Surveys

Surveys

- Popular tool in research involving human subjects

- Best method – or easiest method?
  - Harvest data from large sample
  - Low cost
  - Anonymity & confidentiality
  - Determine data analysis from outset

Good Practice

Define your research aims

⬇

Identify the population and sample

⬇

Decide how to collect replies

⬇

Develop your questions

⬇

Design your questionnaire

⬇

Run a pilot survey

⬇

Carry out the main survey

⬇

Analyse the data

Survey: Worked Example (W/E)

Define Your Research Aims (W/E)

- What are you trying to do or find out?
  - E.g. A critical review of technology driven golf aids

- What is your hypothesis/hypotheses?
  - Technological aids improve golfers understanding of their game
  - Golfers perceive that the aids do not improve their scores

Target population/sample (W/E)

- Potentially all golfers (in a particular category)
  - Too many to interview individually!

- Purposive sampling strategy
  - Target those playing competitive golf
  - Email key figures to promote the survey
  - Use social networks
  - Use direct contacts

- Target population of over 350 people

How to collect replies?

- On-line
  - Increases audience reach
  - Which service?
    - LimeSurvey, SurveyMonkey, Qualtrics or bespoke?
- Paper-based
  - Where to send?
  - Include an S.A.E. and/or covering letter?
- Email
  - Trade off: convenience v anonymity
- Use realistic deadlines!

Question Design

- Clear, unambiguous, easy to understand
  - Especially for on-line surveys

- Free from jargon, without needing further explanation

- Do not collect unnecessary data
- Avoid assumptions and biases
  - "Do you use on-line assessment or *more inefficient* paper based methods?"

Question Design

- Avoid Ambiguity:

- Q: "When did you start using on-line assessment?"

- Possible Responses:
  ◦ "In May 2008" (objective date)
  ◦ "When I was a student" (personal)
  ◦ "Two months ago" (relative)
  ◦ "After we discussed it" (shared private knowledge)

Question Design

- Personal or offensive:

- Q: "How much do you earn per month?"
- Possible Responses:
  - "None of your business" (angry & offended, disengaged with further questions)
  - "£300,000" (distortion for personal esteem)
  - No response

Question Design

- Simple/multiple choice

  ◦ Choice of responses

  "Have you used MMS within the last week?"

  ☐ Yes ☐ No ☐ Don't Know

  "Which of the following resources did you use to produce your bibliography?"

  ☐ Google scholar ☐ Other, please state

  ☐ Microsoft academic search

  ☐ ACM digital portal

  ☐ Elsevier's journal site

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Question Design

- Response scales

  ◦ Opinion/attitudinal measurements

  "The new on-line submission tool saves me time"

  ◦ Likert scale – weighted responses

  • 7 point scale *Strongly agree...Strongly Disagree*

  ◦ Positive/negative comment distribution

  • A simple website usability survey http://bit.ly/9N5JNf

Question Design (W/E)

- Develop Likert-rating items for each issue
  - Statements point scale agree /disagree

"The system helps to improve your swing technique"

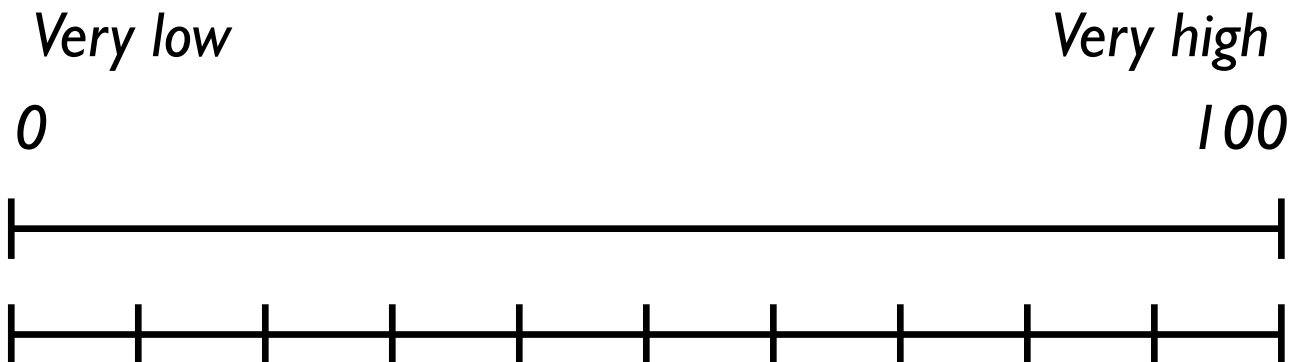| Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Don't Know
●	●	●	●	●	●

Question Design

- Continuous rating scales
  - Manual surveys only…

How heavy has your assignment workload been this term?

Very low   *Very high*

0   *100*

Questionnaire design

- Investigate best practice for layout & design

- Length
  - 10-15 minutes is a good guide

- Order of questions – simple to complex
  - Most important items first
  - Logical flow of questions
  - Sections

- Clear headings & instructions