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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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The Experiment Management System provides an easy method for you to sign up for studies, and tracks your progress throughout

dZ u]o `]oo }u (}u Z u] typically listed on the request account page), so be sure to configure your junk mail filters to allow emails ~



Figure 3 - Main Menu

Your login (also known as a session) will expire after a certain period of inactivity, which is usually around 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. This is especially important if you are using a public computer in a lab.

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. You will see an option on the front login page if this feature is enabled. Using 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 address to see if 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 4 - Upda ting Your Profile

account, for instance), this is the address where all notifications will be sent, as well as the address that will be displayed to researchers (if enabled).

explanation if you like. This information will be sent to the researcher when they are notified of your withdrawal.

With either withdrawal option, all the survey responses you provided are permanently deleted at the time you withdraw.

Signing Up For Studies

To sign up to participate in a study find the study you would like to participate in (see Viewing Studies in this documentation) and click on the study name for more information. You will see a list of any special restrictions or eligibility requirements, as well as a contact person if you have questions about the study. If the study has a principal investigator listed, you can click their name to view full contact information. In most cases, it is preferred that you contact the individual listed as the researcher if you have specific questions.

Some restrictions are automatically enforced by the system. If the study has certain pre-requisites or disqualifiers (studies you must **not** have participated in to participate in this study), those may be listed, as well as a note about whether you meet those eligibility requirements. If you have signed up for a study with another study listed as a disqualifier study, then you will be prevented from signing up for the disqualifier study.

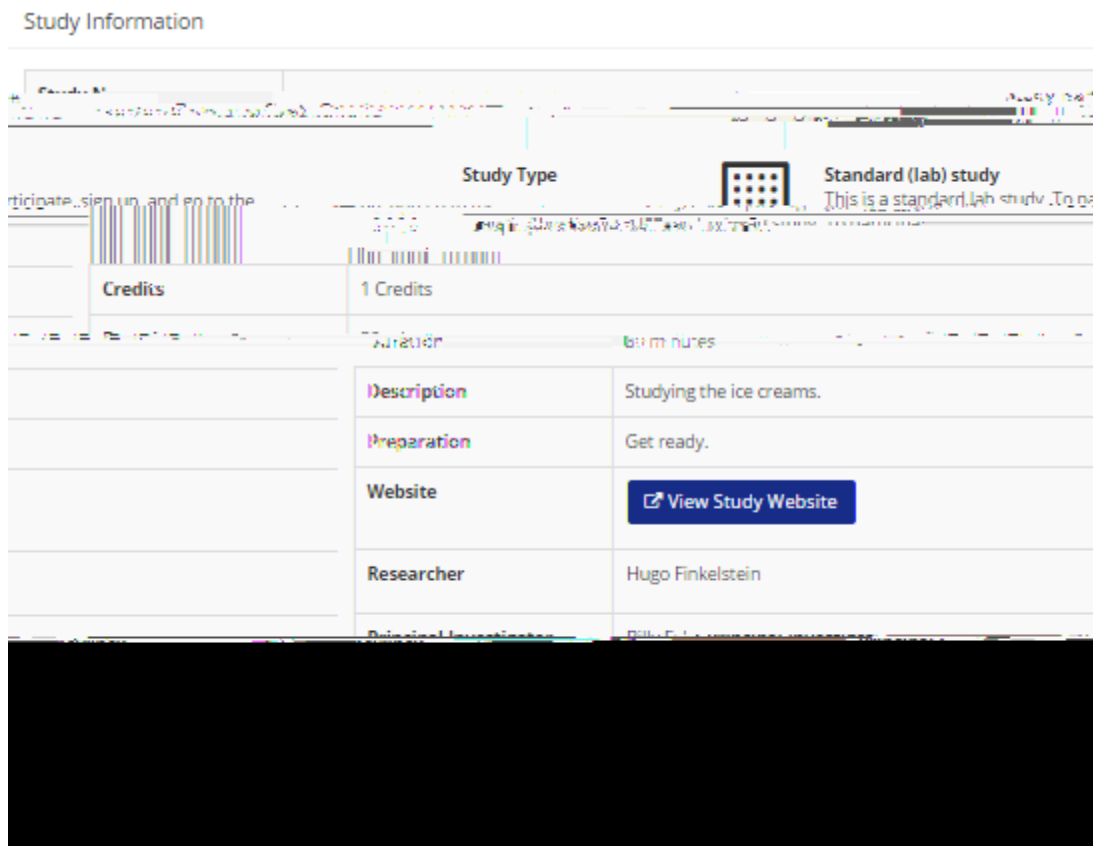


Figure 6 - Study Information

The study may have other restrictions listed as Eligibility Requirements. An example of an eligibility requirement is that you must be a student at the University of Colorado. The system does not enforce this restriction. However, you should only sign up for the study if you meet this restriction. If you sign up for the study and you do not meet the restrictions, you will likely not receive credit for the study and could face a penalty.

If the study is not an online study, then the sign-up and cancellation deadlines for the study will be listed. Those deadlines are based on the date of each timeslot.

If you are viewing a study that you have signed up for in the past and have already participated in, then you will not see the list of timeslots for the study.

Some studies require a special password (known as an Invitation Code) to sign up. In this case, it will be noted. The researcher should have given you this invitation code. It is **not** the same as the password you use to log in to the system. You will need to enter the invitation code just before you click the Sign Up button to sign up for a timeslot.

You may sign up for a timeslot only up until a certain time before that timeslot is scheduled to occur. The system will not show a Sign Up button for timeslots that are too late to sign up for. If you sign up for a timeslot and already have another sign-up

You will see all the studies you have signed

that. Below that, if you have signed up for any studies, those will be listed as well. In the list of studies you will also see information about your credit status.

Figure 9 - Viewing Your Progress

If you failed to appear for a study, it is possible you were assessed a penalty. That will

You can also try to use another computer. Usually the computers in university computer labs are configured correctly.

I participated in a study, but I have yet to receive credit. How do I receive credit?

The researcher must grant you credit. This is usually done shortly after your participation in the study.

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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 so u U Z u `]oo }v(]Pμ } `}μ v o}P]v Z }μPZ `}μ } P 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.

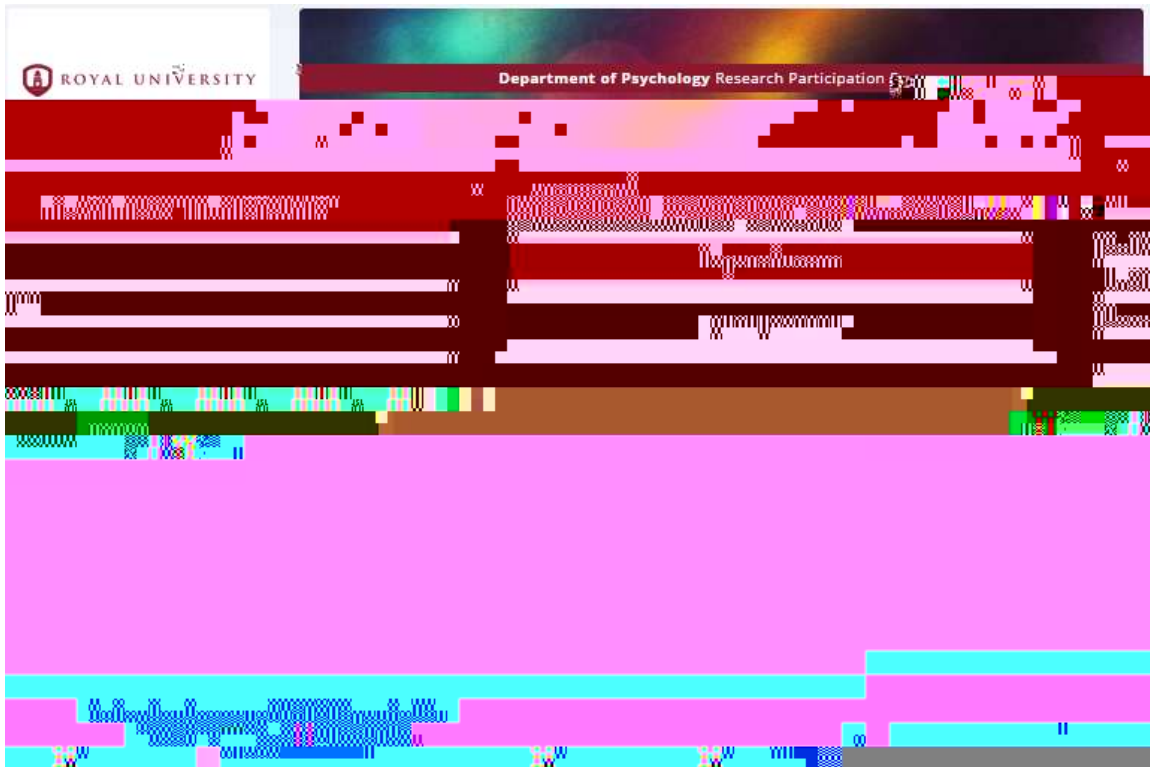


Figure 11 - Login Page

Once you log]vU `}μ u ` i } A] ` v]v}`o P `}μ } sObjcti]}v[Z μu 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.

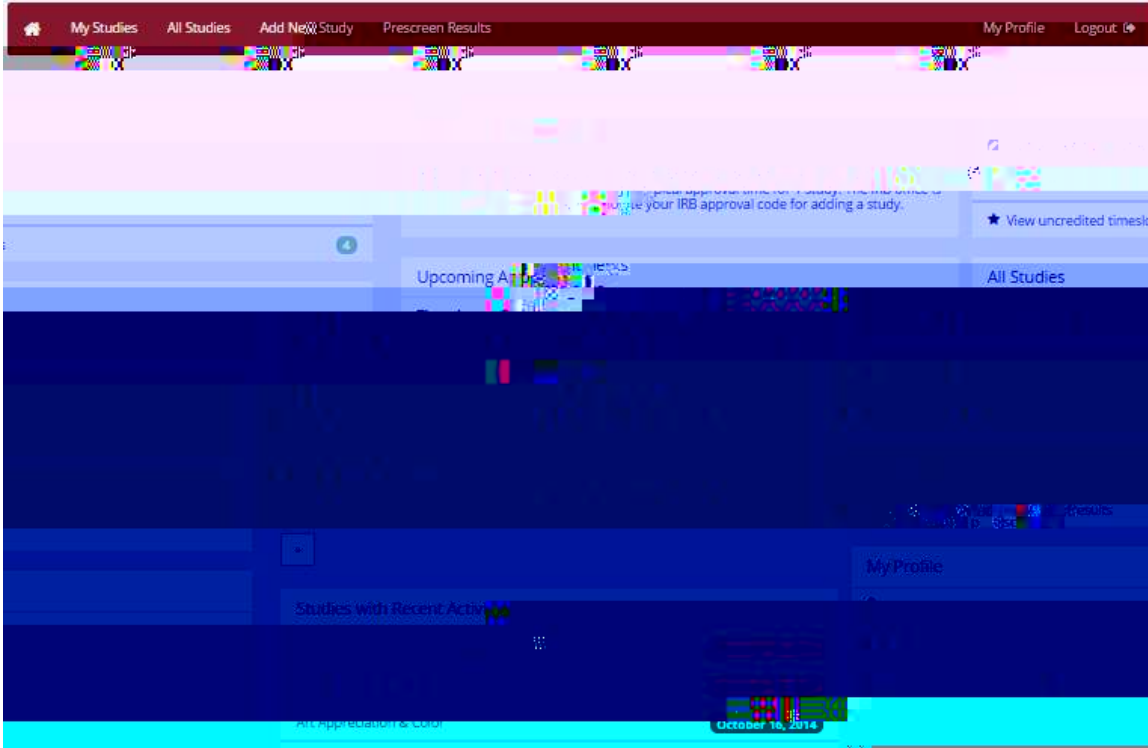


Figure 12 - Main Menu

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 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 13 - 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

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 . You can also save your email address as . If you provide an alternate email address, you will be asked to enter it twice to ensure it is typed correctly.

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. If you provide an alternate email address, you will go to that address.

Run the Study

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

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).

- x 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.
- x 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 ca

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

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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

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:

- x This feature is only supported with online external (web) studies, not the internal online survey feature.
- x 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 U Z h Z > () í v 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.
- x The time separation between each part is based on when the participant was granted credit (participation marke

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,

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.

Figure14-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

	enforced automatically), which you can do after you add the study. This field may be up to 245 characters in length.
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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

more information on how to fill out this field in the case of paid studies.

If you are setting up a multi-

	The selection box lists only users who are researchers.
Principal Investigator (this feature might be disabled on your system)	<p>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.</p> <p>The selection box lists only users who are principal investigators.</p>

IRB Approval Code

Enter the IRB approval code here. This field is

	<p>the list of studies participants can sign up for. Often, this is done so the system can enforce pre-requisites where the inactive study is a pre-requisite for an active study.</p>
<p>Advanced Settings</p>	
<p>Field</p>	<p>Explanation</p>
<p>Pre-Requisites (this feature might be disabled on your system)</p>	<p>If there are studies a participant must participate in before participating in your study, choose them here. You may select multiple studies.</p> <p>You may specify that participants must have participated in at least one, if not all of the studies specified.</p> <p>The system will handle enforcement of the pre-requisites in a strict or lenient fashion, depending on how your system is configured. In strict enforcement mode, the participant must have received creditor (participated in) the pre-requisite 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.</p> <p>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.</p>

<p>Disqualifiers (this feature might be disabled on your system)</p>	<p>If there are any studies that a participant must not 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.</p> <p>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.</p>
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Course Restrictions

	<p>for a study, and not to restrict their ability to assign credits to courses.</p>
<p>Age Restrictions (this feature might be disabled on your system)</p>	<p>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.</p> <p>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.</p> <p>For web studies, the age restriction is enforced based on their age at the time they sign up for the study.</p>

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 **not** 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.

	<p>the administrator. For external web studies, this setting is useful primarily in conjunction with placing %SURVEY_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 %SURVEY_CODE% from the Study URL.</p>
<p>Study URL</p>	<p>The URL (web address, usually starting with https://) for your study. This is only required for web-based studies administered outside the system.</p> <p>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 %SURVEY_CODE% to 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.</p> <p>If you are setting up a multi-part online study, you will need to specify the URL for each part of the study, and the URLs should be unique.</p>

Study URL Display (single-part external web studies only)

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.

	<p>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.</p> <p>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.</p>
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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).

	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- v μ u] À o μ ~ X P X U ^ u 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. ^ ` v ó v ó ` _] (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.

option. If there is some flexibility to

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.

Figure15- 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 pa

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 r [Å]] v] ((v u } μ v Z v Z μ [o]

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,] [u } o] l o ' 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

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

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 approximate

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.

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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 multi-part online studies, because the time separation between parts is based on when participation was marked.

Otherwise, you may want to develop a

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. **ClientSide Completion URL** 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.

http s://yourschool.sona -
systems.com/services/SonaAPI.svc/WebstudyCre dit?experiment_id=123 &credit_token=9185
d436e5f94b1581b0918162f6d7e8&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.

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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

] Å

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 Survey Gizmo

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

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

o v P μ P v o } Z Z v v P o] Z U Z v Z u P `] o o] o `] v 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.

Parameter	Description / Possible Values
experiment_id	

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:

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

It will occur, but it is 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 **%SURVEY_CODE%** 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

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.

2 Q O L Q H 6 X U Y H \ 6 W X G L H V

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

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 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

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

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 k

Figure 20 - Survey General Information

Section List

Depending on if you are adding or editing the survey, you will be taken to the list of sections for the survey. Here you can change the order that sections will be displayed, if you have not enabled full random section ordering for the survey, and see a quick review of each question. From here you can 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

Figure 21 - 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

~ P ^° Å ð U P] u à S — S ^ D à E _ S ` — — P V à / T5c3 ~ TJ 9(oE01890102>-2 io)7(n)-4

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.

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

} Z v μu] À o μ v }]
^ } v P o ' P _ X d Z]] μ (μo ` Z
scale.



Figure 23 - 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 q

participants can sign up

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 3DUWLFLSDQW¶V 6XUYH\ 5HVSRQVHV
Kv }]}v U ` }µ u ` ~H/ u@-0 @Ñæu@- }0 @Ñ] @-`Y/ [S `] v

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 web servers 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.

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

:R U N L Q J Z L W K 7 L P H V O

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.

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

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

Figure26-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,

not signed up for, and you elect to let them participate, you can sign them up on the spot for the timeslot. In



Figure28- Manual SignUp 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 do not occur for a study that has not yet been approved, as research should not take place prior to approval.

Manual Cancellation

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).

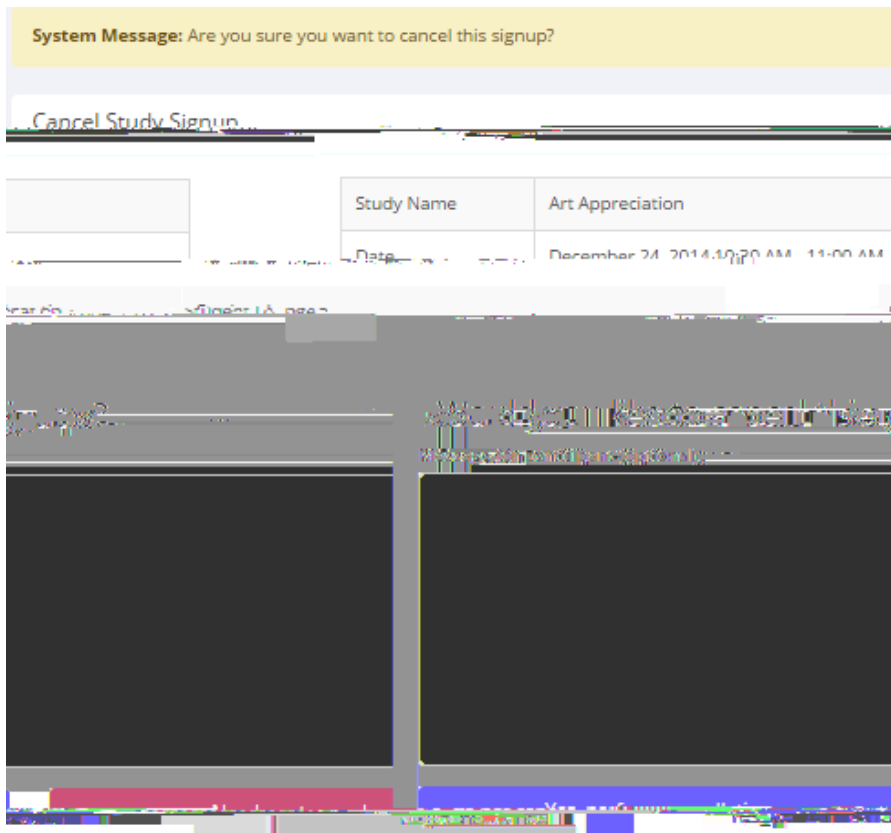


Figure29- Manual Cancellation

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.

Figure30-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 (or ID code) when viewing a participant list. This link will take you to 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.

Figure31 - ViewingParticipant 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 ab-5vT

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 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

This feature also works for studies conducted over videoconference

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

Contact Participants : Art Appreciation

Enter a message below that will be emailed to participants participating in this study. The participant's numeric ID code will be included automatically in the email. Emails will only be sent to users who are allowed to login to the system. You will be able to send the emails in groups of 3000 at a time. You may choose to receive a copy of the email by choosing the appropriate option below.

Notes: You may have the potential to send emails to a large number of participants. In most cases, it is preferred to contact participants associated with a specific timeslot instead of sending to the general list. You may want to go to the desired timeslot and use the Contact feature there.

Recipients:

- All participants
- Participants who were granted credit
- Participants who were marked as a No Show
- Participants who are marked as Awaiting Action

Date Range:

- All Dates
- Specified Date Range

Tuesday, 11/11/2014 11:31 AM

You have approved this email because you are signed up for the study "Art Appreciation" (either in the past or the future) as a researcher in this study.

4/1 HTML

If you write the text: FIRST_NAME|LAST_NAME or NUMBER, the system will place the recipient's information in place of that text when generating the email.

Send a copy of this email to yourself? Yes No

This message will be sent to all participants in the selected date range.

Figure34-Contat Participants

The Sender address on the email will be the administrator email address, which is done to prevent the user who is actually sending the email. When a user chooses to reply to the email, the reply will be addressed to the administrator email 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, ba