Survey Basics: Introduction to Qualtrics

IRAP Professional Development Workshop Series
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Outline

1. Background on Surveys and Assessment
2. Intro to Qualtrics
3. Survey Construction
4. Administering Your Survey
5. Interpreting Your Results
6. Additional Survey Setup Options
Why Surveys?

• Learn about a population

• Purpose
  • “Pulse”
  • Prioritize Actions
  • Indirect Assessment
  • Provide Benchmarking

• At Oxy, scientific sampling is essentially impossible
  • Convenience Samples
  • Goal: Response Rate of 60-70%
  • Post-Hoc Weighting
Assessment and Making Data-Driven Decisions

• In the context of Oxy, surveys have the power to inform decision making processes and drive intelligent evolutions of projects and services

• Academic departments, support units, and administrative offices are all either encouraged or internally required to engage in the collection of assessment data

• By engaging in the collection of quantitative data, your department can become more responsive and improve satisfaction of your end-users
What is Qualtrics?

• Qualtrics is a professional survey administration and management tool
  • Google Forms has proven to be a popular alternative, but serves only very simple needs
• Oxy has an institution license
  • For an account, email Carey Sargent (sargent@oxy.edu)
• Collaboration on surveys with anyone at Oxy is easy
Designing Survey Questions

• Research Question? PURPOSE?
  (think about your hypothesis/conclusion/abstract/report)
  • LESS IS MORE!
  • Focus on Knowledge, Skills, Attitudes
  • Validity (Content) and Reliability (Consistency)
    • Pilot your survey, get feedback, know your audience
  • Think about your analysis while developing
Dos and Don’ts of Surveys

• Ensure
  • Questions and responses are *clear* and *concise*
  • Response categories are *exhaustive* and *mutually exclusive*

• Avoid
  • Double negatives
  • Double barreled questions
  • Biased/leading questions
Building Your Instrument

• Your survey instrument should be as short and as straightforward as possible while still measuring what you need it to - only ask necessary questions
  • People are much less likely to complete your survey if it is long
  • If you must have a long survey, split questions into groups on different pages
    • Two benefits: saves partial responses should people drop-off partway through; may increase completion speed & response rate
Question Design Choices

• Types of questions:
  • General Forms
    • Multiple Choice
    • Slider/Scale (snap to whole numbers in most cases, especially when Likert)
    • Matrix
    • Free Response
  • Unusual Forms
    • Rank Order Lists
    • Explanatory/Introductory Text
    • Document Upload

• Not all question types work on mobile devices - an amber asterisk will indicate compatibility issues (sliders are the most popular type of question with mobile issues)
Other Design Features

- **Question Blocks**
  - Blocks show up as separate pages in the live survey
  - Have an introductory page as the first block

- **Display and Skip Logic**
  - Display logic allows you to create *contingency questions* - questions that only display in response to a condition (such as if the respondent says *yes* to a question)
  - Skip logic allows you to jump to a different section of the survey in response to a condition
Steps before Launch

• Survey Options and Look and Feel are the two final settings menus to be addressed before launching a survey.

• Survey Preview allows you to see how the survey will look to your respondents.

• Launching is the final step before administering your survey.
Under the Edit Survey tab, there are other tabs. This is Survey Options. In this window, you can make changes to the mechanics of the survey such as Survey Experience, Survey Protection, Survey Termination...
Survey Termination is something you may want to edit individually for each survey you create. These settings determine what happens when the survey is completed, such as a completion message or a thank-you email.
Embedded Data
In order to import the embedded data fields from your panel to your survey results, add them to the “Survey Flow”
Set Embedded Data:

Enter Embedded Data Field Name Here... Value will be set from Panel or URL. Set a Value Now

Add a New Field

Add Below  Move  Duplicate  Add From Panel  Options  Delete
Import Panel Embedded Data

Select a Panel...

Please Select...

[Cancel] [OK]
Next to Survey Options, there is Look and Feel. When you choose this options tab, you will be taken to a preview of the website. At the top of this preview, you will be able to customize the survey’s appearance.
On the same toolbar as Look and Feel and Survey Options, there is Preview Survey. This shows you how the finished product will look.
The last step of creating a survey is to finalize it. This can be done by clicking on Launch Survey under the Edit Survey tab or by clicking on the Distribute Survey tab. To finalize your survey, you must activate it by clicking the Activate Survey button. There are also several distribution methods on this page as well as information on viewing survey results.
Administration: Panel or Anonymous Link?

• Panel
  • Use for administering to set list of people
  • Use when you want to link respondents with responses
  • Use to link *embedded data*

• Anonymous Link
  • Use for sending to listservs, posting on websites, etc.
  • Use when you don’t need to link respondents
  • Use for anonymous data collection
Panel Administration: An Overview

• Panel administration is more complicated than anonymous link

• Emails are personalized (mail merge)

• Embedded Data
  • Link information about the respondents that you already have to their responses (Ex: major, team, residence hall, etc)

• Can send reminder emails to people who haven’t responded (without re-emailing the entire panel)
Data

• Guiding Questions:
  • Purpose of the instrument?
  • Instrument design?
  • Target sample?

• Learning about your sample
  • Run frequencies and descriptives on demographics
    • Compare to Oxy
Stats

• Variables
  • Independent
    • Varies across the population; inputs
  • Dependent
    • Responds to independent; outcome
Stats Continued

• Types of Variables
  • Continuous vs. Categorical

• Quantitative Data - Continuous
  • Interval: interval between measures has mean (age)

• Qualitative Data - Categorical
  • Nominal - named groups - sex, yes/no, race, etc.
  • Ordinal - order matters - Likert Scales (agree to disagree)
Frequencies and Descriptives

• Frequencies - for Categorical Variables
  • What % are in each category?

• Descriptives - for Continuous Variables
  • Mean/Media/Mode/Min/Max/Range/standard deviation
## Understanding Data - Statistical Tests

- **Research Question**
  - What do you need to do?

<table>
<thead>
<tr>
<th>Test</th>
<th>Purpose</th>
<th>Type of Data Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptives</td>
<td>Exploratory/Description</td>
<td>1 Continuous</td>
</tr>
<tr>
<td>Frequencies</td>
<td>Exploratory/Description</td>
<td>1 Categorical</td>
</tr>
<tr>
<td>Cross-Tabs</td>
<td>Exploratory/Description/Intergroup comparison</td>
<td>2 Categorical</td>
</tr>
<tr>
<td>T-Tests</td>
<td>Difference - between two groups</td>
<td>1 Categorical &amp; 1 Continuous</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Difference - between many groups</td>
<td>1 Categorical &amp; 1 Continuous</td>
</tr>
<tr>
<td>Correlation</td>
<td>Relationship - between two variables</td>
<td>2 Continuous</td>
</tr>
</tbody>
</table>
Interpreting Results: Three Approaches

• Qualtrics has two ways to view and interpret results:
  • Results Tab
  • Reporting (Beta) Tab

• Additionally, you can download the data as a csv file and analyze the data yourself in Excel, SPSS, Stata, R, etc.

• Results allows you to view individual responses and frequencies/descriptives (distributions & mean/median/mode)

• Reporting allows you to quickly build an exportable report with more detailed analyses (Ex: crosstabs)
Reporting Using Qualtrics
Filters: Reporting on subpopulations

- Qualtrics allows you to create a report on any subpopulation using *Filters*
  - You can filter on a response to a question or embedded data
9. Being an Oxy athlete has contributed to the development of the following. (Drag each characteristic.)

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>GREATLY</th>
<th>SOMEWHAT</th>
<th>NOT AT ALL</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leadership Skills</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal Skills</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Physical Health</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Work Ethic</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Time Management</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Goal Setting</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Self-Confidence</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Initiative</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Self-Awareness</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Mental Training/Toughness</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Teamwork/Collaboration</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Mastery of Sport</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Mentorship</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Results Tab
### Current Class Standing

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freshman</td>
<td>32</td>
<td>32%</td>
</tr>
<tr>
<td>2</td>
<td>Sophomore</td>
<td>24</td>
<td>24%</td>
</tr>
<tr>
<td>3</td>
<td>Junior</td>
<td>17</td>
<td>17%</td>
</tr>
<tr>
<td>4</td>
<td>Senior</td>
<td>26</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>99</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table Options

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min Value</td>
<td>1</td>
</tr>
<tr>
<td>Max Value</td>
<td>4</td>
</tr>
<tr>
<td>Mean</td>
<td>2.37</td>
</tr>
<tr>
<td>Variance</td>
<td>1.42</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.19</td>
</tr>
<tr>
<td>Total Responses</td>
<td>99</td>
</tr>
</tbody>
</table>
Graphs of frequency distributions can be added with one click.
Cross Tabulations in Results
<table>
<thead>
<tr>
<th>Current Class Standing</th>
<th>Sex</th>
<th>What sports did you play? (Check ALL that apply)</th>
<th>What sports did you play? (Check ALL that apply)</th>
<th>Select all that apply to your role/accomplishments this season:</th>
<th>Did you complete the competition season?</th>
<th>Were you recruited by Oxy Athletics?</th>
<th>Please respond to the following statements:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Athletics played a major role in my decision to come to Oxy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oxy Athletics have added to my college experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>My friends at Oxy are mostly my teammates</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I improved as an athlete this season</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I believe my playing time was equal to my ability and effort</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>It is difficult to balance athletics and class work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I enjoy being part of the Oxy Athletic community</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>If you were a new student at Oxy again, would you still decide to participate in athletics?</td>
</tr>
</tbody>
</table>
Please respond to the following statement: "Athletics played a major role in my decision to come to Oxy.

<table>
<thead>
<tr>
<th>Were you recruited by Oxy Athletics?</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>12</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>29</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>25</td>
<td>75</td>
</tr>
</tbody>
</table>

Turn on row and/or column percent under “Data Options” on the right-hand side.
Using Reporting to Build a Professional Report

• Reporting allows you to quickly build a professional and presentable report on your data

  • Less is more - don’t include design elements if they aren’t relevant to how you are using the data (Ex: stats table)

  • Download into Word if more flexibility needed
Reporting Feature

CREATE NEW REPORT
Graphs default to bar graphs but can be quickly altered to more appropriate representations by selecting the graph Filters can also be applied here
Crosstabs and other types of tables can also be inserted into Reports.
Exporting Your Report

- Reports can be exported into many formats, most usefully Word or PDF format
- Please note that exporting takes painfully long, as this feature is still in beta - it really is working in the background
Paths for Further Analysis

• Download data from Qualtrics - Excel, SPSS, etc.
  • Data cleanup
  • Analysis for missingness
    • Subgroup weighting
  • ANOVA, Regression, multi-level crosstabs, t-tests, correlations