The human side of good research

Creation, innovation and discovery are the most exciting things humans do. A person's life enters a new phase when they move from passively learning undergraduate stuff to actively contributing worthwhile knowledge. The hardest thing to do is tell the difference between the excitement of just having fun, on a dissertation or project, with the true excitement of doing something good from which others can benefit. That is where understanding research matters: how do we work to high standards?

Computers affect all our lives. There are many systems that are hard to use, whether as a consequence of poor research or a poor connection between research and influencing the world to take notice of it, so a book on research methods about humans and computers is welcome.

Research in human-computer interaction has five cyclic phases: how you innovate; how you build things; how you establish whether they are any good; how you engage with the research community and build on its resources; and how you iterate again to do better. However, if you are chiefly interested in doing the third phase well, then *Research Methods in Human-Computer Interaction* is a good place to start.

The book paints the human side of the field well. There are chapters on using diaries, case studies, interviews, ethnography, ergonomics and surveys, framed with discussion of statistics and experimental procedures – techniques that are normally spread across the human sciences. It discusses working with participants, exploring ethical concerns and working with people with impairments. Surprisingly, it does not discuss children, ageing or inclusive design, but you have to stop somewhere. Nor does it discuss what to do with your research, publishing it or using it in iterative design, although there is a chapter on usability testing. In my view, there is no point doing research unless you aim to make the world a better place.

One of the limitations of the book is that it is really written for human sciences students: for example, it assumes familiarity with SPSS, a statistical analysis program. It gets human sciences students to think more broadly, but it does not get them to think about technology nor is it accessible to students from technological backgrounds. We know every human user is different: some are idiosyncratic, and some influenced by experimental design. So how can we do efficient experiments that are valid? The book covers such issues well, but what about the systems in those experiments? Many systems themselves are idiosyncratic, ironically, particularly those developed for human-computer interaction research. What influence does code implemented by the experimenter have on experimental outcomes? No wonder the research literature is full of positive evaluations!

This is a very useful contribution to the teaching material available in research methods in human-computer interaction. But as is always the case when striving to do good research, you should not rely on a single source.

Who is it for? Final-year undergraduates or master's students embarking on human-computer interaction projects.
Presentation Readable, broad-brush approach.
Would you recommend it? Essential for anybody working in this field, with the caveat that all research requires critical debate.

Recommended

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