

Web Supported Experiments: The Net in the Lab?

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Publications in German online research focus on web-based surveys, non reactive measurements and web-experiments.

We describe Web-supported experiments as an additional way in online research. Web-experiments are the attempt to transfer experimental investigations in the virtual world of WWW (Lab in the web). In comparison with it Web-supported experiments use internet-technology in a lab (Web in the lab) to investigate subject's behavior. Using internet-technology means both, browsing the web with a standard browser and scripting for data collection, control of experiment respectively the variation of experimental material.

Web-supported experimenting is under methodological aspects the starting point for the analyzing subject's behavior while navigation. Such analyses often forms the essential part in the usability testing of web-sites. In combination with other methods (e.g. questionnaire, interview or video analysis) we will be able to find out what the problems are in navigation and give hints for a better redesign afterwards. Finally we can test the successful realizing of the new design by a web-experiment with many subjects.

An exact description of people's behavior while navigation for both, macro-navigation (Navigation between documents) and micro-navigation (navigation within the document), requires recording of user-induced events, such as "mouse click", "mouse over", "scroll" or browser functions (e.g. "back") including time-stamp and the actual state of system-properties (e.g. size of screen).

We meet this requirements in our Web-supported experiments by using a web-server locally. Every document of the presented hypertext refers to an external file, which contains scripts for the recording of events and (in case of necessity) for variation of experimental material. Using internet explorer (from version 4 up) makes the creating of the local log up file, containing the data of interest, possible.

Within a series of investigations, concerning the navigation in hypertexts, we were able to learn something about development and use of Web-supported experiments.

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These experiences, technical know how, advantages and disadvantages will be reported and possibilities for improvement are discussed.