

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 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, you can randomize separate groups of items, but randomizing the order of item grouping is difficult.

- The first Block will typically be your consent form. Moreover, 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. Measures:

- Each measure can be developed in its own block and then randomized the order of blocks. This way, you can randomize the blocks so that participants get the questionnaires in different orders and you can rule out any order effects between measures. In addition, you could randomize the order of items within block, so each participant will get a different order of questions items and you can rule out order effects within measures. 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. Although, some researchers prefer to give the demographics first to help participants get used to the response format or when a demographic variable represents a critical variable of interest.

#### 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 you can customize to be your debriefing/end of study description. 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. Accessing your 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.
- Accessing the account you have is quite easy as it has been linked you Radford University account already. <http://radford.qualtrics.com/> You will use your RU username (e.g. jdoe32) and password. You can also access Qualtrics within OneCampus, by searching Qualtrics or adding it to your favorites.

### III. Using Qualtrics

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

Type	Project name	Last modified ↑	Status	Responses	
★ Survey	PI 2 - Mask/Social distancing - Fall 2021	Sep 17, 2021	○ New	-	...
★ Survey	Views of Atheists - Private	Sep 17, 2021	● Active	4	...
★ Survey	Views of Atheists - Public Part 2	Sep 17, 2021	● Active	0	...

All Projects – has a list of all the surveys you have created, status indicators for which ones are active, the number of responses, and a drop-down list of **Actions** for each survey [including: Activate survey, Collaborate (where you can collaborate with team members), Rename Project, Copy Project, Edit Survey, Preview Survey, Distribute Survey, and Data and Analysis]. You can sort your projects based on name, most recently modified, and other criteria.

### IV. Create a new Project.

- You can either create a new survey project from scratch, 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), or use one of the templates (Guided Projects) offered.

- Most of the time you will create a project from scratch using the following steps.

- Click **Create New Project** (upper right). This will open a new window (below).

**Catalog** Search the catalog

All CoreXM & DesignXM CustomerXM ProductXM BrandXM

**Projects from scratch**

Survey

**Guided projects**  
Start building using a pre-build solution with step-by-step guidance

**Project Survey**  
Begin a survey from scratch or get started with a previous file.

**Best used for**

- Creating ad-hoc surveys

**What's included**

- Blank survey

**Related links**

[Learn how to create a survey](#)

**Get started**

- In the new window, select **Survey**, which will open a new pane to the right.

In that pane, select **Get started**.

- In the **Create a new project window**, give your new project a name, select the folder where you want the project to be located (the default of **All Projects and Programs** is usually OK). Finally select survey option you want: Create a blank survey project (a new survey from scratch), Import a QSF file (this is exported backup of an existing Qualtrics survey), or Copy a survey form an existing project.

, 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),

- 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.

## V. Building out your survey.

The screenshot shows a survey building interface. At the top, there are navigation tabs: Survey, Workflows, Distributions, Data & Analysis, and Reports. Below the tabs, there are buttons for 'Tools', 'Saved at 11:41 AM', and 'Draft'. On the right, there are 'Preview' and 'Publish' buttons. The main area is titled 'A Wicked Cool Survey' and shows an 'IQ Score: Great' indicator. A sidebar on the left contains 'Edit block', 'Block behavior' (with options for 'Question randomization' and 'Loop & merge'), and 'Format' (with 'Next/Previous button text'). The main content area shows a 'Default Question Block' (marked A) with a dropdown arrow (marked B). Below it is a question 'Q1' with a plus sign (marked D) and a minus sign (marked E). The question text is 'Click to write the question text'. Below the question text are three choice options: 'Click to write Choice 1', 'Click to write Choice 2', and 'Click to write Choice 3'. At the bottom right, there are two buttons: 'Import from library' and '+ Add new question' (marked C). The text 'Add Block' is visible at the bottom center.

### 1. Blocks.

- You will initially have a single block with one multiple choice question. 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/measure, and one for demographics.

- **ADDING BLOCKS**

- The **Add Block Below** option is located on the block options drop-down menu (marked A in the figure above).

- 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 do not 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.

- You can also click the little blue plusses that appear on the question when you hover over it. See D in the figure above.

- Delete questions by clicking the red minus. See E in the figure above.

Edit question

**Question type** Multiple choice A

**Answer type**

Allow one answer C

Allow multiple answers

**Choices**

Number of choices - 3 + B

[Edit multiple](#)

Use suggested choices

**Format**

List D

Alignment Horizontal

Label position Above

**Response requirements**

Add requirements

Add validation

**Question behavior**

[Display logic](#)

[Skip logic](#)

[Carry forward choices](#) E

[Choice randomization](#)

[Recode values](#)

Default choices

[JavaScript](#)

Default Question Block

Q1 F

Click to write the question text

Strongly disagree G

Disagree

Somewhat disagree

Neither a nor disag

Copy H

Replace from library

Add page break

Preview question

Add note

Delete

[Add Block](#)

**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 (marked A in the figure to the left)

- Text Entry for open-ended questions like Age, GPA, and Other Ethnicity.
- Text/Graphic is good for adding directions to a questionnaire.
- **I strongly recommend that you DO NOT use the matrix table** – there is an option there for so called “Likert scales”, which makes it 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 choices (B)
- Answer type (C) – forced choice radio buttons (allow one answer), check all that apply radio buttons (allow multiple answer), etc.
- Position – Horizontal or Vertical Alignment (D)
- 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 (E) – 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 do not want to.

- **Name the Question (F)** – 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 is best if you give your questions names that are more meaningful. You should 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 variable label that SPSS uses) based on the question content, which is actually a nice feature.

- **Label the response options (G)** – 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. Qualtrics 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





## 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.

**Question Randomization**

No Randomization

Randomize the order of all questions

Present only  of total questions

**Advanced Randomization** [Set Up Advanced Randomization](#)

Note: Enabling Question Randomization will ignore page breaks, questions per page, skip logic and override question order.

Close

**Advanced Randomization**

**Fixed Display Order**  
Display the questions in the order they appear below:

{(Randomized)}  
{(Randomized)}  
{(Randomized)}  
{(Randomized)}

**Randomize Questions**  
Randomize and insert all items from the list below:

How often do you think about Cheezy Poofs?  
How often do you eat Cheezy Poofs?  
How often do you bathe in a pool of Cheezy Poofs?  
How often do you hide Cheezy Poofs in your cheeks?

**Random Subset**  
Randomly insert  questions from the list below:

Evenly Present Elements

**Undisplayed Items**  
Do not display the questions below:

**Questions per Page**  
Show  questions on each page.

Close

- 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.

## 6. Demographics Block

**Question type**  
Text entry

**Text type**  
Single line

**Response requirements**

Add requirements

Add validation  **A**

Content type  **B**

Content type  **C**

Minimum

Maximum

Maximum decimals

**Demographics**

age  
What is your age?

+ Add page break

gender  
What gender do you identify with?  
Male  Female  Additional Gender Identity  Prefer Not to answer

gen\_add  
Display this question  
If What gender do you identify with? Additional Gender Identity Is Selected  
You indicated additional gender identity; what gender do you identify with?

- For Age, in this example we have used the Text Entry question type for age. When you use text entry for numerical data, be sure to require numeric response validation. Otherwise, SPSS will treat it as text (String Data) which limits the types of analyses you can conduct. Do to this, under response requirements we selected Add validation (A), Content type (B), and Number (C).
- In this example, Gender/Sex is a 4-option multiple choice question. We have also set it

up so that if a participant selects Additional Gender Identity, they will be asked an open-ended question about that that identity is. We this up using the display logic feature, which is demonstrated in the Ethnicity example on the next page.

Text type

Single line

Response requirements

Add requirements

Add validation

**Question behavior**

- Display logic** (A)
- Skip logic
- Default choices
- JavaScript

ethnicity

What is your ethnicity?

- European-American/Caucasian/White
- African American
- East-/Southeast-Asian American
- Pacific-Islander American
- South-Asian American (e.g., from India, Pakistan, Burma, Nepal, ect.)
- Middle-Eastern/North-African American
- Hispanic, Latino/a, Chicano/a American
- Caribbean American
- American Indian/Native American
- Multi-Ethnic
- Other

eth\_multi

Display this question

If What is your ethnicity? Multi-Ethnic Is Selected

You indicated multi-ethnic background; what is your ethnicity?

eth\_oth

Display this question

If What is your ethnicity? Multi-Ethnic Is Selected

You indicated other ethnicity; what is your ethnicity?

- Ethnicity requires a combination of multiple choice and text entry formats. The initial question is just a single answer multiple choice. Then, from the **Question Behavior** options, we have used the **Add Display Logic** option (A) 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 “You indicated other ethnicity. What is your ethnicity?” Alternatively, if you check Multiethnic status then you will be asked “You indicated multi-ethnic background. What is your ethnicity?”

- To use the Add Display Logic option, we first created the items eth\_oth and eth\_multi. Then for each, we used the **Question Behavior** options to select the Add Display Logic option. Then just filled in the question and response we wanted this item be contingent upon.

Display Logic (You chose multi-ethnic, what is your ethnicity?)

Display this Question only if the following condition is met:

Question ethnicity What is your ethnicity? Multi-Ethnic Is Selected

In Page

Close Save



## 7. Randomizing Block Order

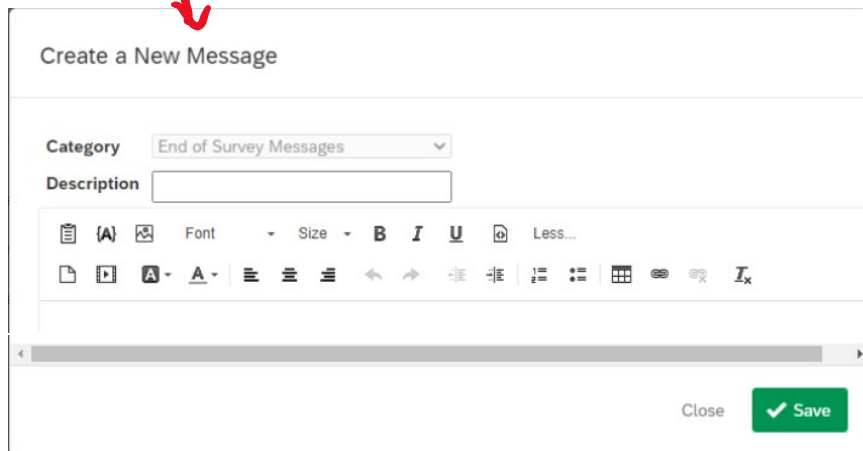
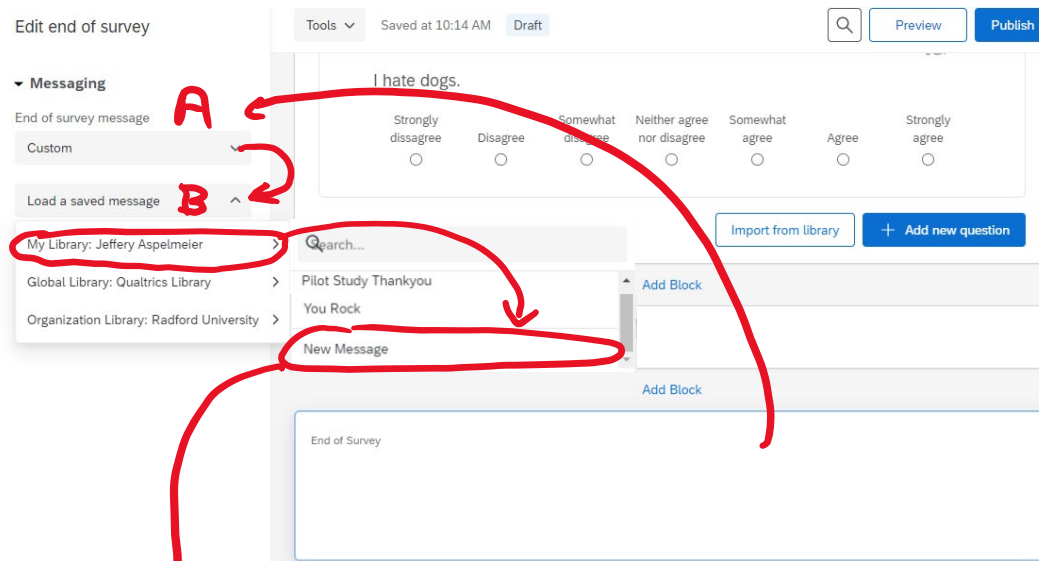
- In the **Survey Flow** window, you can use the **+Add a New Element Here** option to insert a randomizer that will present any blocks inserted under it random order.
  - Use the **Move** option to drag and drop the elements into the order you want.
    - We moved the randomizer under the consent form block after the randomized was added.
    - Next we moved the Cheezy Poofs and Dog Liking blocks into the randomizer.
- Note that the randomizer is set to **Randomly present 2** elements. This ensures that participants get both elements in a random order. In an experiment, where each block represents a different condition, you would want to set it so they only get 1 of the elements in the randomizer.
- It is a good idea to check the box for **Evenly Present Elements**, to help keep the number of cases in each order or condition as even as possible (keeps your group sizes equal).
- Make sure that you leave the demographics out of this section as it typically needs to go either first or last in the survey.

The screenshot displays the 'Survey flow' editor in a 'Draft' state. The interface includes a top navigation bar with 'Survey', 'Workflows', 'Distributions', 'Data & Analysis', and 'Reports'. On the left, there are icons for a list, a document, and a search. The main area shows a vertical flow of blocks:

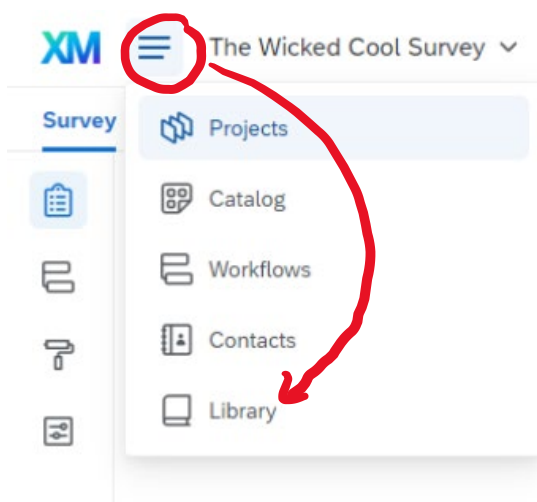
- Show Block: Consent Form (1 Question)** with options: Add Below, Move, Duplicate, Delete.
- Randomizer** block, highlighted with a blue border. It is configured to 'Randomly present 2 of the following elements' with the 'Evenly Present Elements' checkbox checked. It contains two sub-blocks:
  - Show Block: Cheezy Poofs Liking Inventory (5 Questions)** with options: Add Below, Move, Duplicate, Delete.
  - Show Block: Dog Liking Inventory (3 Questions)** with options: Add Below, Move, Duplicate, Delete.
- + Add a New Element Here** (green text)
- Show Block: Demographics (9 Questions)** with options: Add Below, Move, Duplicate, Delete.
- + Add a New Element Here** (green text)

At the bottom right, there are 'Revert' and 'Apply' buttons. A 'Show flow IDs' toggle is visible in the top right corner.

## 8. Customizing the End of Survey Message with your Debriefing/Thanks



SONA login page like this one – [Return to SONA](#).



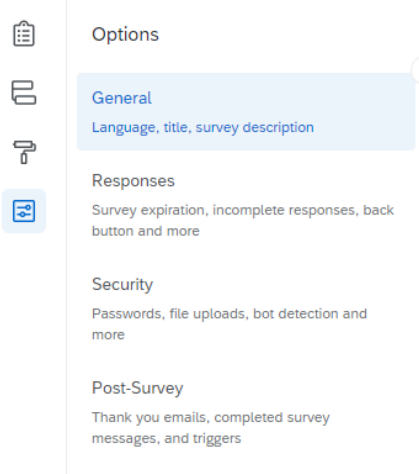
a. To customize your end of survey message, click on the end of survey block at the bottom the Qualtrix survey. This will open the **Messaging** pane to the left of the blocks.

- Within the Messaging pane change the **End of survey message** (labeled A) from **Default** to **Custom**.
- In the next option box (B), select **Load a saved message**.

- The in **My Library: Your Name**, choose **New Message**.
- 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

- NOTE: whichever collaborator creates the message will be the only person who can edit it in the future. To edit the message you will have to go to your message library, by selecting the drop down menu by **XM** (upper left part of the page) and selecting **Library**. In Library select **Messages Library** from the toolbar at the top of the page. From there, you can open your message and select the Edit option to make modification to the messages you have created.

## 9. Survey Options



### A. General Options:

- Here you can customize web display name and survey description that will appear on web page tabs and social media posts for your survey. These are relatively new features.
- You can also toggle on and off the option for participants to see question numbers and the Expert Review, which makes suggestions for optimizing your survey as you build it.

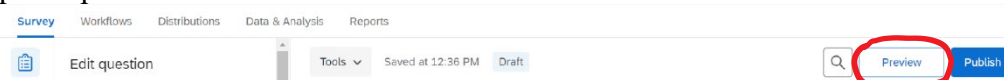
### B. Responses:

- 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.
- Here you will want to set the system to so that people can leave the survey and come back to the place they left off, but also record Incomplete survey responses, 4 hours after they stop answer questions. The default is 1 one week, and that is usually too long for our purposes.

### C. Security:

- This is where you set the password to your study. 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.
- 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.

**10. 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.

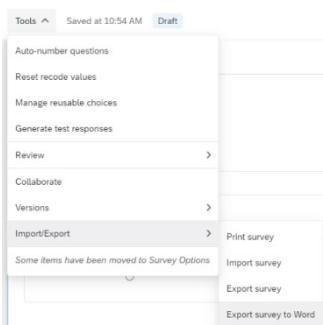


It will allow you to catch any mistakes before you launch your survey.

Note: The data generated does get added to your data file. However, it is marked with an identifier (preview data) in your data file, so you know it is only practice data and you can easily toss it out later... just don't forget to toss it out.

**10. Publish changes or your survey** – Whenever you make change to your survey, they will not be carried forward to the final version of the survey until you hit **Publish**. Hitting publish will also prompt some unsolicited advice from Qualtrics about your survey.

## VI. Launching the Survey

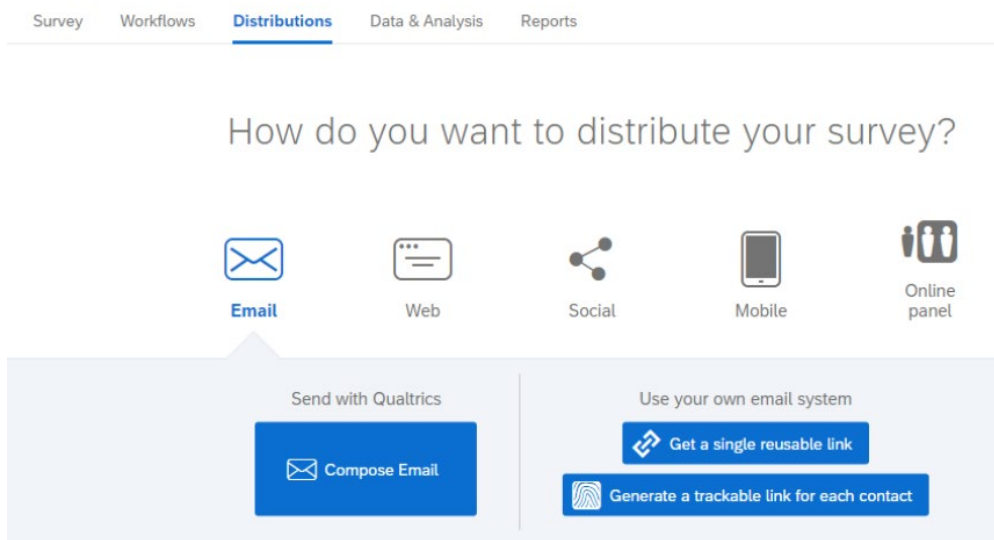


- Before launching your survey, you should check all of the responses and make sure they return the data you want. There are many ways to do this. The easiest way it to check the **Recode values** for each item. You do this in Qualtrics by opening the **Recode values** window for each item (this is an option under **Question behavior**), but that is tedious and time consuming. The fastest way is to export the survey as a word document. This option is under Tools > Import/Export > Export survey to Word. Be sure to select the **Use Question Number** and **Use Recode Values** options. In the word document make sure that the values are correct (e.g. selecting strongly disagree should return a score of 1

and strongly agree should return a score of 7). These do sometimes get wildly out of order or out of range in the process of creating your survey. When you find errors, you will need to go back into Qualtrics and manually change the **Recode values** for the affected items.

- 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.



## VII. Exporting Data

The screenshot shows the Qualtrics Data & Analysis interface. At the top, there are navigation tabs: Survey, Workflows, Distributions, **Data & Analysis**, and Reports. Below these are sub-tabs: Data, Text IQ, Crosstabs, and Weighting. A table of survey questions is visible, with columns for 'Recorded Date', 'ethmult - You indicated multi-ethnic background. What is your ethnicity?', 'ethoth - You indicated other ethnicity. What is your ethnicity?', 'Q1 - Title of Class Project The Personality of Achieverment Investigators(s)', and 'CPL03 - How often do you bathe in a pool of Cheezy Poofs?'. A red circle highlights the 'Export & Import' button in the top right of the table area. A dropdown menu is open, showing options: 'Export Data...', 'Import Data...', 'Response Export Automation...', 'Response Import Automation...', 'Manage Previous Downloads...', and 'View Automation History...'. A red arrow points from the 'Export Data...' option to the 'Download Data Table' window. This window has a title bar 'Download Data Table' and a 'Use Legacy Exporter' link. It features a row of file format buttons: CSV, TSV, XML, **SPSS**, and User Submitted Files. Below this is a section for 'Statistical Analysis Package' with a description and a 'Learn More' link. A checkbox 'Download all fields' is checked. At the bottom, there are 'More Options', 'Close', and a green 'Download' button with a downward arrow icon. Red circles highlight the 'SPSS' button and the 'Download' button, with a red arrow pointing from the 'SPSS' button to the 'Download' button.

- 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....**

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

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

A COUPLE OF NOTES:

- Check out the **More Options**. Here you can turn off the option that downloads your spss data file in a Zip folder. It is not necessary and adds unnecessary steps to opening files.
- You can also select the **Export viewing order data for randomized surveys**. This will be very helpful in creating a variable that represents either random assignment to condition or random assignment to order in which the surveys were completed.

## VIII. Final Comments

There are obviously many 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.