Overview

How to Conduct Behavioural Research Over the Internet provides a step-by-step guide to creating web-based surveys, as the basis for conducting behavioural research. A website <http://www.web-research-design.net> developed in conjunction with the book, contains all the CGI/Perl and HTML files used in the book that can be downloaded from this site. The website is an excellent companion to use alongside the book and there is a brief online quiz for each chapter, as well as a discussion forum, frequently asked questions, links to other relevant sites and an overview of the book including a synopsis of individual chapters.

Summary of chapters

Chapter 1, ‘Introduction’ outlines the aims of the book and what the reader will be able to accomplish by reading the book and completing the suggested activities. It provides a basic introduction to the Internet and definitions of key terms and concepts.

Chapter 2, ‘Getting Started: A Step-by-Step Guide to Using a Web Server’ outlines two ways to obtain access to a web server, either using a professional Web-hosting service or by building a Web server (and explaining how to do this).

Chapter 3, ‘HTML Basics: How to Make a Web Page from Scratch’ steps the reader through the creation of a web page in hypertext markup language (HTML).

Chapter 4, ‘HTML Forms: Collecting Research Data from Participants via the Internet’ discusses the use of HTML forms and how these can be used to obtain input/data from Internet users. It provides an overview of common Web-based input forms such as text boxes, radio buttons, checkboxes and pull-down menus.

Chapter 5, ‘An Introduction to CGI Scripting: Using Perl to Automatically Save Response Data to a File’ provides an introduction to CGI programming in Perl, the processing and storage of participant data, and the exporting of data to statistical packages. (CGI standards for common gateway interface, a standard for exchanging information between the user computer and the server.)

Chapter 6, ‘Providing Customized Feedback to Research Participants’ highlights the utility of using Web-based research methods to provide feedback to participants. It outlines how to create CGI script to analyse and summarise individual participant responses and provide feedback to participants based solely on their own responses or in relation to the response of others.

Chapter 7, ‘Randomizing the Order of Stimuli’, explains how to use CGI script to randomise the order in which questions/items are presented while still maintaining the ability to process or store data in an organised manner.

Chapter 8, ‘Random Assignment of Participants to Conditions’, outlines how to assign people randomly to conditions by building on the randomisation techniques discussed in the previous chapter.

Chapter 9, ‘Using Multiple Web Pages in Research: Carrying Responses Forward from One Page to the Next’ discusses how to transfer/carry forward data collected on one web page to the next web page, through the use of ‘hidden’ HTML tags. This allows for questions, stimuli or sets of stimuli to be presented on separate web pages, while retaining the link to data collected on previous pages.

Chapter 10, ‘Using Conditional Branching Structures: An Example of “Skip Patterns” in Survey Research’, explains how to create conditional branching structures, using CGI script, where questions are presented to participants who meet a condition or set of conditions (e.g. if they are female, if they have children, if they have income over a certain level). Typically referred to as skips or skip patterns, these can be automated through the use of CGI script.

Chapter 11, ‘Advanced Feedback: Summarizing Data with Bar Graphs and Two-Dimensional Plots’ outlines how to summarise and present research results graphically using a combination of simple, preset images formatted in HTML.

Chapter 12, ‘Tracking Participants over Multiple Sessions: PINs, Passwords, and Menus’ explains how to store data from different surveys or data collections sessions for later use (e.g. comparisons at different points-in-time) by using personal identification numbers (PINs) and passwords to track respondent data over time.

Chapter 13, ‘Measuring Response Times’ discusses the contexts in which response times can and cannot be measured effectively over the Internet and provides examples to illustrate ways to assess response times online.

Chapter 14, ‘Additional Applications of Perl: Discussion Forums and Scored Tests’, discusses the application and use of CGI techniques for use in teaching contexts. It outlines...
how to create online discussion forums and online multiple-choice tests that the server automatically grades and track completions and test scores. Chapter 15, ‘Wrapping it Up’ concludes with a discussion of a range of miscellaneous but relevant Internet research topics including ethics, server maintenance, security, sampling issues, participant drop out, data quality control, and Web design.

**Concluding summary**

This text is a user-friendly, step-by-step guide to creating Web-based surveys and a range of excellent examples and resources are provided in the book as well as on the website. At the time of being asked to review this book, I had just completed, with two other colleagues, a review of three online survey software packages. We were looking for an online software option that was cost-effective, was relatively straightforward in terms of setting up a survey instrument with an extensive and flexible range of question formats/response forms and most importantly, had excellent ‘back-room’ capability in terms of its utility and robustness for analysis and reporting. Despite the clarity of this text I would not recommend that my colleagues build an online survey system to conduct research on the Internet, as outlined in this book. From the perspective of an evaluation practitioner, there are simpler and less time-consuming solutions, given the range of free or fee-based online survey products and services available. The real value for practitioners lies not so much in the ‘how-to’ knowledge the book conveys, but the insight the book provides into understanding the issues that underpin undertaking online surveys (compared with other research methods). The book highlights the relative strengths and limitations of online survey and research methods and the factors to be aware of when designing or undertaking Internet-based research.

The clarity of writing, the format and layout of the chapters and the step-by-step instructional nature also make this an excellent reference text for students, or for use in teaching settings.

| Title: | Designing and Constructing Instruments for Social Research and Evaluation |
| Authors: | David Colton and Robert W Covert |
| Publisher/year: | Jossey-Bass, San Francisco (an imprint of Wiley), 2007 |
| Extent/type: | 394 pages, paperback |
| Price: | A$72.95/NZ$82.99 from Wiley Australia which offers a 15% discount to AES members, phone 1800 777 474 (within Australia), 0800 448 200 (from NZ only), +61 7 3354 8444 (from overseas), email <custservice@johnwiley.com.au>, website <www.johnwiley.com.au> |
| ISBN: | 978-0-7879-8784-8 |

I welcome this comprehensive resource on instrumentation for social research and evaluation practice. The authors develop a wide range of useful scaling and instrumentation techniques that are highly relevant for evaluation methodology. Their portfolio is more than sufficient for postgraduate courses on program evaluation.

According to the authors they assume and assert that: The process of constructing an instrument is both a creative and a technical venture. It involves not only being very familiar with the content or substance of the topic of interest but also developing good questions or items and presenting them in a format accessible to the people who will have to complete the instrument. Consequently, this book is designed to help you create an instrument that will obtain the information you seek. (Colton & Covert, 2007, p. xii)

Indeed they have followed this approach faithfully, for instance in the layout of the book with chapters on each stage of the instrument design, construction and use. However, with this approach lie both the book’s strengths and weaknesses. It is avowedly both practical and non-technical, aimed at the reader with no technical background, minimising some aspects of the underlying theory, and even limiting the referral to where the theory might be elaborated. For example, it covers the essential issues of levels of measurement (Chapter 3), validity and reliability of instrumentation (Chapter 4), but it only gives a very short footnote on ‘latent variable’ with one reference, and nothing on Rasch Unidimensional Measurement Models, which some evaluation practitioners may wish to know about (see Bailey, 2001).