

National Collaborating Centre for Methods and Tools

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## Can cartoons build capacity to interpret research evidence? An evaluation of the Understanding Research Evidence videos from the NCCMT

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# Situation and solution

## Rationale

Some key terms common to research evidence are poorly understood by our target audience.

### Proposal

Create series of short, *plain language* videos to explain common terms and concepts: "Understanding Research Evidence"







# Developing the URE videos



### Topic Selection

- Feedback from workshop participants
- Expertise from NCCMT
- Online survey



### Script Development

- Initial draft
- Editing, revising
- Translation



## Production

- Cartoon development
- Filming
- Editing
- Formatting for Web



for Methods and Tools



# Watch a video





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Cartoon Illustrations C Mike Cope, copetoons.com





# Can learning stats be fun?

## **Evaluation of URE videos**

- In-person pre-post-test experiment
  - Is knowledge gained?
- Online survey
  - o Who is watching? How much knowledge is gained?
- In-depth phone interviews
  - o Impressions of delivery and content?
  - o How do the videos apply to practice?





# **Evaluation Results**

### In-person pre-post-test experiment

• Statistically significant increase in knowledge (odds ratio, confidence interval, clinical significance)

### **Online** survey

Statistically significant increase in knowledge (forest plot, confidence interval)





# Success factors

### Narration

• "I liked that someone was actually speaking versus going somewhere to read a bunch of text ... because it made it easier to understand"

Animation

• "They helped you understand some of the concepts ... which is not possible sometimes with just having a person talk."

#### Length

short length of the videos allows them to serve as a quick reference

### Examples

 "Using the examples made the definition of odds ratio more real to me. again versus reading it in a textbook. ...[I]t just brought it more to life."





# Using the URE videos in practice

#### NCCMT users

"...excellent introduction to the modules – very helpful for new staff who would otherwise be reluctant to go into a detailed learning module."

#### Practitioners in the field

"These are a great, quick way to help people understand challenging statistical concepts. I use them in my journal club meetings before going into more depth with a research article."

"Although, I am familiar with many of these terms from my university days ... having access to these video series enables me to brush up on my previous learning."

#### Educators in post-secondary institutions

"I regularly use the wonderful resources provided on the NCCMT website in my work, and share them with my students in the public health classes I teach."





# How can the URE videos help you?

### From evaluation:

 "[The video] gave me language to explain [the term] to others in my workplace... [I]t's always helpful to have a different way to ... explain a concept than what you have used in the past.

... I found the videos gave me some of those clear examples and language that I could help explain it to others."





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