

I originally developed this guide for my students and found that I have been giving it to as many colleagues as students so I decided to post it on our department web page. Please feel free to use and distribute this document as you see fit.

Background – Qualtrics (Qualtrics Inc., Provo, UT) is private company to which RU pays for service. The primary service is an online questionnaire development, delivery, and management system. This service meets the standards for security required by CFR 45.46 (Federal Guidelines for Human Research) and by VITA (Virginia Information Technology Agency). Specifically, the data is stored in a secure manner by Qualtrics and when the questionnaire is being completed and transmitted it is encrypted.

Qualtrics can be used for our data collection (regardless of whether it takes place in the lab or outside of the lab).

This guide will make frequent references to SONA, which is an online research participant pool management system to which the psychology department subscribes. This program allows students to sign-up for studies and it will automatically send them to the appropriate Qualtrics study. If you are not using SONA, just ignore these references.

I. Overview of data collection strategy:

1. Participant sign up:

Students will first register with SONA (another service to which the psychology department subscribes) wherein they will find your study. When they sign up for your study they will be given a password which they will need to access your survey and they will be directed to your Qualtrics survey.

2. Password-

To ensure only invited participants complete our survey, participants will be given the password when they sign up for the study in SONA. They will have to enter the password before the Qualtrics survey will begin. If you are not using SONA, you may include your password in an invitation email you send potential participants.

3. Consent Form- Block 1

- Qualtrics arranges questions into blocks. You could put the entire survey in a single block or you can separate it into multiple blocks. Typically you will want to use separate blocks for each part of your study (e.g., each task or measure). This becomes especially helpful if you want to randomize the order in which certain elements of your study are presented, randomly assign people to condition, and/or randomize the order of items within measures. If you put everything in one block and randomized it, then all the items from different questionnaires will be mixed together in a random order.

- The first Block will typically be your consent form. And you should set it up so that if participants click Yes, then they proceed to the next block of questions. If they click NO, it should jump them to the debriefing form (Your End of Survey Message) and they can exit back to SONA from there. You will also want to use response validation that forces them to answer the question before they can move on (this will make the IRB folks happy). You will want to be sure to have big and bold instructions to print the consent form before they are asked to click Yes or NO. The consent form should be retained for their records (typically an

IRB requirement) and can serve as proof of participation in case there is a problem with assignment of participation points for studies offering course credit or extra credit.

4. Questionnaires:

- Each questionnaire can be developed in its own block and then randomized within blocks. This way each participant will get a different order of the measure and you can rule out any item order effects. Also, you can randomize the blocks so that they get the questionnaires in different orders. In either case, you must carefully consider whether this is appropriate for your study.
- Randomization can also be used to set up random assignment to condition if you are using an experimental design.

5. Demographics:

- The last Block should consist of the demographic items. Demographics should go last as they are typically the least important and this is the point where people are often the least motivated. Though some researcher prefer to give the demographics first to help participants get used to the response format.

6. End of Survey Message/Debriefing:

- Once participants complete the last block of questions, Qualtrics will take them to your end-of-survey message, which can be your debriefing/study description form. Again you need big and bold directions encouraging students to print the debriefing form as proof of participation in case there is a problem with assignment of participation points.

7. Exit back to SONA

- You should add a link to the bottom of the debriefing that will send participants back to the SONA login page.

II. Creating a Qualtrics Account

- Anyone can set up free Qualtrics account, but the functionality of these free accounts is limited. The full version is available to the general public for a fee.
 - As a student or faculty member at RU, the University has paid for you have to have access to the full version of Qualtrics.
 - Each member of the research team should make his/her own Qualtrics account. Qualtrics will allow you to collaborate on the same survey using separate accounts. Alternatively you could make one account and share it with the research team (but this not recommended unless absolutely necessary).
1. Access the Academic Technologies Qualtrics web page (<https://www.radford.edu/content/it/home/it-support/software/general-software/Qualtrics.html>).
 2. Select Create Account from the side menu and then click the "Create an Account" link in the directions provided. This should take you to the following link:
<https://radford.co1.qualtrics.com/ControlPanel/Register.php?BrandID=radford&ServerID=Prod>.
- You will be asked to provide an email address and a password – You must use your Radford University email address (include the @radford.edu part), but you **should not** use your Radford University password – especially if you decide to use a single account for the whole research team. You should create a unique password for your Qualtrics account.
 - After you submit your application you will get an email at your Radford University email account from Qualtrics to activate the account. This step is to confirm that you are officially affiliated with the university. Click the link in the email that says "Please click here to confirm your request."
 - You should be good to go. You will just need to login to Qualtrics.
<https://new.qualtrics.com/ControlPanel/>

III. Qualtrics Login

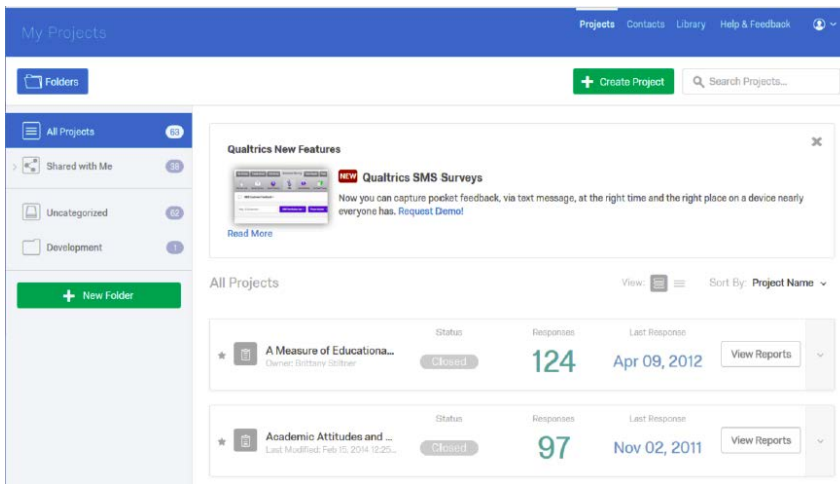
1. Access the Academic Technologies Qualtrics web page

(<https://www.radford.edu/content/it/home/it-support/software/general-software/Qualtrics.html>).

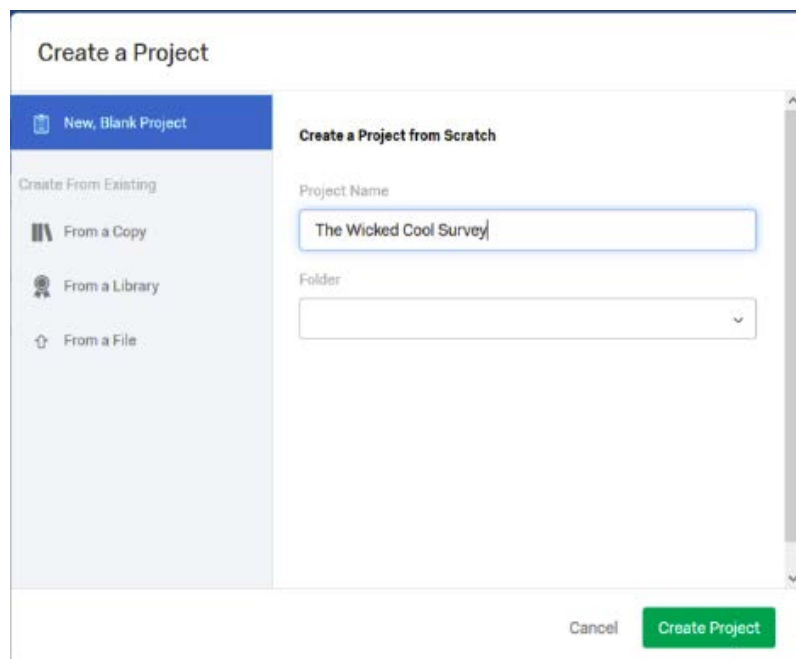
- You can also go directly to <https://new.qualtrics.com/ControlPanel/>. I would bookmark the page.

- Enter email address username@radford.edu and the Qualtrics password you created.

- Once logged in you start on the My Projects Page.



My Projects – has a list of all the surveys you have created, indicators for which ones are active, the number of responses, a View Reports Button, and drop down list of options for each survey [including Activate survey, Share Project (where you can collaborate with team members), Edit Survey, Preview Survey, Distribute Survey, and Data and Analysis]



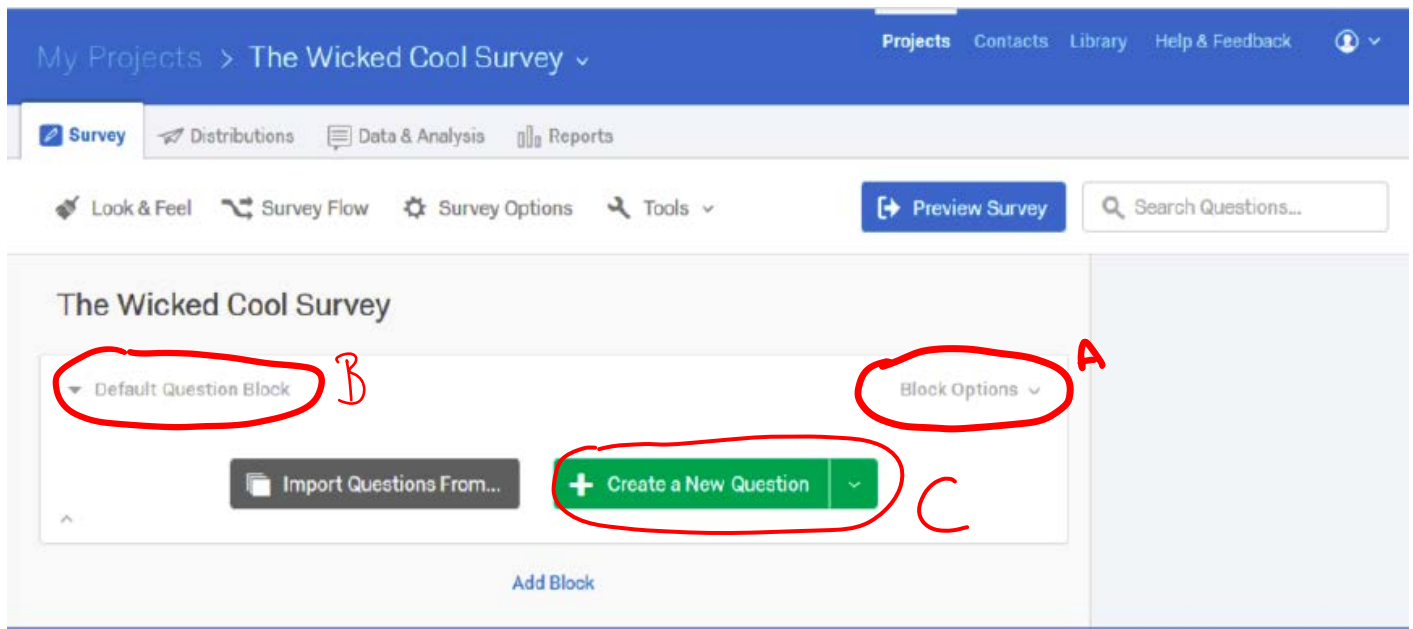
IV. Create a new Project.

- Click **Create Project** (upper right). You can either create a new blank project or you can make copy of an existing project or from an exported backup file that you have made of your project (this is handy if you moving from one institution to another).

- In the **Create a Project** window, give your new project a name.

- The folder information is optional. You can add and rename folders using the Manage Folders option on the My Projects page.

- Click **Create Project** to continue.



1. Blocks.

- You will start with a single block with no questions. You may want to start by adding the number of blocks you intend to use in your study. At the very least, you will want one for consent, one for each questionnaire, and one for demographics.

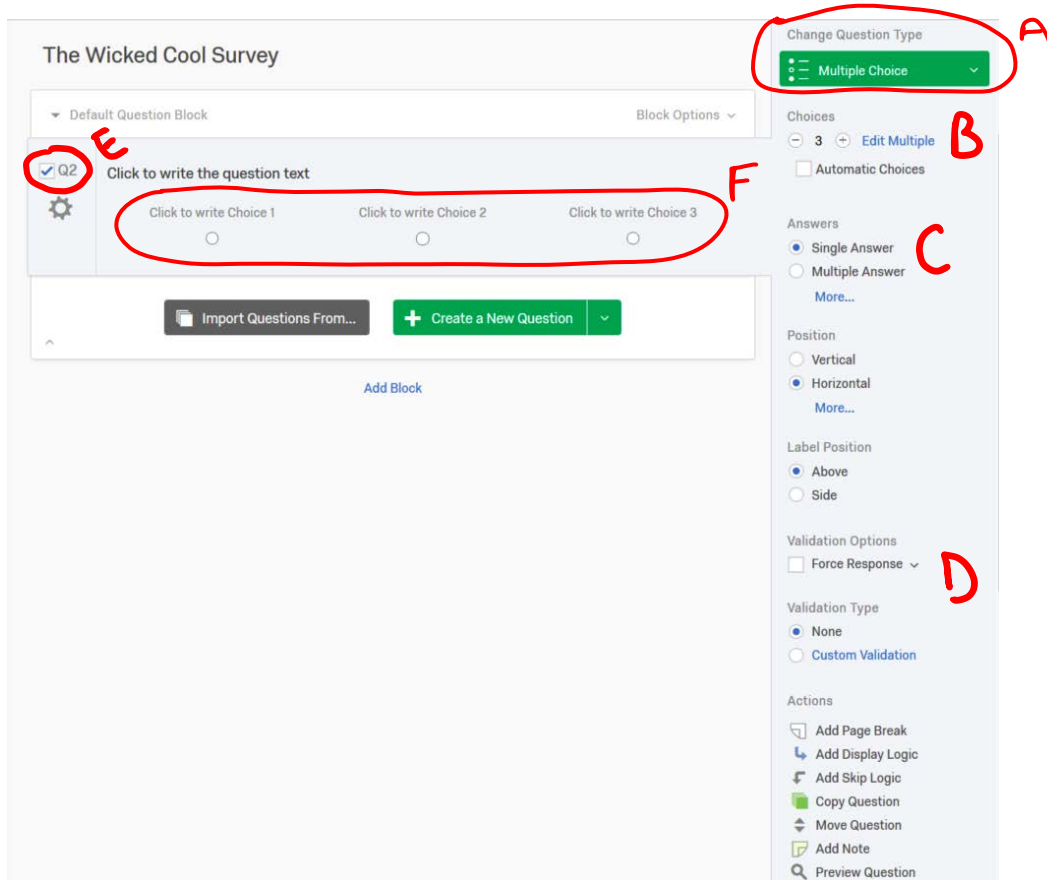
- ADDING BLOCKS

- The **Add Block Below** option is located on the **Block Options** drop-down menu (A).

- As you create each block you may want to name it appropriately by clicking on the block title (marked B in the figure above) and then typing the name you want. You don't have to worry about SPSS naming conventions with these block titles as they will not be transferred to SPSS.

2. Create Items/Questions.

- Click **Create a New Question** (C), unless you have questions you created in other studies that you want to copy.



- **Choose a Question Type:** With a few notable exceptions, the Multiple Choice format will be the way to go.

- Other formats are available by clicking the question type menu (A)
 - Text Entry for open ended questions like Age, GPA, and Other Ethnicity.
 - I strongly recommend that you DO NOT use the matrix table – there is an option there for so called “Likert scales”, which makes it really easy to create a questionnaire, but you lose control over the manner in which individual items are named and thus how they are assigned variable names in SPSS.

- Select the **Multiple Choice Options** you want

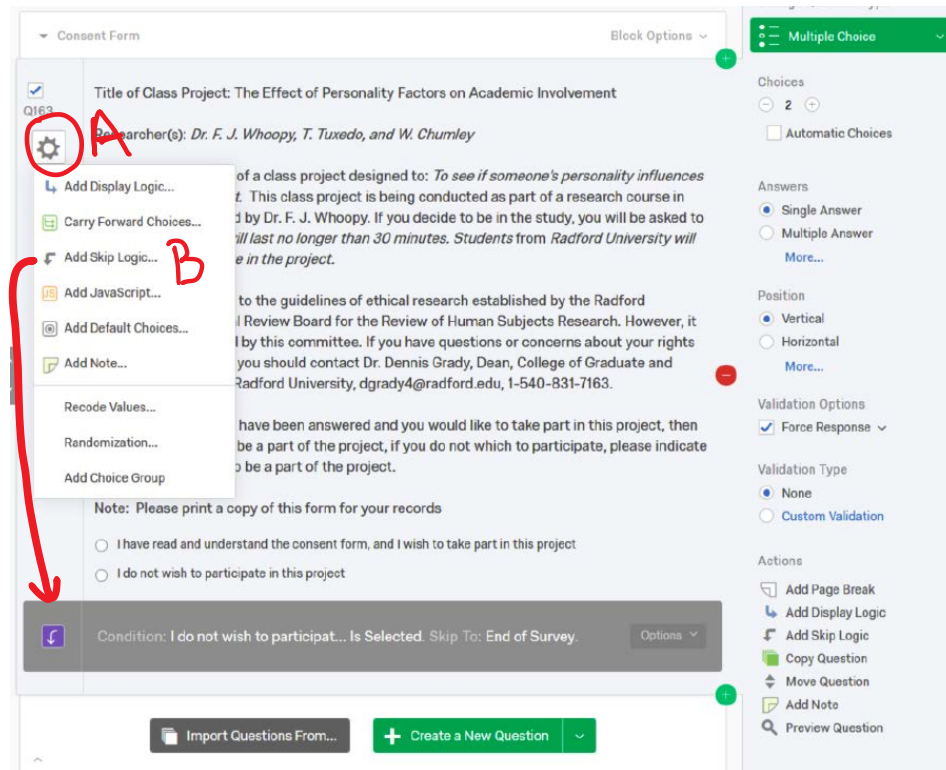
- Number of responses (B)
- Answer type (C) – forced choice radio buttons (single answer), check all that apply radio buttons (multiple answer), etc.
- Position – Horizontal or Vertical
 - Most of the time, you will want to use the horizontal layout so that it takes up less space on the screen and we can get more items on each page.
- Label Position – Above or Below
- Validation (D) – None or Forced Response
 - You will need to use the forced response for the Consent block, but after that you cannot use it, since your consent form probably says that participants do not have to answer every question if they wish not to.

- **Name the Question (E)** – If you click on the question name (upper left corner of the question box) you can rename each question. Qualtrics will use names like Q1, Q2, Q3 etc., which can make your SPSS file confusing to work with. It will be best if you give your questions more meaningful names. You will want to

follow SPSS naming conventions: no spaces, cannot start with a number, no special characters, but you can use underscore. What you type here needs to be readable by SPSS. Also, you should use as short a name as possible for these (8 characters or less). When you work with the data in SPSS syntax you will rue your decision to use long variable names. Qualtrix will label your variables (the long label that SPSS uses) based on the question content, which is actually a really cool feature.

- **Label the response options (F)** – You will need to type in your response options. E.g., Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree nor Disagree, Somewhat Agree, Agree, Strongly Agree. Qualtrix may automatically suggest some of these for you, but you need to check very carefully to make sure it is providing exactly what you want. Also, these labels will be imported directly into SPSS as value labels for ALL of your variables. This can be a little confusing as most of the time we don't need value labels unless the variable of interest represents groups. This doesn't cause any real problems for SPSS, so you can delete them or ignore them once you get your data into SPSS.

Once you type in the response format for the first question, you can then copy that item repeatedly and just change the question stem for each item. You don't need to keep typing the response format over and over.



3. The Consent form

- In block one, we have one question. The body of the question is the text of the consent form and we have selected two response choices, a single answer format, aligned horizontally, with the Validation option requiring a response (Force Response).

- We have also used the Add Skip Logic... option (B) from the Advanced Question Options drop down menu (A). If participants say no, then it kicks them to the debriefing at the end of the survey.

4. Questionnaire Blocks

- Here we have a questionnaire about how much people like Cheezy Poofs that we have named Cheezy Poofs Liking Inventory.
- Each item is a multiple choice, single answer, and horizontal without verification.
- We wrote the first question and entered the scale point labels by hand. We copied the first question 3 more times, so all we had to do was change the question stem. The copy question option is on the right hand side under the question type options.
- Notice that we have renamed each question: CPL1, CPL 2, CPL3, & CPL4. These will be the variable names that SPSS uses.

5. Randomization of Items within a Questionnaire

- From the **Block Options** drop-down menu, select the **Question Randomization...** option.
- Select **Advanced Randomization**.
- In the Advanced Randomization window, you will need to select all of the desired items listed in the **Fixed Display Order** field and move them to the **Randomized Questions** field.

- If you have included any items in this block to serve as your directions for that measure/task, then you will want to be sure you leave items associated with directions in the **Fixed Display Order** field.

The screenshot shows a survey editor interface with several demographic questions. The 'Ethnicity' question is selected and highlighted in blue. Below it, two conditional questions are shown, each with a gear icon for settings and a text entry field for the response.

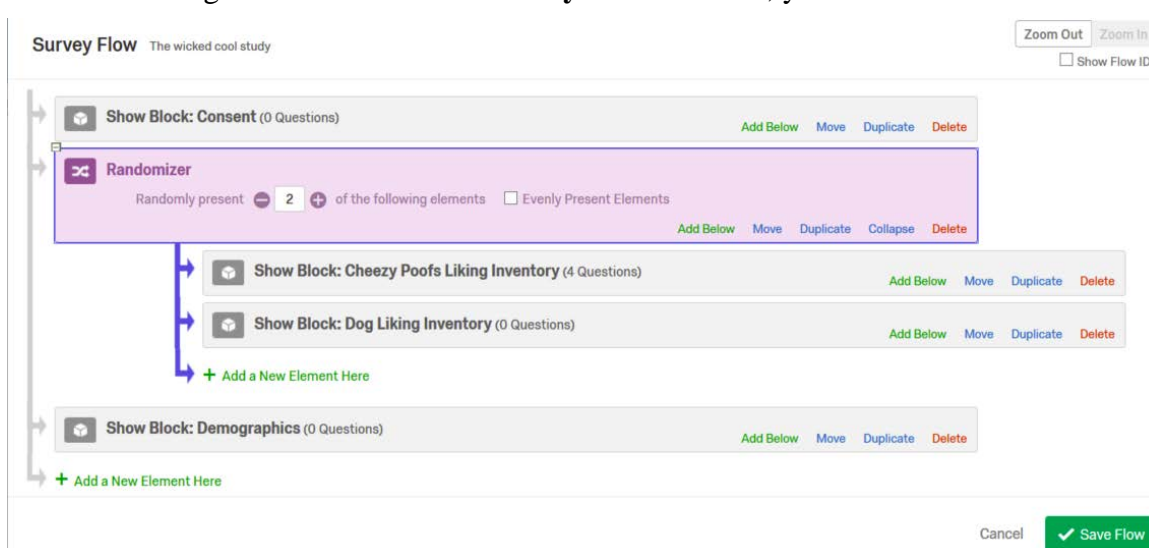
6. Demographics Block

- Gender/Sex is just a 2 option multiple choice question.
- For Age, in this example we have used the Text Entry question type for age. You could use the multiple choice format with 17, 18, 19, 20, 21, 22, 23, and other. The “other” response would require an additional open ended question like what we did with ethnicity below. This will complicate data analysis later, so you should probably just use the text entry format.
- When you use text entry for numerical data, SPSS will treat it as text (String Data) and you will need to convert it to numerical data in SPSS in order to run most statistical tests.
- Ethnicity will require a combination of multiple choice and text entry formats. The initial question is just single answer multiple choice. Then we have used the **Add Display Logic** option to two subsequent questions that address the Other Ethnicity and Multi-Ethnic responses. It is set up so that if you say Other Ethnicity, then you will be asked “If ethnicity is other – Please specify.” Alternatively, if you check Multiethnic status then you will be asked “If you answered Multitethnic-Please list all ethnic categories to which you feel you

belong.”

- To use the Add Display Logic option, we first created the items eth_oth and eth_mult. Then for each, we used the **Advanced Questions Options** drop-down menu (it looks like a little gear just below the question name) to select the Add Display Logic option. Then just filled in the question and response we wanted this item be contingent upon.

7. Randomizing Block Order: in the **Survey Flow** window, you can use the **+Add a New Element Here**



option to insert a randomizer that will present any blocks inserted here in random order. Make sure that you leave the demographics out of this section as it needs to always go last.

8. The Debriefing & Other Survey Options

My Projects > The wicked cool study

Projects Contacts Library Help & Feedback

Survey Distributions Data & Analysis Reports

Look & Feel Survey Flow **Survey Options** Tools

Preview Survey Search Questions...

Survey Options

Survey Experience

- Back Button. Enable respondents to change their responses.
- Save and Continue. Allow respondents to save and continue later.
- Show Question Numbers. Great for previews. For participants, try a [Progress Bar](#) instead.
- Use Custom Survey Validation Messages...

Survey Language: English The language the survey is written in.

Survey Title: Online Survey Software | Qualtrix This text will appear in the browser as the window or tab title.

Meta Description: Qualtrics sophisticated online su Search engines and social media services use this description.

Survey Protection

- Open Access. Allow anyone to take this survey.
- By Invitation Only. Prevent people from taking the survey using an anonymous survey link.
- Password Protection. This password must be entered to take this survey:
- Prevent Ballot Box Stuffing. Keep people from taking this survey more than once.
- HTTP Referrer Verification. The user must come from this URL to take the survey:
- Prevent Indexing. A tag will be added to the survey to prevent search engines from indexing it.
- Secure Participants' Files. Files uploaded as responses can only be viewed by users with permission to view responses.
- Survey Expiration. The survey will only be available for a specified date range.

Survey Termination

- Default end of survey message.
- Custom end of survey message...
 - Load a Saved Message...
 - My Library: Jeff Aspmeier > Academic Attitudes Study Debriefing
 - Organization Library: Radford Universit > New Message...
 - Rec...
 - Rec...
 - Send additional thank you email from a library...
 - Anonymize Response. Do NOT record any personal information and remove contact association (not recommended).

Create a New Message

Category: End of Survey Messages

Description: Wicked Cool Debriefing

Font Size B I U x₂ x² Source I_x

This is where I would type my wicked cool debriefing.

a. To set up your debriefing page, select the Study Options form the tool bar at the top of the Qualtrix page.

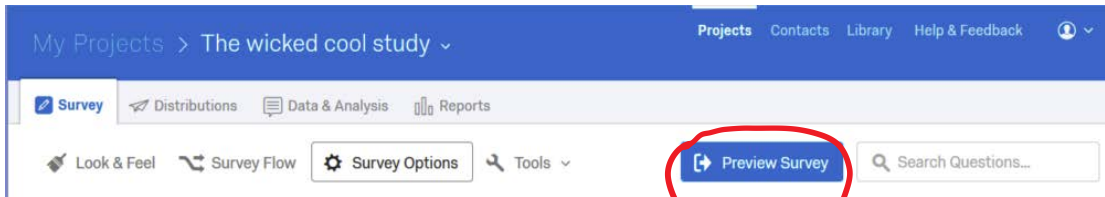
- Survey Termination – allows you to set your debriefing as the text for the final page
- Select the **End of survey message from library...** option list your library and select the **New Message** option.
- In the **Create a New Message** window, name your message and then paste the text of your Debriefing from the IRB proposal.
- At the end of your debriefing include a message in very large letters asking participants to print this page so they have our contact info and they have proof of participation if there is a problem with the SONA points.
- Also add a hyperlink back to the SONA login page like this one – [Return to SONA](#).

b. Other Options

- Anonymize Response – This will keep your data from recording IP addresses of participants. RU IRB prefers that you use this option if you are intending to collect anonymous data.

- Survey Experience – turn off the back button option. You probably don't want participants going back and forth on the questionnaires – especially if you are doing experimental manipulations.
- Survey Protection – enable the password protection and establish your password. You should probably use a single word that is easy to remember because it will be presented in SONA and participants have to remember it and be able to enter it. We often use “radford” as our password. It is easy to remember when participants go from SONA to Qualtrics.
- Partial Completion – not shown in the figure above. Set the time limit to 4 hours.

9. Preview your study – you can see what your questionnaire looks like and see how the data comes out by using the **Preview Survey** option on the survey toolbar. This is exactly how it will look for your participants.

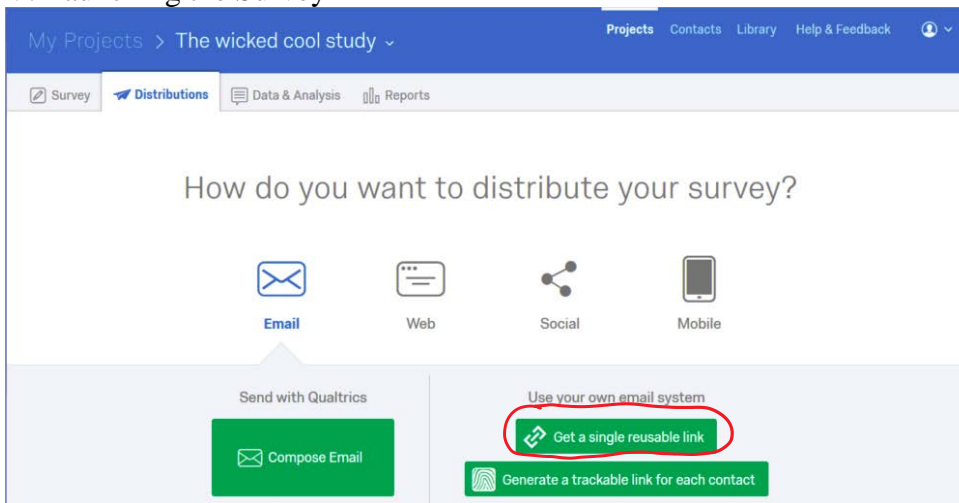


It will allow you to catch any mistakes before you launch your survey.

However, this data does get added to

your data file so you may want to use an identifier when you answer open ended questions (e.g., the AGE question), such as xxxxx, so you know it is only practice data and you can easily toss it out later.

V. Launching the Survey

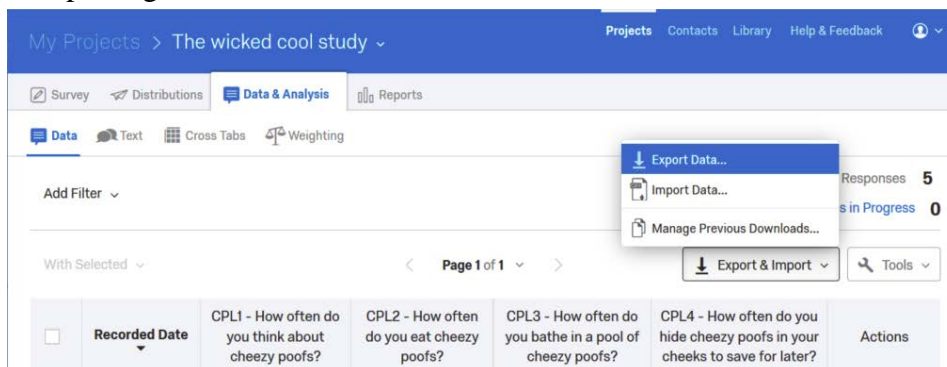


- Before launching your survey you should check all of the responses using the preview option. First go through and click on all the 1s from start to finish. Start the survey again and do all of the 2s. Repeat this process until you have taken the survey and clicked all of the possible options. Then export the data to SPSS (see below) and make sure the output is correct.

- When you are sure your study

is ready to go you can generate the URL (web link) for you survey by clicking the **Get a single reusable link** option on the **Distributions** tab. This will generate a secure (https://) link that you can then post on SONA, email to your participants, or distribute in some other manner. NOTE: Qualtrics typically leaves the “s” out of the https:// url. You should add the s when you are distributing it to folks.

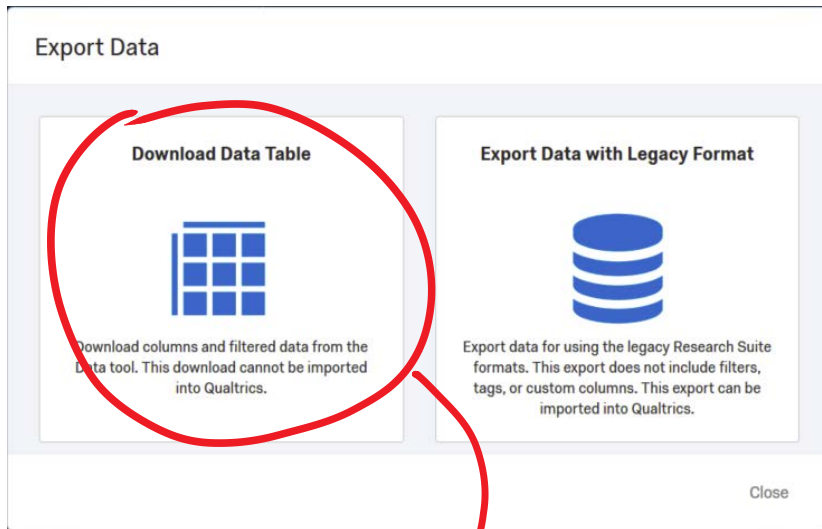
VI. Exporting Data



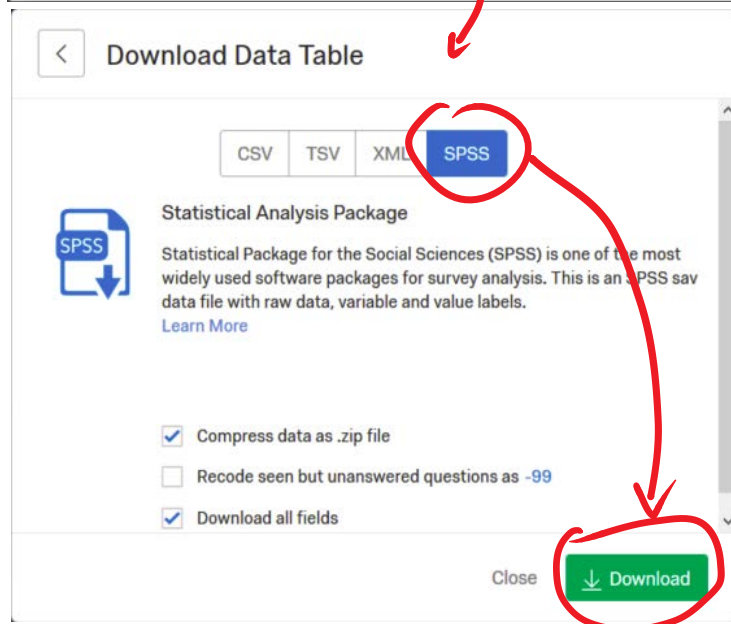
-You can view the results in Qualtrics, but it is really clunky.

- The best method is to download it as an SPSS file.

- Select the **Data & Analysis** tab and then click the **Export & Import** button and choose **Export Data....**



- Choose **Download Data Table** in the **Export Data Window**.



- In the **Download Data Table** window, select **SPSS**.

- Just go with the default values unless you really know what you want.

- The recode missing data as -99 can be kind of useful.

- Click **Download SPSS.sav** file and you should be good to go. Open it in SPSS and look at all your beautiful data.

- Be very conscious of how you are naming the SPSS files you import. They need to be clearly named so you can keep your test data (used during development) and your final data separate (e.g. Data-form-test.sav, Data-form-final.sav).

VII. Final Comments

There are obviously a lot of things you can do with Qualtrics. This guide really just covers the basics for a simple survey. You can also do much more complicated things with Qualtrics. You can include timers on responses that will record how long it takes for participants to respond, limit the time they have to respond, or make sure that they don't respond until a certain time limit has passed for a given item. You can include video, pictures, and audio in your survey. You can even use it to measure very gross reaction times. One thing to keep in mind though is that, when you use Qualtrics, you are at the mercy of the internet and network. Things happen and Qualtrics can get kind of glitchy on occasion. The more complex you make your study, the more likely it is that these little hiccups can affect your data.