

Methodology  
wextor.org

# Internet-based Experiments

Helpful tips and solutions for typical problems when creating web experiments

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## Naming errors

Naming of files and folders should not be too obvious (configuration error III, Reips, 2002). Otherwise, the structure of the experiment becomes too visible, causing some participants to switch conditions, skip pages, or correctly infer hypotheses. So, don't name your folders „shock\_cond“ versus „control\_cond“, for instance.

## Editing errors

### Mixing up answer options

On the Web, *Checkboxes* (square) allow for multiple selections, whereas only one selection can be made in *radio buttons* (round) that belong to the same group (meaning: in the HTML code they have the same “name”).

### Wrong naming of answer options

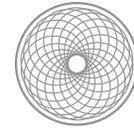
Different groups of *radio buttons* (round) need different *names*, each radio button needs a unique *value*.

### Missing index.html etc. files, superfluous files

The experiment folders contain several important files that need to be present for the experiment to work (see descriptions in Steps 5 and 9, WEXTOR at <http://wextor.org>). Also, each of the experimental *between* conditions needs to be in its own subfolder. Do not delete or rename these. Lastly, there shouldn't be any superfluous files, like the zipped archive or temporary files created by HTML editors.

### Problems on the last page

The last page is where you thank your participants. Do not forget to provide information on WHO is saying thank you and to whom they can direct questions and commentaries. Provide a name and contact information, preferably an e-mail address and a link to a homepage. However, do not run into configuration error II (Reips, 2002)! Please leave the link to the WEXTOR participant pool on the page. It is safe.



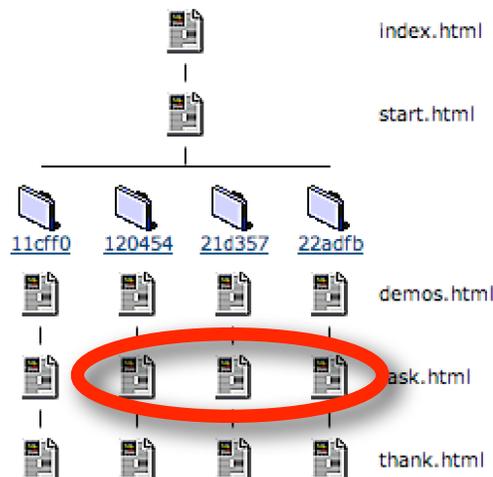
## Change of scripts in page headers

**Do NOT change** the HEAD part on the pages generated by WEXTOR, except for the part between <title> and </title>. Usually, only the BODY part needs editing. (If you know HTML and Javascript, you may try it under your own responsibility...).

## Don't forget to edit downloaded files

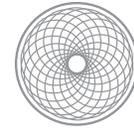
In WEXTOR's current version (2.5) all *between* conditions look identical after download. Therefore, the pages need editing with an HTML editor (Adobe Golive, Dreamweaver, KompoZer) or a text editor (BBEdit, NVU1.0, UltraEdit, or NotePad, **but NOT MS Word!**), before they can be pre-tested, zipped, and uploaded.

## Visual display of your experimental design



## Implementing order

The implementation of order depends on the type of design (between-, within- or mixed experimental design). You should consider whether order of items, objects and/or answer options may introduce confounding effects (check out <http://www.bolderstats.com/within/index.html> for illustrations). Also, contemplate whether order may have a *theoretically significant impact on the underlying hypotheses* - in this case one would implement order as a factor. If order is not of theoretical significance, it should be implemented by *balancing*. In WEXTOR, order variations in regard to *between* designs are always to be treated as *between* factors (in Step 1), even if order is balanced and not of theoretical interest. Variations of order in within factors can be defined in Step 7 in WEXTOR (with certain limits).



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## Linking

### Wrong page

Experiments are correctly linked to the *index.html* file, **NOT to start.html**.

### Multiple site entry technique

Append a unique string of characters to the URL for each source of recruitment, e.g. "...index.html?**so=studentlist**". Your data file will have a column („so“) containing an entry of the referring source for each participant (“studentlist“). Contacting different places to recruit participants is called the *multiple site entry technique* (Reips, 2000, 2007). This technique allows you to target different samples and compare their data, e.g. for theoretical reasons. Generally, you will be able to see whether a pattern of results is similar in all subsamples (a good point when arguing for the generalizability of your results and against the influence of self-selection effects) or if there are differences (these may be quite interesting). Thus, I like to see the multiple site entry technique as a win-win strategy: using it will be of advantage no matter what the results are.

## References

Reips, U.-D. (2000). The Web Experiment Method: Advantages, disadvantages, and solutions. In M. H. Birnbaum (Ed.), *Psychological experiments on the Internet* (pp. 89-118). San Diego, CA: Academic Press.

Reips, U.-D. (2002). Internet-based psychological experimenting: Five dos and five don'ts. *Social Science Computer Review*, 20, 241-249.

Reips, U.-D. (2007). The methodology of Internet-based experiments. In A. Joinson, K. McKenna, T. Postmes, & U.-D. Reips (Eds.), *The Oxford Handbook of Internet Psychology* (pp. 373-390). Oxford University Press.