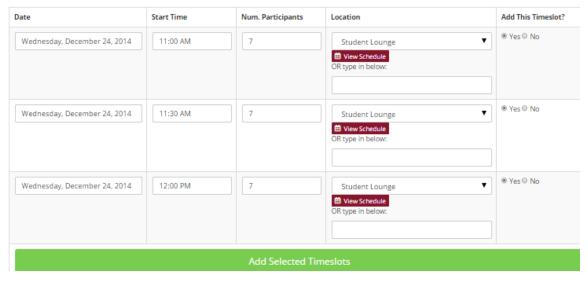


Figure 16 - Creating Multiple Timeslots

Modifying and Deleting Timeslots

To modify or delete a timeslot for a study, you must first choose the study that you would like to deal with. To view your studies, choose the My Studies link from the top toolbar. Choose the Timeslots option in the View column for the desired study. You will see a list of all recent timeslots. Timeslots that are in the past with no participants signed up will not be displayed. To work with timeslots more than a few days old and to see all timeslots, you will see a link to view all timeslots for the study. Select the timeslot you would like to deal with, and click the Modify button.

If the timeslot has no participants signed up for it, you will see a Delete button. You may not delete a timeslot that has participants signed up for it. You would need to first cancel all existing signups for the timeslot. If you would like to delete the timeslot, click the Delete button, and you will see a confirmation page. Choose Delete again to delete the timeslot.

If you would like to modify the timeslot, modify the desired information and click the Update button just below the timeslot information. Depending on your system configuration (Timeslot Change Limit setting), you may be restricted from changing key information about the timeslot (date, time, location, and number of participants) if it's only a few hours before the timeslot will take place.

It is important to note that participants will *not* be notified of any changes you make to the timeslot. You should contact them via email, if information needs to be passed onto them. A link is provided on the same page to do so. If you change the date or time of the timeslot, you will be warned that this was changed, in the event the change was unintended. You may not update the size of the timeslot, meaning the number of participants, to a value lower than the current number of participants signed up for the timeslot. Generally, researchers only update timeslots with sign-ups to update the location if it was not available when the timeslot was originally created.

If the study or researcher is subject to timeslot time usage restrictions, the system will enforce them. This prevents you from making changes that would result in exceeding the timeslot usage limit, for example by increasing the number of participants.

Timeslot Change Tracking

The system automatically tracks certain changes that occur with a timeslot. This includes information about any time the timeslot's key information (date, time, etc.) is changed, as well as any time a manual sign-up or cancellation is performed, but not a sign-up or cancellation done by the participant. This information is tracked for the last 3 months of changes for each timeslot.

To view this information, choose the Timeslot Modification Log when viewing a timeslot, and you will see this information.

Deleting Multiple Timeslots

If you would like to delete multiple timeslots at once, select the desired study and choose Timeslots. At the top of the Timeslots page, you will see a Delete Multiple Timeslots option. The option may not appear in certain cases where such an option is not available due to a lack of available timeslots to delete.

After going to that page, you will see a list of timeslots eligible for deletion. You can choose to view only empty timeslots (timeslots with no sign-ups), or all timeslots including those with sign-ups. If a timeslot has sign-ups, it will only be listed if there are no pending (Awaiting Action) sign-ups, no (non-zero) credit grants, and no unexcused no-shows.

Choose the timeslots you would like to delete, and choose Delete Selected Timeslots to continue. If you would like to delete all empty timeslots, there is a Check All option at the bottom of this page that will automatically select all timeslots listed on the page for deletion. Click the Uncheck All button to revert the effect of choosing the Check All option.

The system routinely deletes all empty timeslots more than 3 months old to preserve database space.



Figure 17 - Delete Multiple Timeslots

Manual Sign-Up

If enabled on your system, you may manually sign up participants for your study on their behalf. There are a number of situations where this is desirable. If the participant shows up for a timeslot they were

not signed up for, and you elect to let them participate, you can sign them up on the spot for the timeslot. In this situation, participants may not be able to sign-up on their own, because the sign-up deadline has passed. You may also sign up a participant for a study that has already occurred, if necessary.

It is important to note that a manual sign-up overrides any restrictions you have placed on the study (e.g. pre-requisites, prescreen restrictions, course restrictions, age restrictions). However, you will be warned if you are overriding any restrictions. You may not sign up a participant for the same timeslot that they are already signed up for. You are allowed to sign them up for a study, even if they are already signed up for a different timeslot for that same study. You will receive a warning when doing this. You may not sign up a participant for a study if it causes them to exceed their maximum credit or study limit. If it is necessary to do so, please ask the administrator to do this. They are allowed to do a manual sign-up even when it will exceed maximum credit or study limits.

You may not sign up a participant whose account is Limited, if your study is not a research alternative study. Those participants whose account is Limited are ineligible for your study. However, the administrator can still do this.

If participants must acknowledge the system's human subjects/privacy policy before logging in, and they have not done so, the system will show a warning about this but will otherwise allow the sign-up to proceed.

If the system is configured as such, the participant will receive a confirmation email when you sign them up for a study. In that case, you also have the option to enter comments to be included in this email that may better explain to the participant why they were signed up. If you are signing up a participant for a timeslot more than one year old, a confirmation will *not* be sent despite the system configuration. This is to make it easier when transitioning from an existing system, as you may sign up old participants for the purposes of preventing them from signing up for the same study again in Sona. You may only sign up participants for your own study.

To sign up a participant for a timeslot, you must first find the desired study and timeslot. To view your studies, choose the My Studies option from the top toolbar. Click on Timeslots for the desired study. Then, select the timeslot you would like to deal with, and click the Modify button.

If it is enabled, at the bottom of the page you will see a Manual Sign-Up option. Type in the participant's User ID or SSO ID (you may have to ask them for this) and click Sign Up. If enabled, you may also choose to sign up a participant using their unique ID code. You may have the choice to enter their name and choose from a list of participants. In all cases, after proceeding, you will see a confirmation page that also lists any restrictions on the study. Choose Sign Up to complete the sign-up.

Signup Confirmation		
Sign-Up Restrictions:		
Participant must have completed ALL of these s • Climate effects on happiness False	studies:	
WARNING: This study has restrictions based or		s participant does not meet those restrictions.
Are you SURE you want to sign up Frank Bass f	or the study "Art Appreciation" on Decemb	per 24, 2014 10:30 AM - 11:00 AM?
Comments		
(Optional. Any comments will be included in the up.)	e email notifying participant of the sign-	
Sign Up	Cancel	

Figure 18 - Manual Sign-Up Confirmation

If you are subject to timeslot time usage restrictions, the system will enforce them and prevent you from signing up a participant in the timeslot if that results in exceeding your timeslot usage limit. If you are doing a manual sign-up for a multi-part study, you must do a manual sign-up for each part separately. The system will overlook the scheduling range restrictions as well.

You cannot use the manual sign-up feature for online survey studies because the sign-up for the study is integrated with the administration of the survey.

The manual sign-up feature will not appear for a researcher if the study requires approval by the administrator, and it has not yet been approved. This is to ensure that sign-ups don't occur for a study that has not yet been approved, as research should not take place prior to approval.

Manual Cancellation

If enabled on your system, you may have the opportunity to cancel a participant's sign-up. You may only cancel sign-ups that are in a No Action Taken state. To cancel a sign-up, find the desired timeslot and participant. Click Cancel next to their name. The participant will be sent an email about the cancellation, and who performed it, along with a confirmation code. Their sign-up will be immediately cancelled. The administrator may also receive a copy of this cancellation email, depending on how the system is configured.

You may cancel all participants for the same timeslot at one time, when applicable. The option will appear below the list of sign-ups. This is done in cases where there are two or more participants signed up for the timeslot who are eligible for cancellation (No Action Taken state).

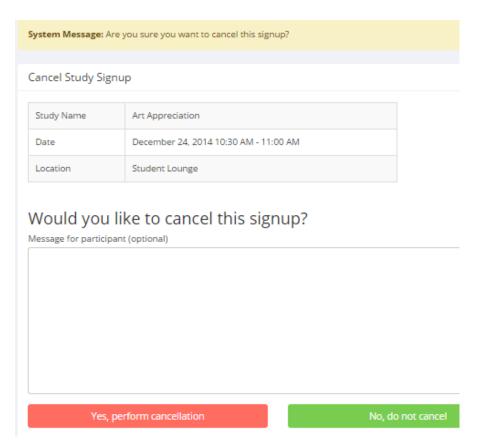


Figure 19 - Manual Cancellation

Viewing the Participant List

To view the list of participants who have signed up for your study, you must first select the study and timeslot you wish to see. To view your studies, choose the My Studies option from the top toolbar. Click on the timeslots link in the View column for the desired study. Then, select the timeslot you would like to see, and click the Modify button.

The list of participants, along with their email addresses will be listed. If ID codes are enabled, you will only see an ID code and no name or email address for each participant. In this case the list will be sorted by ID code.

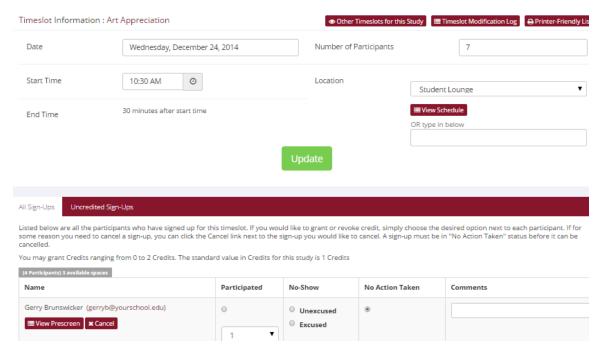


Figure 20 - Modifying a Timeslot / Participant List

Viewing Prescreen Responses

If online prescreening is enabled on your system and you are also allowed to view an individual participant's prescreen responses, then you will see a Prescreen link next to each participant's name (or ID code) when viewing information for a timeslot. Click on that link to view the participant's prescreen responses.

If you would like to download the prescreen data for all participants in your study, choose the Download Prescreen Responses option after clicking on your study in the Study Menu. That will allow you to download all the data at once, in CSV (comma-separated) format, for further analysis. The download will not contain data for participants marked as a no-show.

If age appears in the prescreen data (not as a response to a prescreen question but as part of the participant's profile), then it is computed based on the participant's age at the time of the timeslot for lab studies. For web studies, it's based on their age at the time you download the data.

If you would like to analyze responses in aggregate, meaning across all participants in the system, see Analyzing Prescreen Responses in this documentation.

Prescreen Responses: Martha Lee Hunt · Sections were displayed in the same order as below Prescreen is currently available for participants to participate in Participation in the prescreen is optional
 Prescreen was started at September 16, 2014 7:58 PM Prescreen was finished at September 16, 2014 7:59 PM Response Summary Listed below are questions for this section of the prescreen. Please provide a response for every question. If you are given the option to decline to Section 1 answer a question, then declining to answer is considered a response 1. Do you wear glasses? Multiple-choice question. Participants may decline to answer this question. 2. When writing, which hand do you prefer to use? Multiple-choice question. Participants may decline to answer this question. Response: Left hand 3. Please rate how you feel about the following statement: I have a better time in social settings if I drink alcohol. Multiple-choice question. The numeric values for choices were not displayed -- only the associated text. Participants may decline to answer this Response: 1 Strongly Disagree

Figure 21 - Viewing Participant Prescreen Responses

Granting or Revoking Credit

At the completion of a session, you should promptly mark the attendance status of participants in the system to ensure proper credit grants. The reason for the prompt handling of this situation is in the event your study is a pre-requisite for another study, as well as for good record-keeping. You do not want to hold up other studies that are waiting on your response to the study you just ran.

To grant or revoke credit for a timeslot, you must first find the desired study and timeslot. To view your studies, choose the My Studies option from the top toolbar. Click on the Timeslots link in the View column for the desired study. Then, select the timeslot you would like to see, and click the Modify button.

You will see a list of participants, identified either by name or ID code. If the participant properly participated in the study, click the radio button next to their name in the Participated column.

If the participant did not appear for the timeslot, you may choose to mark their no-show as excused or unexcused. Depending on how your system is configured, an unexcused no-show may result in a penalty being assessed for the participant (the system will compute this automatically), or their privileges to use the system may be restricted. You should ask your administrator for guidelines about when to grant an excused no-show or an unexcused no-show. Generally, excused no-shows are granted for extenuating circumstances, like if the participant was involved in a car accident on their way to the appointment. An unexcused no-show is generally used when the participant did not show up and had no reasonable excuse. For most schools, many of the no-shows are unexcused and are due to carelessness on the part of participants. A no-show generally does *not* prevent the participant from signing up for the same study again, unless they a general account limitation occurred as part of earning the no-show.

Depending on how your system is configured, you may see an option to grant a credit value that is different from the standard credit grant. This is useful when you want to grant a participant a lower credit value because they left the study early, or a higher credit value if the study ran longer than expected. The default value that is selected is the study's standard credit value. If this is enabled, then you may also grant 0 credits. This is useful if you do not want to grant credits to the participant, but also want to prevent them from participating in the study again. If a participant is granted 0 credits, and the study is set to prevent duplicate sign-ups, then the participant will not be able to sign up for that study again.

If desired, enter any comments about the session in the Comments section. Generally, this is used to indicate the reason for denying credit. Participants will see anything you enter in the Comments section for their sign-up, and these comments will be included in the email sent to participants when a credit grant/revocation occurs, if notification emails are enabled on your system.

Click on the Update Sign-Ups button at the bottom of the list of sign-ups to save your changes. Credit will be granted or a penalty assessed, as necessary. The participant(s) will be emailed about this, depending on how your system is configured.

It is not recommended to leave any sign-up for a timeslot that has occurred in the "No Action Taken" stage. This is a credit "limbo" and the system will warn you upon your next login that the timeslot has not been dealt with properly. Note that if Manual Cancellation is enabled and you would like to cancel a participant's sign-up, the sign-up must be in No Action Taken state.

Depending on how your system is configured, the system may automatically grant credit to participants for timeslots that are more than an administrator-specified number of hours old, and where the researcher has taken no action. You can always change the automatic credit grant later if it was in error. The automatic credit grant takes place once a day, usually overnight. Your administrator can let you know if such a feature is enabled on your system.

If you need to do a simple credit grant or no-show across many timeslots, see the Uncredited Timeslots section, which offers such a feature.

Granting Credit using QR Codes

For lab studies, another option to grant credit is by using QR codes. If enabled in the system, the reminder email sent to participants the day before their appointment will contain a QR code. Participants can show you this code from the email, and you can scan it to grant credit.

To scan a QR code, you can use the built-in camera feature on your smartphone. Most phones will recognize the QR code as you go to take a photo of it, and will offer to open the URL. There are also many free QR scanning apps available. After scanning the QR code, you will need to log in to the system if you are not already logged in, as a security measure to ensure the person scanning the QR code has privileges to grant credit.

This feature also works for studies conducted over videoconference – ask the participant to hold the QR code up to their camera and scan it that way.

Batch Credit Granting

In some cases, you may wish to automatically sign up and immediately credit a group of participants. This is useful if you administer a study on an ad-hoc basis, and want to credit participants after the fact.

To do so, go to the appropriate timeslot. You may want to create a timeslot specifically for this purpose, and click on Modify Timeslot. In the Manual Sign-Up section, if enabled, you will see a Batch Credit Grant link. Click that link and you can provide the list of User IDs of users you would like to sign up and credit. Users will be signed up and credited immediately. This feature overrides any sign-up restrictions on the study, just as a manual sign-up does.

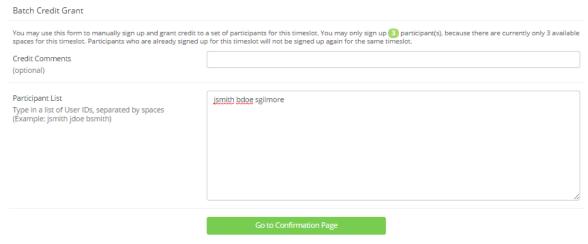


Figure 22 - Batch Credit Grant

The batch credit grant feature will not appear for a researcher if the study requires approval by the administrator and it has not yet been approved. This is to ensure that sign-ups don't occur for a study that has not yet been approved. You may provide a list of up to 50 participants or as many participants as there are available spaces for the timeslot, whichever is less. Any participants listed past that limit will be ignored, but you are able to run the batch credit again with additional participants.

If you are signing up a participant for a timeslot more than one year old, a sign-up confirmation will *not* be sent despite the system configuration. This is to make it easier when transitioning from an existing system, as you may sign up past participants for the purposes of preventing them from signing up for the same study again in the system.

Emailing Participants

If you wish to contact participants in a particular timeslot for any reason, you may click on the Contact link that will appear next to each participant's name or ID code, to contact an individual participant. To email the group of participants for a particular timeslot, click the Contact All Participants choice at the bottom of the Modify Timeslot page for that timeslot.

You will be taken to a page where you can fill out a message that the system will send to the selected participants. The message is auto-filled with some basic information about the study, so participants are aware of which study you are referring to. You may remove this information if desired. If you include the text %FIRST_NAME%, %LAST_NAME%, or %USERNAME% in the email text, the system will substitute it with the recipient's first name, last name, or username. Note this text must be in upper case and surrounded by % symbols.

You may choose to receive a copy of the email that you send.

Depending on how your system is configured, participants may already be receiving a reminder about upcoming studies the day before they are scheduled to participate. Ask your administrator for more information.

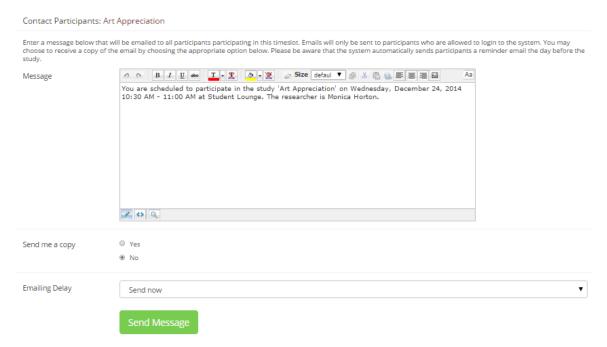


Figure 23 - Contacting Participants

In some cases, you may find it useful to contact all participants for the study, across all timeslots. This feature may be particularly useful if you are sending debriefing information when a study has concluded. To do so, go to My Studies, click Study Info next to the desired study, and choose the Contact Participants option (in the Study Menu). You will then be able to select which group of participants to send to, and a message to send. Messages will be sent in batches of 3,000 at a time, to avoid overloading email servers. You cannot include attachments in the email, so if you have a document you would like to include, you should post it on another website and provide a link to the document in the email you send.

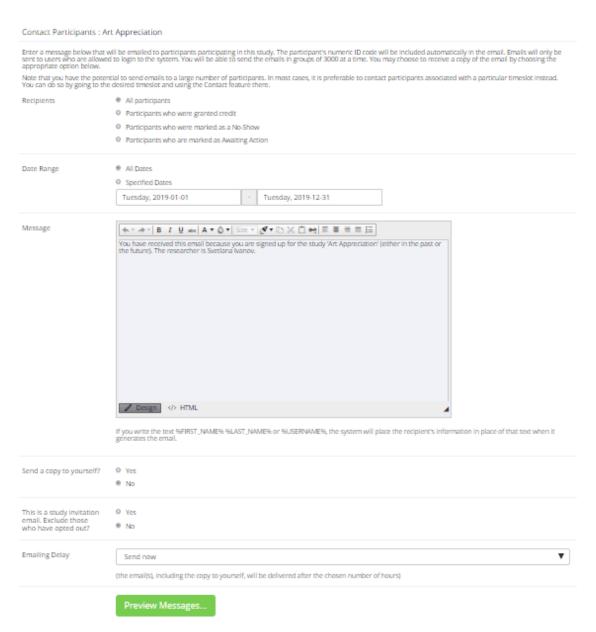


Figure 24 - Contact Participants

The Sender address on the email will be the administrator email address, which is done to prevent the email from being blocked by junk email filters. The "Reply To" address of the email will be that of the user who is actually sending the email. When a user chooses to reply to the email, the reply will be sent to that "Reply To" address.

There is also the option to restrict the emails so that they only go to participants who signed up for timeslots in a specified date range. The date range is based on the date of the timeslot, not when the participant signed up for, completed, or received credit for the study.

You may see an option to indicate that the email you are sending is a study invitation email. If the email is inviting participants to another study and you indicate it is a study invitation email, then the

email will not be sent to participants who have specifically opted out of receiving study invitation emails.

Finally, there is an option to specify a delay in sending the email, based on the number of hours from when the emailing option is used. This is useful if you want to target a certain time of day (e.g., during the evenings) when the email will be sent. The emails are generated at the time you use the emailing feature, but are stored on the email server queue until the specified sending time. These emails cannot be revoked once this emailing feature is used.

In most cases, summary information about the email you sent, in particular, to how many recipients it was sent to, will be logged and made available to the administrator. This is done to ensure that there is no abuse of the email feature in the system, and to ensure compliance with generally accepted Internet practices for sending emails.

Viewing Uncredited Timeslots

When you log in to the system, you will receive a warning if you have any timeslots that are more than two days old that have not been dealt with. You may view a list of all timeslots that have not been dealt with by choosing the View Uncredited Timeslots option from the My Studies page. The default view will show in-person studies with timeslots in the past, as well as all uncredited timeslots for some online studies (single-part online studies, and part 1 of multipart online studies) even when those timeslots are in the future. Participants typically participate in online studies right after they sign up, so these timeslots are often in need of crediting even if in the future (since the timeslot is based on participation deadline, not signup date). See the Web-Based (Online) Studies section of this documentation for more information.

If you would like to do a simple credit grant (standard credit grant, no comments) or no-show (of either type), you may do so directly from this page. Select the desired sign-ups/timeslots, and then choose the desired option.

If you need to do something more complex, like add comments or perform a special credit grant with a non-standard credit amount, you can easily click on the timeslot's date and time and go directly to that timeslot.

In cases where a study has timeslots linked to specific researchers, you will see the warning only for timeslots that are specifically linked to you, or to everyone in the study (i.e., not timeslots linked to someone else in the study). However, when you view uncredited timeslots, you will see all uncredited timeslots for your studies, even if someone else is linked to one of the timeslots for your study. This is done to make it easier to give your fellow researchers assistance in dealing with uncredited timeslots.

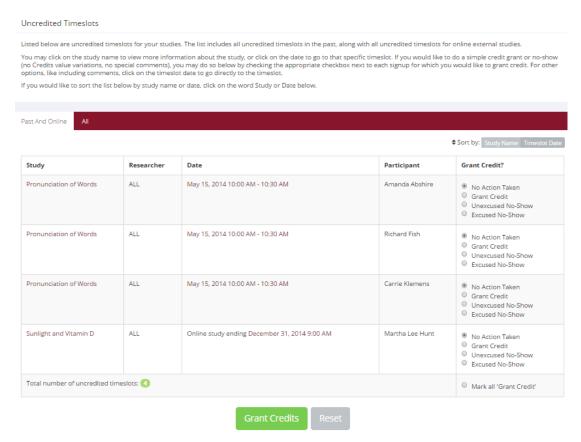


Figure 25 - Uncredited Timeslots

Analyzing Prescreen Responses

If online prescreening is enabled on your system, then you might also have the opportunity to analyze prescreen responses in aggregate or as raw data. Choose the Prescreen Results option from the top menu bar. You can then select which question you would like to analyze, and whether you would like to see summary data or raw data (in CSV format) for the selected question. The raw data will identify each participant only by a unique ID code and not by their name, for privacy reasons. If for some reason you need the participants' real names, ask the Administrator to run the same analysis. They are able to pull the real names with their report. This gives you access to all prescreen data across all participants in the system.

If you would like to analyze the prescreen data for just those who participated in your study, select the Download Prescreen Responses after clicking on your study. See Viewing Prescreen Responses in this documentation for further information.



Figure 26 - Prescreen Response Analysis

Prescreen Qualification Analysis

If you would like to get an idea of how many participants meet a set of requirements for help in setting prescreen restrictions on your study use the Prescreen Qualification Analysis link from the Prescreen Responses page. Using this feature, you can select multiple questions (only those that qualify for study participation restrictions are listed) then the desired responses for those questions, and you will see how many participants meet that criterion.

If enabled, you may also contact participants and invite them to participate in any of your studies. See the Invite Qualified Participants to a Study section in this documentation for more information on how this works. The functionality is the same as the functionality described in that section, though a few options may be unavailable when not inviting directly from a study, as those options do not apply. Be sure to include information about how to sign up for the study in your communication to them, as a direct link to the study is not provided in the email.

Frequently Asked Questions (FAQ)

Why do I have to acknowledge the Human Subjects Policy?

Certain regulations and research guidelines either require or recommend it. You only need to do it once every 6 months, so it should not be intrusive. You will not be asked to acknowledge the policy if this feature is disabled by your administrator.

I want to set up a study so that participants can choose to receive credit or payment. How do I set this up?

Set it up as a study for credit, and note in the study description that participants may opt to receive payment instead. They should notify the researcher of this when they come to their appointment. If the participant at that time chooses to receive monetary compensation, the researcher should grant

credit, but mark the credit as 0 credits (Variable Credit Granting must be enabled in System Settings by the administrator), and then note in the comments for the timeslot that payment was received.

The monetary compensation a participant receives for a study depends on decisions they make during the study. How do I indicate this?

You may type any value into the payment field when setting up the study, so you could type in a range of compensation values.

I want a participant to participate in an upcoming session, but the system says it is too late for them to sign up. What do I do?

If enabled, you can perform a manual sign-up. See the Manual Sign-Up section of this documentation. If not enabled, your administrator can still perform a manual sign-up.

Where are email notifications to me sent?

Email notifications (e.g. sign-up notices) are sent to either an address derived from your user ID or your alternate email address. See the Email Address Options section of this documentation for more information.

How do I deal with dyads?

A dyad is a study, which requires a pair of people to participate. Often, the second participant is not a "real" participant, but rather a colleague of the researcher who is "colluding" with the researcher as part of the study itself.

You do not need to deal with dyads in the system itself. Participants cannot see how many people have signed up for a timeslot, or how many spaces are available for a timeslot. So, your "fake" participant can just act like a real participant and the real participant will be unaware of this.

I have finished running my study. What should I do?

So it does not clutter the list of studies for participants, you should make the study Inactive or delete it. See the Updating a Study section of this documentation for more information.

Who has access to my studies?

All users can see the information about your studies and the available timeslots. Administrators, the principal investigator (if applicable) and the researchers for the study are the only people who can see who has signed up, and modify the study.

Regulatory Compliance Guidelines

Introduction

This software complies with all major regulations governing human subject research and privacy of data stored online. The system complies with both HIPAA and Common Rule for customers in the United States. For customers in Canada, it complies with the Personal Information Protection and Electronic Documents Act, as well as the Tri-Council Statement. For customers in the European Union or in countries that follow OECD rules, it complies with OECD privacy rules and the European Union Directive of Data Protection. Your organization may or may not need to comply with the relevant regulations. Your research administrator can advise you on this situation.

Even if you are not required to comply, compliance is always a good idea. Protecting sensitive data is always a good thing. Compliance in the context of this system is as simple as reading the remaining paragraphs of this section, that apply to your organization, and following the guidelines contained therein. The software handles all the remaining compliance issues involving software, privacy and electronic data storage automatically. You should still consult with your IRB or organization to learn about additional compliance rules you must follow outside of use of this software. For example, the handling of the data you collect during your study.

Some regulations, particularly the US HIPAA regulations) are focused primarily on health data. You may think the system does not store confidential health data (in HIPAA terms, it is called PHI -- Protected Health Information), but depending on how your organization uses the software, there may very well be confidential data in the system. Consider the case of a study that requires a participant to come from a family that has a history of mental illness. Merely knowing who signed up for that study could be considered confidential because that type of information should not be revealed to the public. It may turn out that your studies are not of such a nature, but it applies in even more benign situations. For example, a study that requires that participants be regular contact lens wearers can be construed as confidential information. Organizations typically err on the side of caution given the criminal and civil penalties for violation of these types of regulations.

Data Handling and Security Guidelines

In your role, you have access to your studies and you can see who has signed up for those studies. You may also have access to prescreen responses. Because of these privileges, you should follow these simple guidelines:

- <u>Secure Your Account</u>. Use a password that is difficult to guess. The most secure passwords
 contain a combination of letters and numbers, do not spell a real word, and are at least 8
 characters long. Your university IT department can provide you with assistance on choosing a
 secure password.
- <u>Secure Your Work Area</u>. If you are logged into the system and you leave your computer, you should logout of the system or use a password lock on your computer. Ask your network administrator for help with setting up a password lock.

• <u>Handle Paper Documents Carefully</u>. Any printouts from the system should be kept reasonably secure. Store them in a locking desk drawer out of the public view. Documents you decide to discard should be shredded if possible.

Human Subjects/Privacy Policy Acknowledgment

Upon your first login to the system, and every 6 months thereafter, you may be required to acknowledge your organization's policy on these matters. This acknowledgement will be logged. Ask your research administrator if you have any questions.

INSTRUCTOR DOCUMENTATION

Introduction

The Experiment Management System is used for the scheduling and management of a research participant pool. As an instructor, your interaction with the system will be minimal, and hopefully painless. Your primary use of the system will be to check on the credit status of students (participants) in your courses. In some cases you may also have the ability to grant credits to your students, as well as view which studies are available to students.

Getting Started

The system works best if you use a web browser that is less than 2 years old. It works well with all current versions of Internet Explorer, Firefox, Chrome, and Safari. It will work with other web browsers, and with older versions of the browsers noted above, however the layout may not be as clean. Using an older web browser will lose no functionality. Ask your IT department if you need help with installing or using a web browser. This documentation presumes you have a basic knowledge of how to use the web. On this system, it is not necessary to use the Back button. You can always use the toolbar on the top to navigate anywhere on the site.

Single Sign-On (SSO)

In some cases, the system will be configured so you can log in through your organization's existing login process, known as single sign-on (SSO), instead of needing to remember a separate username and password to use this system. If that is the case, you will see an option on the front page of the system. Note that you will still require an account in the system to successfully log in to the system, even if you authenticate using SSO.

Logging In

Your administrator will provide you with a username and password to log in to the site (if SSO is not enabled), as well as the URL (web address). When you go to the front page of the site (the login page), you may see a link to request an account. This form is *only* for participants. Do not use this form to request an account, as participant accounts have an entirely different set of privileges, which are not appropriate for a researcher.

If you have forgotten your password and the system is configured to allow password retrieval, you will see a link where you may choose to have your password reset and a new password emailed to you. Once you log in, you will be presented with a Main Menu with a few options.

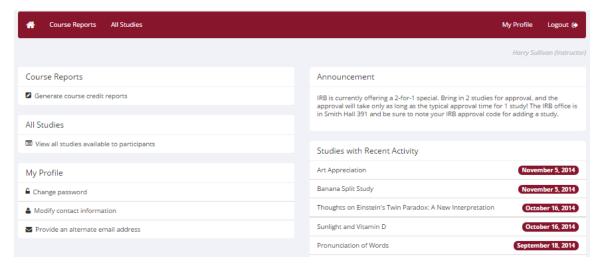


Figure 27 - Main Menu

Course Reports

On the Main Menu that you see after logging in, you will see an option to generate course reports. Once you click on that, you will see a list of all the courses that you are listed as an instructor for. You have the option to generate reports for each of those courses.

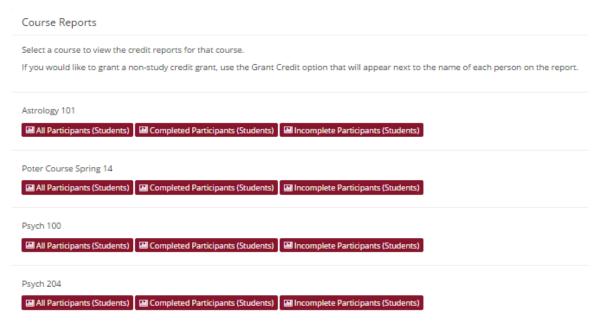


Figure 28 - Course Listing

You have three choices for the type of report you would like to generate. All Participants will list all the participants that are in the course. Completed Participants will list only the participants who have met or exceeded their credit requirements. Incomplete Participants will list only the participants who have not met their credit requirements. Click the link for the desired report.

The report will be listed in alphabetical order by participants' last name. Participants that have not completed their requirements will be highlighted in bold. For privacy and ethics reasons, you will never see exactly which studies the students participated in. You will only see a summary of their credit earnings. If for some reason this information is needed, the administrator can produce such a report for you using the Course Credit History report available to them.

If your system is configured as such, you will see a credit status for the participant overall, as well as for the listed course. If this is the case, you should look at a participant's credit for the *course* to determine if they have completed their requirements. If you do not see such a column ("Credits Earned for Course"), then you only need to be concerned with the overall credit completion status for the participant. If the report is too wide to be printed easily, you can use the Printer-Friendly format. A link to that will appear at the bottom of the report.

The report also includes a column indicating the Overall Unexcused No-Shows a participant has accrued. If you have a policy whereby you give some type of bonus for participants who do not accrue any unexcused no-shows, then use this column to determine which participants fit into that category (look for values of 0).

If you would prefer to deal with the information in CSV (comma-separated) format, for easy import into a spreadsheet program like Excel, use the CSV link at the bottom of the report to generate such a data file. If you have a problem working with the CSV format file, please contact your IT department for assistance. CSV is a standard data format and they are quite familiar with it.

To generate a new report, choose the Main Menu link from the left toolbar and proceed from there.

Granting Credits

In some cases, you might see a Grant Credit choice next to each name when you generate a course report. If you click on this link, you can grant a non-study credit grant to that student. This is useful if you are in charge of granting a student credit for participation in a research alternative (e.g., writing a paper), in lieu of actual research participation. To grant the credit, simply enter the credit value and a comment about the credit grant, and the credit will be granted immediately. If you grant a credit by mistake and would like to delete it, please contact the administrator and they can do this for you.

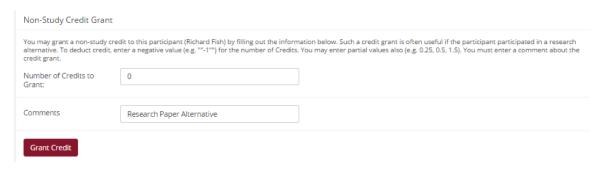


Figure 29 - Non-Study Credit Grant

Viewing Studies

In some cases, you may have the ability to view what studies are available in the system to participants. This is useful if you want to discuss information or concepts from those studies in class, as a part of the educational experience. If such an option is available, you will see an All Studies link after you login. If you click this, you will see a list of studies. You may then click on any study to view more about it. For privacy reasons, you may not see who has signed up for any of the studies.

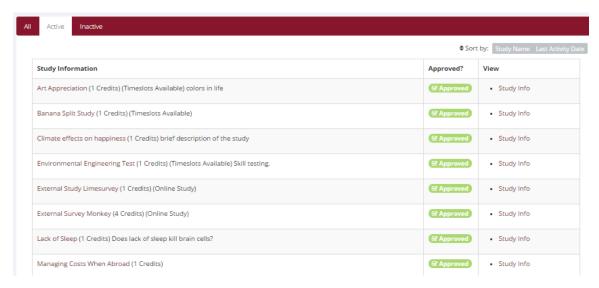


Figure 30 - Viewing Studies

Changing Your Password

To change your password or other information, choose the My Profile choice from the top toolbar.

If you change your password, please be sure to select a password you do not use on any other systems or websites, which is a good computing practice.

My Profile	
	You may use this page to change your password and update other information about yourself. All fields are required unless marked otherwise.
Name	Harry Sullivan
User ID	hair @yourschool.edu
Alternate Email Address Optional. If provided, all emails sent to you from the system will be sent to this address.	harry@sullivanschool.edu
	harry@sullivanschool.edu
	(please enter twice for verification purposes)
Change Password	Enter your current password, then your new password twice, to change your password. Otherwise, leave blank.
	Current Password
	New Password
	New Password (confirm)
University ID Number (optional)	
Phone Number (optional)	202-555-2011
Office (optional)	
	Undate

Figure 31 - Updating Your Profile

Depending on how your system is configured, you may enter an email address on this page. You will be asked to enter it twice when changing the address, to ensure it is typed correctly.

Logging Out

When you are done using the system, choose Logout from the top toolbar to log out. You are now logged out. It is always a good security measure to close all your browser windows as well, especially if you are using a computer that is shared by others.

Frequently Asked Questions (FAQ)

I would like to deduct or add credit from a participant. How do I do this?

The easiest way is through the non-study credit grant feature. You have the option to grant a negative credit if you would like to deduct credit, or you may grant a positive credit. See the Granting Non-Study Credit section of this documentation for more information.

A participant failed to show up for a study and did not properly cancel, but there were extenuating circumstances and we would not like to penalize the participant. How should this be handled?

Researchers should take some action on every study timeslot that has occurred. The best option is for the researcher to mark the sign-up as an excused no-show. This has no negative effect, and the participant may sign up for the study again.

The reason to always properly indicate a no-show for a participant is that the system makes certain pre-requisite enforcement decisions, and other decisions, depending on whether the participant participated in the study or was a no-show.

You may also cancel the participant's sign-up, if appropriate.

Can there be different sign-up or cancellations deadlines for each study?

Yes, if study-level deadlines are enabled on your site (see System Settings).

Can a participant who earned a no-show sign-up for the same study again?

Yes, because they did not participate the first time. This assumes there is no other reason they cannot participate, like their account becoming Limited. The reason the system allows them to sign up again is that typically participants who do not show up are not targeting a particular study. In other words, they would no-show for any study, not just one particular study, so there is no reason to block them from a particular study due to a no-show. Instead, they should be restricted system-wide, if necessary, which is done using the Account No-Show Limit.

No-Show Handling

The system has support for assessing a penalty when an unexcused no-show is accrued. See the settings No-Show Penalty Credits and Penalty Type in System Settings.

In many situations, assessing penalties for failing to show up for a study may not be allowed for ethical reasons. See the No-Show Penalties section (in Regulatory Compliance) for more information about in which situations this may apply.

Instead of or in addition to, assessing penalties for no-shows, the system offers some other features for dealing with participants who accrue excessive no-shows. All these features are in full compliance with the determination letter from OHRP (see No-Show Penalties).

The first option is the Administrator No-Show Notification Email setting (see System Settings). With this, the administrator can be notified once a participant has accrued a specified number of unexcused no-shows. At that point, the administrator can either block the participant's access to the system entirely (set Login to System Allowed to No), or restrict their account so that they may only sign up for studies marked as research alternative studies (set Limited to Research Alternative Studies to Yes).

Another option, similar to the previous option, provides a more automated method of dealing with the situation. The No-Show Account Limit (see System Settings) may be configured so that a participant's account is *automatically* limited to only research alternative studies after a specific number of unexcused no-shows are accrued. The system will also reverse this limitation if an unexcused no-show is later reversed. To make this limitation handled automatically by the system, ensure that the Limited to Research Alternative Studies setting for a participant is set to Automatic (default). If the No-Show Account Limit is reached for a participant, then this will not cancel any pending sign-ups they have for studies in the future, but will limit all future sign-ups to only studies marked as a research alternative. If necessary, the administrator can cancel any pending sign-ups, and if Administrator No-Show Notification Email is set to a value less than or equal to the No-Show Account Limit value, then the administrator will receive an email notification that also lists if there are any pending sign-ups for the participant.

A final option is if instructors want to give some type of bonus credit for participants who do not accrue any unexcused no-shows. To facilitate this, there is an Unexcused No-Shows column on the Credit Completion report. Instructors may use this information at their discretion. There is no direct feature in the system to grant any type of bonus credit through the system for not accruing no-shows. The reason is that the credit grant would get extremely complicated when participants are in multiple courses, and also if they accrue an unexcused no-show after the bonus is granted, or a no-show is later reversed.

There are methods of making participants aware of the no-show policies, by including text in emails when they receive an unexcused no-show or their account is automatically limited. See Updating System Text for further information.

It is often useful to clear out unexcused no-shows from participants before the start of a new term, so they may start with a clean slate. See End-of-Semester Maintenance for options to delete unexcused no-shows, or convert them to excused no-shows.

Security Considerations

Security is typically a balance where the need for information to be secure is weighed against convenience for users. Security needs may also vary based on what data is being stored in the system, and what type of research is being done.

In general, data in the system is not considered high-risk in terms of its attractiveness to being sought out or stolen. Most criminals are looking for data that can produce an easy financial gain and where there exists a market to sell such data. Most often this is financial information like credit card numbers. Data stored in the system, like information about who signed up for which study, does not have much commercial value on the open market. Even research data, like data collected as part of an online survey study, is likely to have limited value to others. To date, we have seen no malicious attempts to hack into our software, and we have had no reported cases of data being compromised.

Regardless, confidentiality of data is always important to maintain trust and ensure that users receive the level of privacy they expect. The following sections outline some areas of concern, and we have a HECVAT form which details our security stance in more detail, available upon request.

If a language other than English is enabled, the system can be configured to default to that language for first-time visitors to the site. Contact Technical Support to have this configured. For returning visitors, the system will remember the language they used on their previous login and switch to that automatically.

If you would like to use the system in a language not currently offered, please contact Technical Support and we can work with you on the translation process.

Accessibility Information

In general, the system should be usable for all users without hindrance. The system works correctly with screen-reading devices, and all non-decorative images are properly labeled. In addition, for participants, all text entry fields are linked to their descriptive text with use of <label for> tags. The system is predominantly text-based, and uses the popular Bootstrap framework for page layout, along with the Bootstrap Accessibility module.

Because of the complexity of the interface that the administrator sees, there may be cases where non-decorative images are not properly labeled. This only affects the administrator, and not any other type of user. If this is an issue, please contact Technical Support and we will be happy to work on dealing with any issues in a timely manner. A VPAT document indicating compliance with various accessibility requirements is available upon request. This document details compliance with WCAG 2.0 and 2.1 (Levels A, AA, AAA), Section 508, and EN 301 549 (Mandate 376) requirements.

Regulatory Compliance

Introduction

This software complies with all major regulations governing human subject research and privacy of data stored online. The system complies with both HIPAA and Common Rule for customers in the United States, when configured as such. For customers in Canada, it complies with the Personal Information Protection and Electronic Documents Act as well as the Tri-Council Statement. For customers in the European Union, we are in full compliance with GDPR regulations.

Data stored on servers located in the United States is stored in compliance EU GDPR. Compliance is covered under the EU Privacy Shield framework (as applicable), and our certification of compliance can be verified through the US Department of Commerce. Note that for all customers in Europe, your site is stored on servers located in the EU, and that data is never stored on servers in the US.

In most cases, your organization must comply with all human subject and data privacy rules that apply in your country. You should consult with your IRB for more information. Even if you are not required to comply, compliance is always a good idea, as protecting sensitive data is a good thing. Compliance in the context of this system is as simple as reading the remaining paragraphs of this section that apply to your organization, and following the guidelines contained therein. The remaining compliance issues involving software, privacy and electronic data storage are for the most part handled automatically by the system. You should still consult with your IRB or organization to learn more about additional compliance rules you must follow outside of use of this software, the handling of research data collected on paper would be one example.

You should also give some thought to the Unique ID Code feature (see Participant Unique ID Codes). In many cases, your IRB may require you to enable this feature to properly protect a participant's privacy.

No-Show Penalties

In January 2010, the Office of Human Research Protections (OHRP), which is part of the U.S. Department of Health and Human Services (HHS), issued a determination letter regarding assessing penalties when a participant does not show up for a study. You may read more here: http://www.hhs.gov/ohrp/regulations-and-policy/guidance/january-08-2010-correspondence-student-subject-pools-and-use-of-penalties/index.html

You should consult with your IRB for advice, but generally this applies to research funded by the U.S. Government, and to universities with a Federal-Wide Assurance (FWA) in place (common at most research universities). Even if your university is located outside the U.S., the determination may still apply if researchers receive U.S. Government support for their research. In addition, it some regulatory bodies in other countries are following the lead of OHRP on this issue.

To ensure compliance with the determination, simply set No-Show Penalty Credits to No Penalty in System Settings.

In the determination letter, OHRP proposed some alternatives to issuing penalties, like restricting study opportunities, and offering bonus credits for not accruing any no-shows. Both options are supported in the system. See No-Show Handling for more information.

EU GDPR Compliance

The system is fully compliant with EU GDPR (General Data Protection Regulations). We can provide a copy of our DPA (Data Processing Addendum) upon request.

In particular, here are the settings in System Settings to focus on when it comes to GDPR compliance for your site:

- Participant Account Self-Deletion. This provides a simple way for participants to have their data permanently deleted from the system. This addresses their "right to be forgotten."
- Study Invitation Email Feature. This provides a simple way for participants to opt out of receiving such emails.
- Participant Human Subjects/Privacy Policy Acknowledgement. This provides a way for
 participants to be shown your privacy policy upon their first login, and for the system to record
 their acknowledgement of it.

CCPA Compliance

The system is fully compliant with CCPA (California Consumer Privacy Act).

In particular, here are the settings in System Settings to focus on when it comes to CCPA compliance for your site:

- Participant Account Self-Deletion. This provides a simple way for participants to have their data permanently deleted from the system. This addresses their "right to be forgotten."
- Study Invitation Email Feature. This provides a simple way for participants to opt out of receiving such emails.
- Participant Human Subjects/Privacy Policy Acknowledgement. This provides a way for
 participants to be shown your privacy policy upon their first login, and for the system to record
 their acknowledgement of it.

Handling an Information Request

In many cases, a participant has a right to request a copy of all data stored about them by the system, and this request should be granted in a timely manner, free of charge.

If you receive such a request, first verify the identity of the requester. After this is done, go to User Management | View and Edit Users, and print a copy of their record. This will contain all their signup data and other login data. If your system has the online prescreening feature enabled and they have participated in the prescreen, you should also print a copy of their prescreen results (a link is included on their user information page). In addition, if they participated in any online survey studies within the system, you should print that data as well.

Data Handling and Security Guidelines

As an Administrator, you have access to every study and you can see who has signed up for those studies, as well as online prescreen responses. Because of these privileges, you should follow these simple guidelines:

- <u>Secure Your Account</u>. Use a password that is difficult to guess. The most secure passwords contain a combination of letters and numbers, do not spell a real word, and are at least 8 characters long.
- <u>Secure Your Work Area</u>. If you are logged into the system and you leave your computer, you should logout of the system or use a password lock on your computer. Ask your network administrator for help with setting up a password lock.
- Handle Paper Documents Carefully. Any printouts from the system should be kept reasonably secure. Store them in desk drawer out of the public view. Documents you decide to discard should be shredded if possible.
- <u>Secure Electronic Data Carefully</u>. Data exported from the system (using the Data Export feature) should be securely stored. Ask your network administrator for assistance with properly securing this data.

Strict IRB Mode

The system can run in strict IRB mode, if configured as such in System Settings. In this mode, a study must have an IRB approval code and expiration date in order to be added. The system does not check the format of the IRB approval code (since those may vary widely), but merely that some text is provided. So if the study is one that does not require IRB approval, it's acceptable to enter any text in this area.

The system will prevent any timeslots from being added which are to take place after the IRB expiration date. In addition, the study will be deactivated (participants will not be able to see it) on the expiration date. The check for studies that need to be deactivated is done once per day. Only the administrator may extend the expiration date or change the IRB approval code.

Human Subjects/Privacy Policy Acknowledgment

Researchers and Principal Investigators must acknowledge the Human Subjects and Privacy Policy (all on one page) once every 6 months, if the Researcher Human Subject Policy Acknowledgment setting is enabled (see System Settings).

Participants must also acknowledge the policy once every 6 months, if the Participant Human Subject Policy Acknowledgment setting is enabled (see System Settings).

When a user is shown the policy for acknowledgment, they will see standard, regulation-compliant wording that is included with the software. If you would like to modify this with your organization's own policy, you may do so (see Updating System Text).

The standard policy varies depending on the type of user that is viewing it, and is available for review at any time through a link labeled "Human Subjects Policy" at the bottom of every page (for users who are logged in).

If anonymous identification (see Participant Identification in System Settings) is enabled at the time the policy was generated, participants will also be notified that researchers know them only by this code.

If you have made changes to the policy and want to ensure all existing users re-acknowledge it upon their next login, contact technical support and we can make an adjustment in the database to accomplish this.