WEXTOR tutorial: Re-creating the cup experiment

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If you do not have a WEXTOR account yet: click „sign up“ and fill in the short form. You will receive an e-mail with an activation code. You will need to enter that code only during your very first login, afterwards your login and password will suffice.
Log in:

We will now create a simple one factorial experiment with two levels on that factor. We will later expand the experiment to a 2x2 factorial experiment. (Note that WEXTOR can also be used to create surveys by simply ignoring the factorial variations.)

On the first screen after login click on “Create/Modify an experimental design”: 
Type in a name for your experiment and click “create”, then click on “modify” in the newly appearing line. Then, on the following screen, define your factors. We will need one between-subjects factor.

On the following screens, just read what it says and copy what you see here.
Step 2

Defining factors

Your experiment consists of 1 factors. Please name all factors and indicate the number of levels for each factor.

Between-subjects factors

Please name your between-subjects factors and indicate the number of levels for each factor.

Name: reference point  Number of levels: 2

Step 3

Defining levels

Please name the levels of the factors, you defined in Step 2.

Between-subjects factors

Please name the levels of your between-subjects factors!

Factor 'reference point'

Name: 4 --> 2
Name: 0 --> 2
Defining experimental conditions

Please name your experimental conditions. We already made a naming proposal, which consists of the abbreviated form for the experimental condition and four random characters. Please note that it is wise to NOT use names that reveal information about the underlying structure of your Web experiment.

If your experimental design is incomplete, you may now erase the superfluous experimental conditions. Simply uncheck all experimental conditions you don’t need.

- Experimental condition 1: 15948
- Experimental condition 2: 28601
Step 5

Defining Web pages

How many pages does one experimental condition consist of? If you are intending to conduct this experiment on the World Wide Web, consider using the WEXTOR technique for step-out control. Please note that the number of Web pages has to be the same in every experimental condition - otherwise we would introduce a confounding variable.

WEXTOR automatically generates five Web pages:

- index: this is the homepage of your experiment.
- start: we need to test whether a participant's Web browser is JavaScript-compatible. If the test result is positive then the user will be redirected to the start page automatically. This page should contain general information about your Web experiment. If your instruction requires a participant consent form, then this page would be the place for it.
- source: if the user doesn't have a JavaScript capable Web browser, he will be sent to the source page. This page should display the information that the user won't be able to participate in this experiment because the Web browser isn't JavaScript capable. Further you can tell the user where to get a qualifying Web browser or how to enable JavaScript in the browser preferences.
- demos: this is the place to ask the user for demographical information.
- thank: this is the place to thank participants for their participation.

NOTE: Do not include the 5 default pages with the number of pages you fill in.

Number of Web pages: 1
Defining Web pages

Please name your Web pages now (e.g., intro.html).

- Name of index page: index.html
- Name of start page: start.html
- Name of source page: source.html
- Name of demos page: demos.html
- Name of thank page: thank.html

Choosing obvious file names is a frequent error when creating and designing Web experiments. For this reason WEXTOR offers to add some random characters at the end of your file names. Simply click on the button 'add'. You will see the changes immediately in your file names.

Defining the sequence of within-subjects factor levels

Your experimental design does not include a within-subjects factor. You can skip this step!
Step 9a offers options to visualize your design and procedure and to choose a so-called CSS skin to change the appearance of your pages (you will be able to preview your choice in Step 9b). You can download the list view and display to later view them when you are not connected to the Internet.

Click on “view” for the option “list of your experimental design”. You will see the following structured view of your factors with levels, the resulting experimental
conditions, and your code plan (now it is still empty, but will show details after you add measures in Step 9b – see next screen).
Clicking on “Visual display of your experimental design in Step 9a” will provide you with the following display that shows a flow chart or procedure for your experiment. A participant will move from top to bottom through the Web pages that are shown.
On to Step 9b:

Adding HTML forms to your Web pages

Simply click on the names of your Web pages to add HTML forms. Editing of the standard Web pages (start.html, demos.html, etc.) will be implemented in WEXTOR's next version. For now, you may use an HTML editor (e.g., Adobe Gollive or Macromedia Dreamweaver) to edit these Web pages after downloading.
You can now edit pages by clicking on their name or picture, clicking on “view” will give you a preview of the page you are editing:
In Step 9c you can add or modify some options for your experiment, for example collection of response times. Don’t forget to go back to Step 9a to look at your code plan. Check whether everything is as you want it to be. You will need the code plan to identify the meaning of entries during analysis.

You can now download your experimental materials in Step 10a:
Step 10b provides you with information about some of the variable names that may be important to know later during analysis of results:
Before we now continue editing the downloaded materials, we will apply a change, so you see how easily WEXTOR handles modifications of designs. We decide to vary the order of our two answer options. It is best to implement this variation by adding another factor. So we go back to Step 1:
We change the number of between factors to two:
A new row with fields appears in Step 2. We add a name and define the number of levels for the new factor:

We then name the levels for the new factor in Step 3:
Step 3

Defining levels

Please name the levels of the factors you defined in Step 2.

Between-subjects factors

Please name the levels of your between-subjects factors:

Factor 'reference point'

Name: 4->2
Name: 0->2

Factor 'order of answers'

Name: full first
Name: empty first
Defining experimental conditions

Please name your experimental conditions. We already made a name abbreviated form for the experimental condition and four random characters, use names that reveal information about the underlying structure of the experiment.

If your experimental design is incomplete, you may now erase the selected experimental conditions you don't need.

<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>11c0f0</td>
</tr>
<tr>
<td>1-2</td>
<td>120454</td>
</tr>
<tr>
<td>2-1</td>
<td>21d357</td>
</tr>
<tr>
<td>2-2</td>
<td>22adfb</td>
</tr>
</tbody>
</table>
Your experimental design

Your experiment consists of 2 factors:

**Between-subjects factors**

Factor 'reference point'

- 4-->2
- 0-->2

Factor 'order of answers'

- full first
- empty first

**Experimental conditions**

Experimental condition 1-1: 11c0f0
- factor reference point, level 4-->2
- factor order of answers, level full first

Experimental condition 1-2: 120454
- factor reference point, level 4-->2
- factor order of answers, level empty first

Experimental condition 2-1: 21d357
- factor reference point, level 0-->2
- factor order of answers, level full first

Experimental condition 2-2: 22adfb
- factor reference point, level 0-->2
- factor order of answers, level empty first
In the visual display of the procedure in Step 9a the horizontal line shows when participants are randomly distributed to one of the experimental conditions.

Downloading the new experiment in Step 10a. Once you decompress the zip file on your desktop you will get a folder that is named like your experiment. Within this folder you will find a subfolder for each condition, a folder for media files (images, flash files etc.) and some additional files. Make sure not to rename any of these files and folders!

Double click on “index.html”. You will preview your experiment. This is possible even when you are not connected to the Internet, because the experiment folder is self-contained: everything that is needed in your experiment is right there on your desktop.
In another view:
One by one, load „choicec5bc.html“ (or however you named that page in WEXTOR) from conditions 12, 21, and 22 into an HTML editor (Dreamweaver, Adobe Golive, UltraEdit, BBEdit... – you may also use a text editor, but do not use MS Word!) and change according to „Experimental conditions“ above. The screenshots below (in standard blue CSS design) also show you how the text needs to be changed depending on the condition.

11:

The cup

Imagine a 4-ounce measuring cup in front of you that is completely filled with water up to the 4-ounce line. You then leave the room briefly and come back to find that the water is now at the 2-ounce line.

What is the most natural way to describe the cup now?

- The cup is 1/2 full
- The cup is 1/2 empty

next

12:

The cup

Imagine a 4-ounce measuring cup in front of you that is completely filled with water up to the 4-ounce line. You then leave the room briefly and come back to find that the water is now at the 2-ounce line.

What is the most natural way to describe the cup now?

- The cup is 1/2 empty
- The cup is 1/2 full

next
Make sure that the value assigned to each radio button option stays the same for its meaning, i.e. a 1 should always mean “The cup is ½ full” was selected and a 0 should always mean “The cup is ½ empty” was selected.
Zip compress your entire experiment folder. (Make sure you do not compress anything else with it – a typical error would be to also compress the folder that contains your experiment folder). You should then have a file on your desktop that is named like your experiment folder and ends in “.zip”.

Log back into WEXTOR. On the first screen appearing click on “Upload an experiment, download data”. On the new screen (like the one shown below) follow the instructions to upload your experiment.

You are ready to go! Click on the link that appears to pretest your experiment.

Happy Web experimenting!

Your WEXTOR team