

Qualtrics Survey Software Slides 1

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What we'll cover today

- What is Qualtrics?
- Why should we care?
- Introduction session
 - Basic features
 - Tips and Tricks
 - Distribution
 - Handling data

What is Qualtrics?

- *qualtrics XM* or Qualtrics is a private research software company (recently bought by SAP, hence the name change)
- Offers software solutions for online data collection
- Most interesting for us: **Qualtrics Survey Software (QSS)**
- QSS let's you create online surveys, it includes many features that makes it useful to conduct experiments or gather data online (more on this later)

Why Qualtrics?

- Qualtrics is not the only online survey platform (SurveyMonkeys, Google Forms, Gorilla, Lab.js.org, etc)
- It's free to many students! Inquire about the link to your university's Qualtrics site from your IT department
- Qualtrics and other platforms operate on a freemium model, free account gives access to basic features, advanced features need to be paid for
- For you, Qualtrics advanced features are for free!!!

Features of QSS

- Web-based, GUI, create and manage online surveys
 - **No prior knowledge in programming required**
- Includes logic branching, display logic, randomization
 - **Easy to create experiments with different treatments**
- Includes many predefined question types and supports JavaScript and html
 - **In combination allows complex experimental designs**
- Built-in distribution system, but also works fine with crowdsourcing platforms, social media

Weaknesses of QSS

- Software solutions, this means respondents have to be acquired elsewhere
 - **Previous years: Convenience sampling or social media**
- Designed to work with the pre-defined questions types
 - **No support for customizations (there is a forum)**
 - **No documentation of internal process (e.g. naming of variables)**
 - Can be circumvented, but a bit cumbersome*
- Live interaction between participants not possible, games difficult to implement (strategy method!), check OTree if interested in the latter

What I/my group has done so far

- Research line Behavioral Economics
 - More than 3000 data points collected so far
 - Used in the laboratory and crowd-sourcing platforms
 - Used in various domains (Bayesian Truth Serum, Choice experiment to elicit probability equivalents using the bi-sectional approach, Cheating behavior, Distributional justice, Risk and time preferences...)
- Master students previous years
 - Under my supervision alone 10 independent studies in the last 15 months
 - Ranking and choice experiment about mobile phone plans with asymmetric dominance, measuring political belief polarization, solving mathematical equations, priming effects in willingness to pay for environmental goods, brand-recognition in different advertisement formats, ...

Why the tutorial today?

- Overall positive experience with the platform
- Could be a powerful tool for you to gather data for your master thesis
- Low-level of programming knowledge leads to satisfactory results quickly!
- Works very well with social media, cheaper and quicker way to gather data!

The structure of slides

- Slides complement online videos.
- Slides raise awareness, videos give practical insights
- Slides highlight interesting features, videos illustrates implementation
- Take this as invite to explore the platform yourself

Before we start...

- Please note that two tutorials are not enough time to cover all features of Qualtrics in detail
- Qualtrics has great online support, with video clips and how-to guides: <https://www.qualtrics.com/support/survey-platform/getting-started/survey-platform-overview/>
- Please consult the official support and the helpful community (<https://www.qualtrics.com/community/>)

Basic jargon Qualtrics

- Qualtrics surveys organized in **BLOCKS**, collection of question used for randomization, grouping, looping, etc
- Individual **Questions** are pre-defined, many different types of question, to some degree customizable (especially if you are familiar with html)
- **Survey flow**, determines the flow of the survey, what will be presented when and how

Basic jargon Qualtrics cont.

- Typical way to build experiment
 - Create individual questions needed for experiments
 - Group questions into blocks (thematically, treatment, etc)
 - Use survey flow to build experiment (tree logic, you can create nodes and branches, route subjects through different parts of your experiment, present randomly only parts of your survey, etc)

Important notes about question types (I)

- There are many question types, multiple choice, slider questions, text entry, rank order, etc
- Every question type comes in many guises with many different options!!!
- Find out by playing around with them a bit!!!
- Question text can be entered plain, using the Qualtrics editor to customize text, or by html commands if you are familiar with the language

Important notes about question types (II)

- Many options to randomize presentation
 - Randomize question items to minimize order effects in responses
 - Present random sub-set of items
- Possibility to set defaults
- Carry forward choices to sub-sequent questions
- ...

The power of the survey flow!!!

- Many users misconceive the graphical user interface as the survey builder, **WRONG!**, survey flow is the way to build your survey!!!
- Allows you to use branch logic via simple drag and drop to navigate participants through your survey

Embedded data

- Basically how variables are called in Qualtrics
- Can be used for many things:
 - Branch logic in survey flow (condition on value from embedded data field)
 - Display values in questions
 - Display logic in questions
- Most important application: TREATMENT randomization

Basic experimental design

With our knowledge so far we can already design experiments

1. Create questions relevant for experiment
2. Use *embedded data* field and *Randomizer* from *Survey flow* to implement treatment randomization (stratified randomization possible, ensures approximately equal sample sizes between treatments for small samples, called “Evenly present elements”)
3. Use Survey flow to build survey

Tips and Tricks: Presentation styles

- Explore the Look&Feel tab, many customization options available
 - Color text
 - Buttons
 - Progress bar
 - Customizable via css style sheets (right click on element to inspect and get name)
 - ...
- Question text have rtf editor (font style and size options, etc)
- Piped text: extremely useful way to “pipe text” like *embedded data*, naming of variables, or old answers, available as option in many menus

Tips and Tricks: Distribution

- Built-in distribution system
 - Upload contact list (example list available online, excel file)
 - Send invitation message to members from contact list
 - Personalized links
 - Used this in past to run surveys on course participants
- Anonymous link
 - One anonymous link
 - Can be posted via social media
 - Non-personalized

Tips and Tricks: Survey options and Data

- Explore the survey options tab, many useful options for survey
 - **Prevent Ballot Box Stuffing:** Keep people from taking this survey more than once
 - **Save and Continue:** Allow respondents to save and continue later
 - ...
- Data handling, most important feature is export data
 - Use legacy exporter to get all data as stored on server
 - Many useful options like exporting randomization orders, etc
 - Careful, Qualtrics data often a mess, cleaning data takes some time...
 - Name Questions properly via Question tags

Thanks for your attention!

Next week we handle some more advanced features, feel free to explore Qualtrics in the meantime