

Medical School Ysgol Feddygaeth

# Survey-based research on Academic Integrity

# **Tips and Tricks**

#### **Professor Phil Newton, Swansea University**

# Who am I?

# Why am I here?

# Learned the hard way

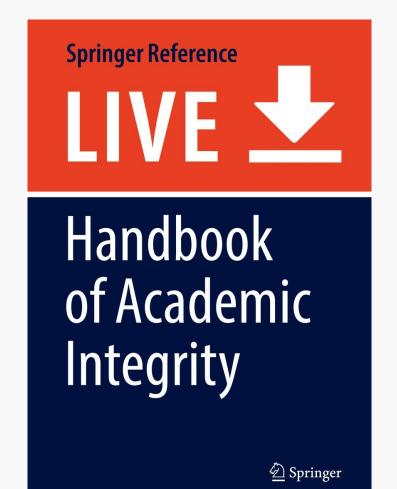
# Many, many times

#### Learned the easy way

- Newton, P. M. (2018). How common is commercial contract cheating in higher education and is it increasing? A systematic review. In Frontiers in Education (Vol. 3, p. 67)
- Newton, P., & Essex, K. (2022). How common is cheating in online exams and did it increase during the COVID-19 pandemic? A Systematic Review.*Preprint* <u>https://www.researchsquare.com/article/rs-2187710/v1</u>
- Newton, P. M., & Salvi, A. (2020). How common is belief in the learning styles neuromyth, and does it matter? A pragmatic systematic review. In *Frontiers in Education* (p. 270).

• Design, Run and Interpret Survey-Based Research in the fields of Academic Integrity and Misconduct

• Coming Soon!



# Surveys can be....

# Easy to do

# Surveys can be....

# Easy to do <u>better</u>

# What is a survey?

"a system for collecting information from or about people to describe, compare, or explain their knowledge, attitudes, and behavior"



# Four Survey Methods

- Questionnaires
- Interview
- Structured Record Review
- Structured Observation



# Four Survey Methods

- Questionnaires
- Interview
- Structured Record Review
- Structured Observation



# What are we going to do?

# How to do your own survey Review other people's surveys



## What?

# Who?



### What?

## Who?

### What is your research question

#### Is a survey the best way to answer it?

# Can you collect objective data

# Behaviour, performance?

#### Rather than opinions, intentions, self-report

#### What is your research question

#### What sort of data could answer it? Do you have the skills to analyse it properly?

#### Has the question been asked before?

# Was it asked with a survey? Review other people's surveys?

#### "How Common is X?"

#### Hundreds of existing research studies?



## What?

## Who?

## Ask the fewest questions possible

# If the answer was X, would that help answer the research question?

## Ask the fewest questions possible

### Ask important things twice....?

## **Everything is relative**

# Judgements and perceptions Conscious or subconscious

#### Is it OK to smoke while you pray?

# Is it OK to pray while you smoke?

# Contrast Effect

# We make judgements by comparison

# Contrast Effect

#### **Consider the order of the questions**





#### Murder

# **Speeding Ticket**

## **Violent Robbery**

## **Violent Robbery**

#### Rodriguez and Blanco 2016

### Ask the most important things first

# **Demographics last**

# Ask one thing at a time

# make it *clear*

# make it specific

# make it objective



#### is this a good question?

How could it be better?



"In the last year, have you ever cheated on an online exam taken for course credit"



"In the last year, have you ever gone online to look up answers, in an online exam taken for course credit, despite this being prohibited by university regulations?"

#### If no, why not?

If yes, why?

If yes, how often?

"In the last year, have you ever gone online to look up answers, in an online exam taken for course credit, despite this being prohibited by university regulations?"

If yes, how often?

"In the last 12 months, have you ever gone online to look up answers, in an online exam taken for course credit, despite this being prohibited by university regulations?"

# Social desirability bias

#### What do they want me to say?

#### Be objective and specific

**Guarantee anonymity** 

# Social desirability bias

## What do they want me to say?

#### **Be objective and specific**

**Guarantee anonymity** 

# Who is asking?

(Perceived) Independence? Anonymity of participants



#### What?

## Who?



- who do the results represent

#### Sample

- people from the population who are *asked to* fill out the survey

#### • Response rate

- *Percentage* of the sample who complete the survey
- -(N = the number who actually fill it in)

Population

– who do the results represent

• Sample

– people from the population who are *asked to* fill out the survey

- Response rate
  - *Percentage* of the sample who complete the survey
  - -(N = the number who actually fill it in)



– who do the results represent

• Sample

– people from the population who are *asked to* fill out the survey

Response rate

- *Percentage* of the sample who complete the survey

- 10000



– who do the results represent

- Sample
  - 100000
- Response rate

- *Percentage* of the sample who complete the survey

- 1000

Population

– who do the results represent

- Sample
  - 100000
- Response rate
  - -1%
  - 1000

- Population
  - 1 million university students
- Sample
  - 100000
- Response rate
  - -0.1%
  - 1000





- Sample
  - 550
- Response rate
  - 90.1%
  - 500



- Population
  - University students
- Sample

– people from the population who are *asked to* fill out the survey

Response rate

Population

– University students studying X at Y?

• Sample

– people from the population who are *asked to* fill out the survey

Response rate

Population

– University students studying X at Y?

Sample

- Ideally the same as the population

#### Response rate

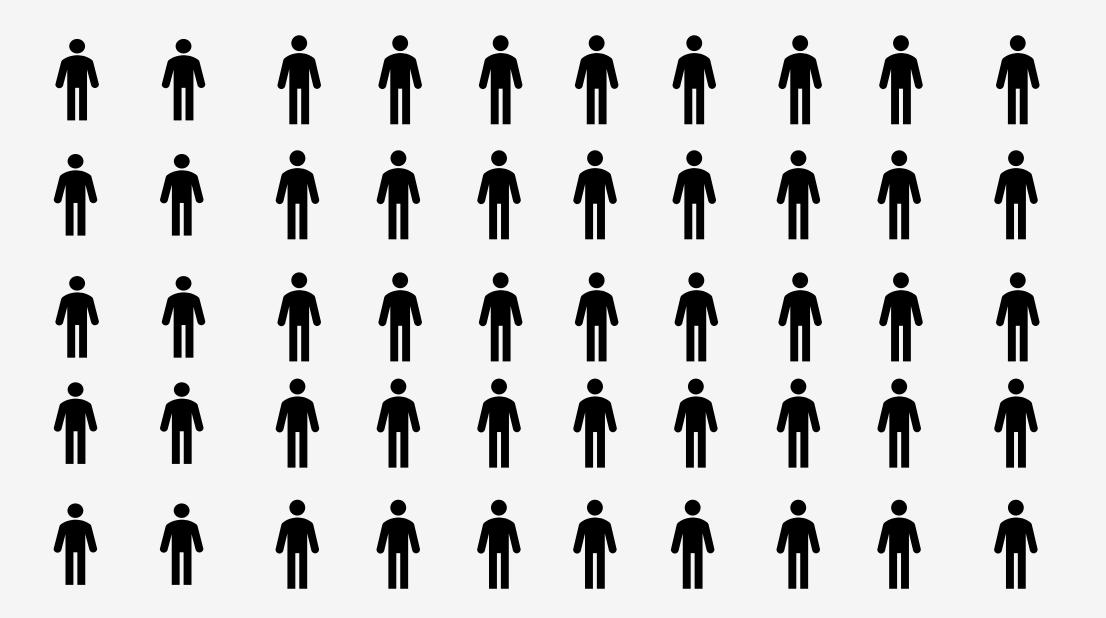


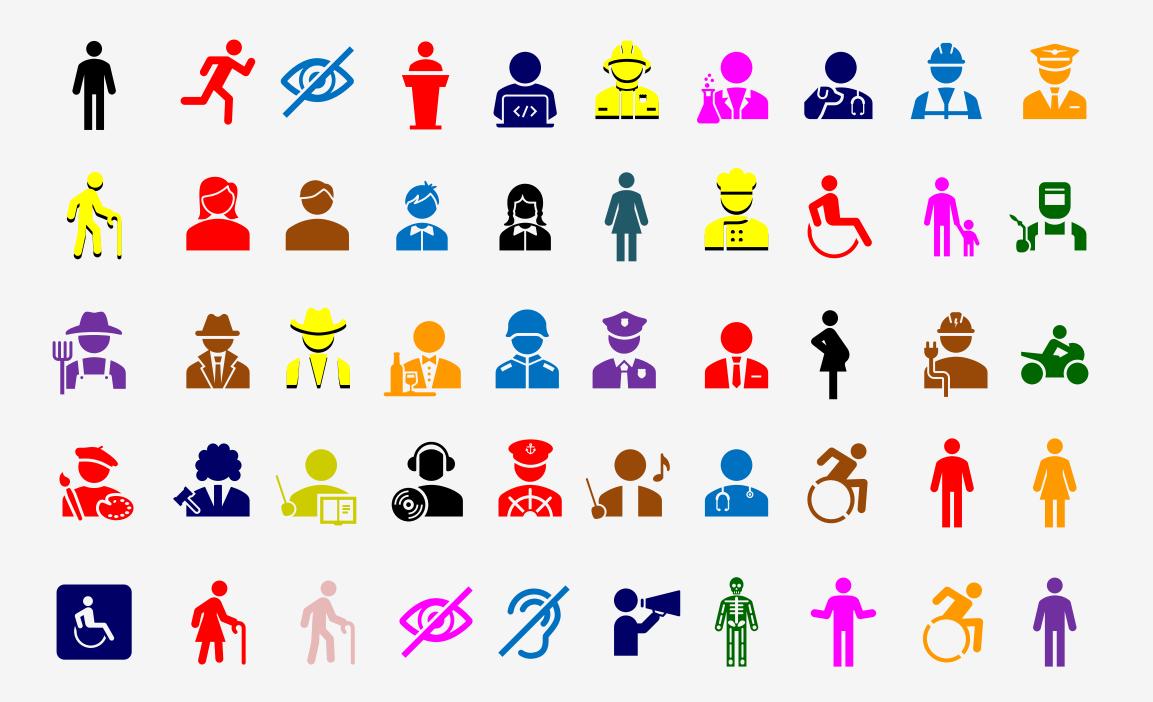
– University students studying X at Y?

Sample

– If not, then *representative* of the population

#### Response rate





# Sampling method?

# **Convenience** sample?

# Convenience sampling

Send the survey out (who to?) Analyse response from whoever voluntarily fills it in

## Who is more likely to

#### Voluntarily fill in surveys?

Women

Older

High achievers

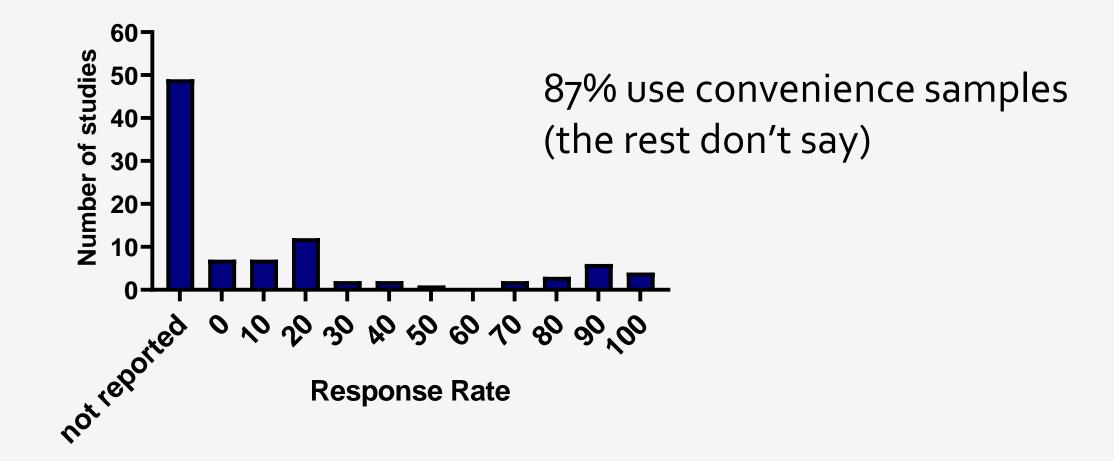
Rich

Native speakers

'Cheat' (intentionally or not)
Men
Younger
Low achievers
Poor
Non native

#### Newton 2018

#### Response rate in (97) survey studies on Academic Integrity



#### Newton 2018, Newton and Essex 2022

#### **Improve Representation**

- Define Population + sample in advance
  - Define key features which affect your research question
  - Can you realistically reach all of the sample?
  - Multiple reminders, incentives, etc
- How high is your response rate

   (does 'N' represent the sample'?)
- Does your final sample represent your population?
- (At the very least, report these considerations and account for them in limitations)

# Analysis?

Multiple comparisons Correlation or causation Collapsing Likert scales

# Analysis?

# Plan in advance

#### Summary

- Why
  - -What is your research question
- What
  - -Simple, specific, short, unbiased
- Who

-Representative Sample

## References

- Newton, P., & Essex, K. (2022). How common is cheating in online exams and did it increase during the COVID-19 pandemic? A Systematic Review. *Preprint.* <u>https://www.researchsquare.com/article/rs-2187710/v1</u>
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# Any questions?

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