

Introduction to Surveys and Questionnaires

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Travel survey - Bath psychology department
http://drianwalker.com/travelsurvey/index2.php

Please answer ALL questions. This part of the questionnaire should only take two or three minutes, and then there will be some extra questions after you submit these answers.

On questions with seven-point answer scales, choose the point which best represents where you feel you lie between the two extremes given. Don't be afraid to use the whole scale; the central point means you feel half-way between the two extremes. Don't think too much about your answers but go with your first instinct.

Your gender: ☐ male ☐ female

Your age last birthday:

What is your role in the university community?

How often do you come to University in a typical week?

How many years is it since you last moved house?
If less than one year, please enter '0'; if you have never moved house, please enter '99'

When you moved house, was this...

What is the first part of your home postcode?
e.g., if your postcode is BA1 5DF, just enter 'BA1'

How much do circumstances outside your control affect how you travel to the university? ☐ Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ A great deal

On days when you come to the university, to what extent do you tend to leave home at the same time every day? ☐ I leave home at the same time almost every day ☐ ☐ ☐ ☐ ☐ ☐ I leave home at different times almost every day

Allowing for the answer above, what best represents the time

The Oxford & Cambridge Cycling Survey

A large-scale study of bicycle
UK cycling cities



Published by Oxfordshire

54 mode

YJEVP: 483

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ED: Pabitra Borah

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Advances in Transportation Psychology

Road users do different things in different contexts

Department of Psychology

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Journal of Environmental Psychology

Context change and travel mode choice: discontinuity and self-activation

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Abstract

The habit discontinuity hypothesis states that when a context change is more likely to be deliberately considered. The self-activation hypothesis states that important values are considered and guide behavior. Combining the two hypotheses, we predicted that recently moved and were environmentally concerned used the car more than those who were low on environmental concern. The results support the notion that context change can activate important values.

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1. Introduction

Traffic jams, high oil prices, air pollution, noise, and the significant contribution of cars to carbon dioxide emissions do not seem to impress the vast majorities of car owners in Western societies, as the car remains the prevalent mode of transport. Subjective expected utility models of transport suggest that car use is driven by a perceived balance of costs and benefits, which thus often favors the car. Alternative modes of transport (e.g., Aizen, 1991; Aizen & Möser, 2007; Feather, 1982; Fishbein & Ajzen, 1975) These models also suggest that people should be sensitive to changes in the pay-off structure of travel mode choice. For instance, Fujii and Gärling (2003) documented mode choice changes in a panel of students from being student to being employed in a panel of students. They changed their travel mode behavior according to the perceived balance of costs and benefits. Change in the pay-off structure may also be deliberately investigated. Aizen, and Schmidt (2003) found that planned behavior adequately modeled mode choice.

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NIGEL HOLT AND IAN WALKER

research with people

theory
plans and
practicals



A thought...

- “It may seem easy to construct a survey... But there are hundreds of ways to do it wrong and only a few ways to
‘’”

Physics Today, Nov. 2007

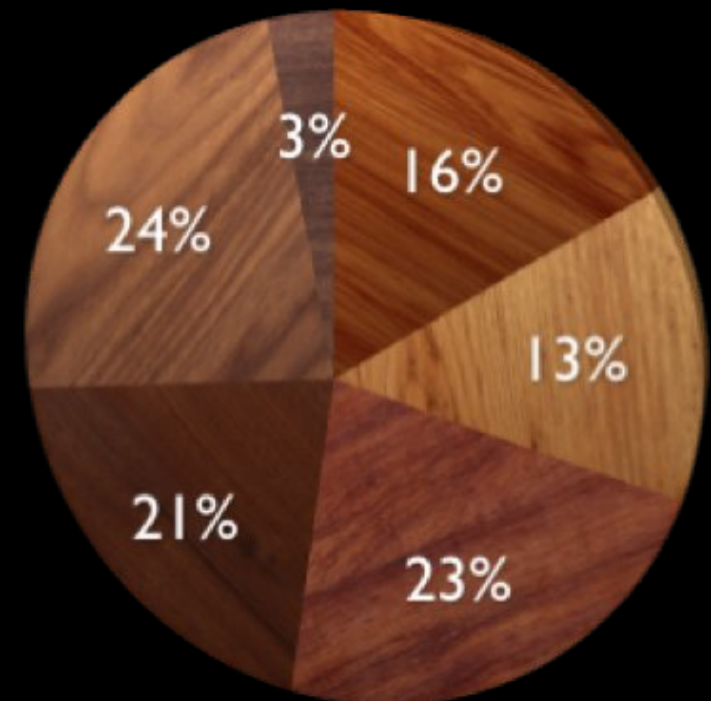
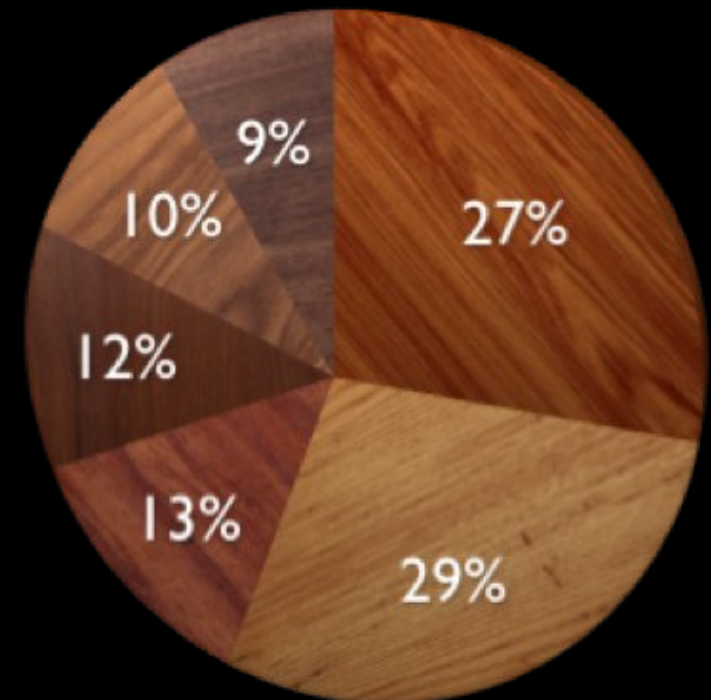
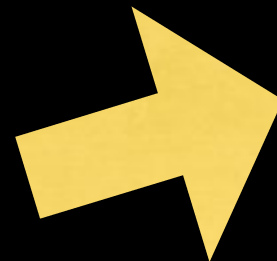
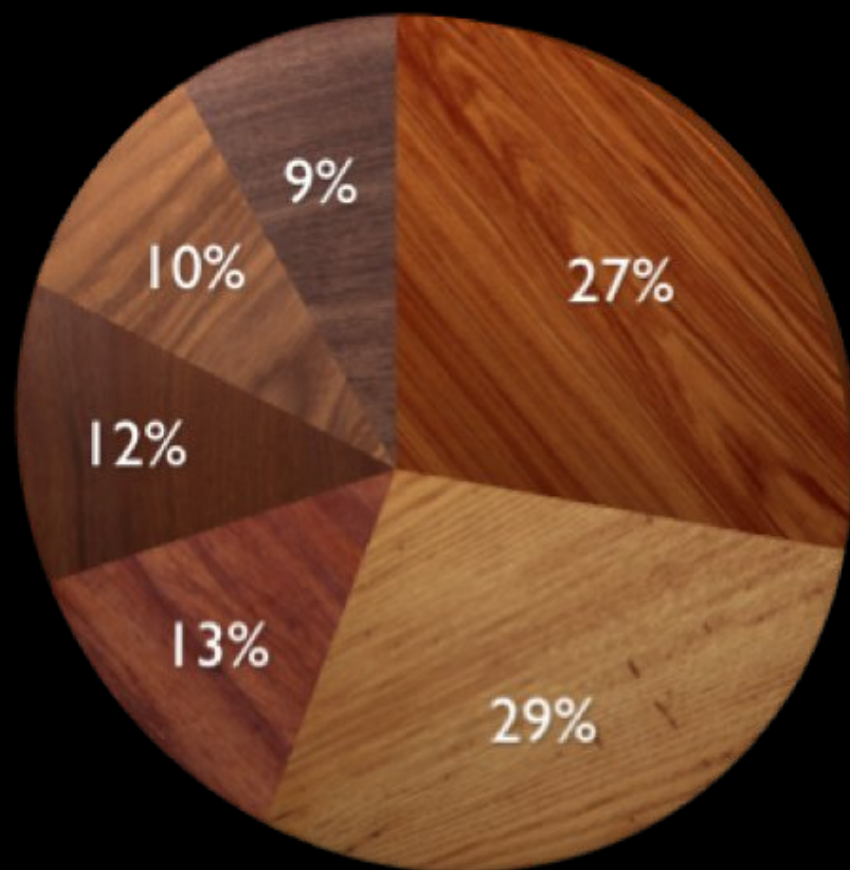
Why a questionnaire?

- What is a questionnaire?
- What *can* it tell you?
- What *can't* it tell you?
- Are you sure this is the best way to answer your question?
- Does a questionnaire already exist or must you create one?

Populations and samples

- What is a population and a sample?
- Census versus survey
- What do we want in a sample?
- Methods for gathering a sample

An ideal sample



Sample size

- Why does this matter?
- How many people to survey?
- Power analysis

Types of question

- Open questions
 - How to process the data
 - Subjectivity and reliability
- Closed questions
 - Yes/no, categories, Likert scales, etc.

Open v closed

- Often a question can be asked both ways...

How old are you?

< 18

18-24

25-34

35-44

45-54

55-64

> 64

How old are you?

26



*Can help avoid
bad data*

*Provides more
detailed data*

Open questions

- “Do you have any comments about the service you received?”
- “What was the best thing about our service?”
- “Do you have any other comments?”

Categorical questions

- What is your role in the university community?

Undergraduate student

Postgraduate student

✓ Academic

Academic-related

Research staff

Clerical/admin/support

Technical

Security

Other

Likert scales

- How much do you like ice cream?

| | | | | | | | | |
|---------------|---|---|---|---|---|---|---|--------------------|
| Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | A great deal |
|---------------|---|---|---|---|---|---|---|--------------------|

Numbered points

Semantic anchors

Semantic anchors

| | | | | | | |
|-------------|---|---|---|---|---|--------------|
| Not much | 1 | 2 | 3 | 4 | 5 | Somewh at |
|-------------|---|---|---|---|---|--------------|

| | | | | | | |
|---------|---|---|---|---|---|------|
| Dislike | 1 | 2 | 3 | 4 | 5 | Like |
|---------|---|---|---|---|---|------|

| | | | | | | |
|----------------------|---|---|---|---|---|--------------------------------|
| Detest it utterly | 1 | 2 | 3 | 4 | 5 | Love it so much it hurts |
|----------------------|---|---|---|---|---|--------------------------------|

Line bisection

- How much do you like ice cream?



Preference ratings

- How important are these NHS services to you? (Rate the most important as 1, the next most important as 2, and so on until the least important. which will be 7)

| | | | |
|----------------|---|---------------|---|
| Clean wards | 3 | Polite staff | 5 |
| Telephones | 6 | Ample parking | 4 |
| Anaesthetic | 2 | Badgers | 1 |
| Free lollipops | 7 | | |

Is good wording a factor in the design of good questionnaires? For me, it's a question of whether the wording offers sufficiently concrete options, thereby reducing any possibility of the reader failing

Some wording issues

- Not
 - People often don't see it. Don't use it, or write NOT
- Handy phrases with Likert scales:
 - “Go with your first impression”
 - “Don't be afraid to use the whole scale”

‘for instance...’

- ‘for instance...’ or ‘for example...’ can also provide useful cues in open questions
- “Have you ever had a bad experience at a training course? (For instance, the presenter sneezing on you?)”
- Can clarify what you expect
- Can also bias responses in a

Vagueness is your enemy

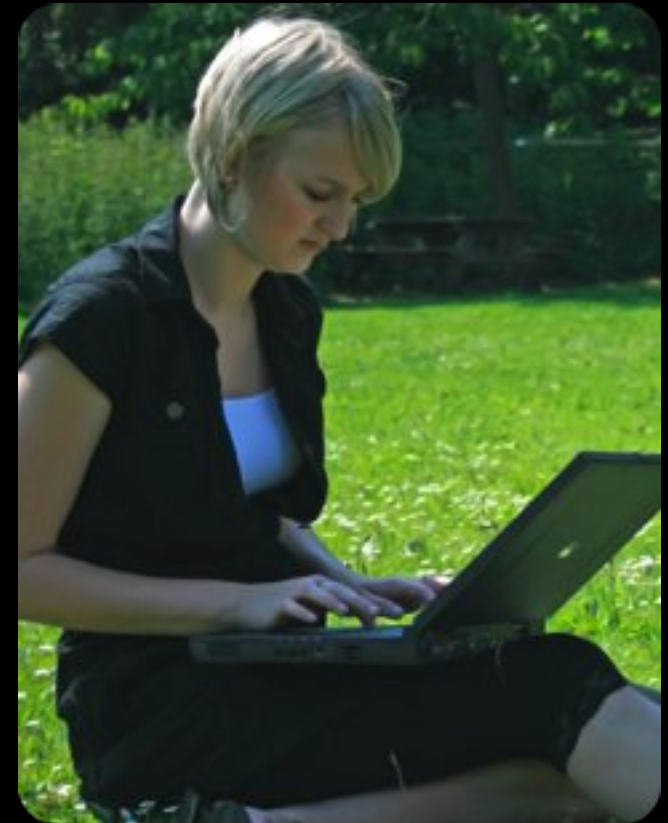
- “How important is the university’s new strategy?”
 - To whom?
- “How often do you buy shoes?”
 - Per week? Per year? The word ‘often’ is also very subjective
 - Better as: How many pairs of shoes have you bought in the last

People agree with statements

- Biased:
 - Do you agree that the university should stop admitting overseas students to reduce its carbon footprint?
- Unbiased:
 - Do you agree or disagree that the university should stop accepting overseas students to reduce its

Some practical issues

- Paper, online, face-to-face?
- Write your own or use Survey Monkey etc.?
- Response rates
 - Power analysis
 - Incentives

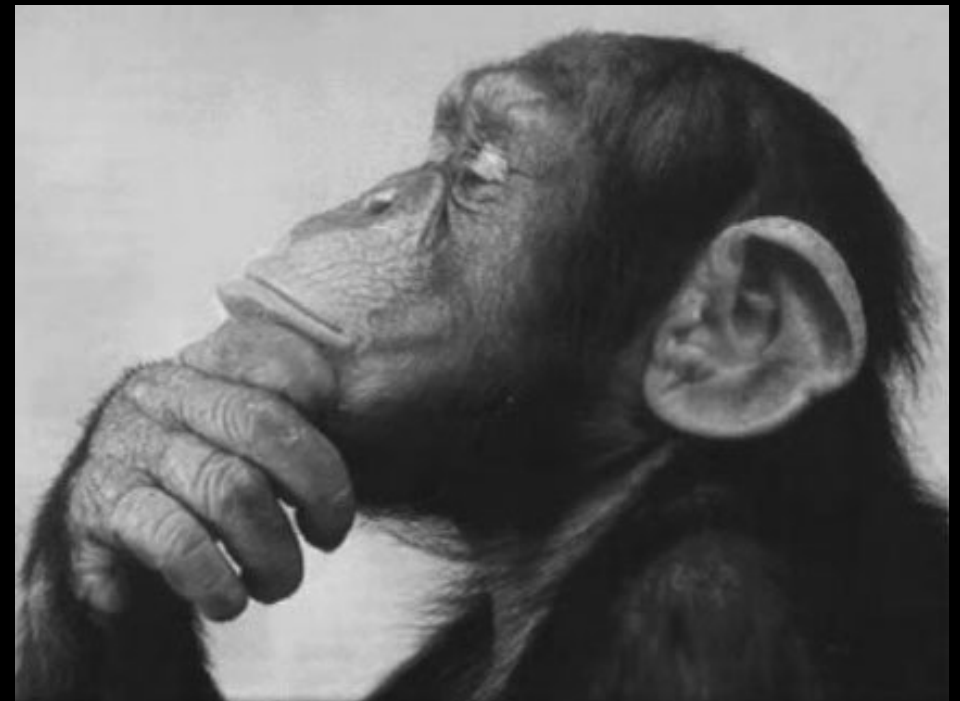


Psychometrics

- *Psychometrics* = mind-measuring
- Validity
 - Do you measure what you want to measure?
 - Forms of validity
- Reliability
 - How consistently do you measure something?
 - Forms of reliability

Getting a good sample

- Random samples
- Systematic samples
- Opportunity samples
- Cluster samples
- Quota samples



Thinking about bad
practice

The options you give

- How satisfied were you with the service you received today?
 - Totally satisfied
 - Satisfied
 - Neither satisfied nor dissatisfied
 - Dissatisfied

Good and bad Likert scales

| | | | | |
|------------|---|---|---|--------------|
| Not at all | 1 | 2 | 3 | A great deal |
|------------|---|---|---|--------------|

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|--------------|
| Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | A great deal |
|------------|---|---|---|---|---|---|---|--------------|

| | | | | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|--------------|
| Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | A great deal |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|--------------|

Objective terms can improve questions

- How did the drug make you feel?
- Did you experience any of these feelings when you took the drug?
 - nausea
 - tingling
 - dizziness
 - euphoria

How could we make these more objective?

- “Have you made any major household purchases recently?”
- “How satisfied were you with the service you received today?”
- “What is your favourite colour?”
- “How could we improve our service?”

Ethical considerations

- Informed consent
 - Special groups - minors, prisoners, reduced responsibility, etc.
- Anonymity
- Confidentiality
- Withdrawal
- Do people answer all the questions?
 - especially online, where you can insist

Any problems?

- A questionnaire is handed out at the start of a lecture and completed questionnaires are collected at the end

Any problems?

- A sample of people have their job motivation assessed before and after taking amphetamine. They are told it is a survey of mood and that the pill is caffeine

Any problems?

- You set up video cameras overlooking the Parade. You then put photographs of groups on the university website and survey people's attitudes to these

Any problems?

- Schoolchildren are given a questionnaire in class on their attitudes to homosexuality and religion. All fill it in together during a break between lessons.

Any problems?

- A popular soft-drink manufacturer pays you to conduct a survey of your employees' attitudes to their product. You give each a questionnaire and say you'll collect it later

Any problems?

- You conduct an anonymous online survey of workplace bullying. There is a mixture of open and closed questions and people are free to omit any questions they don't want to answer.