CEPC 0911

Professor Jack Hester

Due July 7, 2020 at 11:59pm EDT

Quiz 1 — Fundamentals of Evidence Synthesis

Q1: In your own words, briefly describe what evidence synthesis is and why it's helpful. (Only write around three sentences, but mention at least two key reasons it's helpful) (3 pts)

Q2: True or false, evidence synthesis is useful for examining existing information AND determining what research is missing? (1 pt)

- (a) True
- (b) False

Q3: Suppose you have limited time for gathering research and evidence synthesis (as you probably will in this course). What seems like a good option for your evidence synthesis technique? (2 pts)

- (a) Meta-analysis
- (b) Rapid review
- (c) PubMed review
- (d) Narrative review
- (e) Any of the above

Q4: The general steps (in order) of a systematic review are: (2 pts)

- (a) Rapid review →screen studies →prepare your topic →extract data →analyze and synthesize data →report your findings
- (b) Search for studies \rightarrow screen studies \rightarrow prepare your topic \rightarrow rapid review \rightarrow analyze and synthesize data \rightarrow report your findings
- (c) Search for studies →screen studies →prepare your topic →extract data →analyze and synthesize data →report your findings
- (d) Prepare your topic →search for studies→screen studies →extract data →analyze and synthesize data →report your findings

Q5: A well defined research question/topic for your systematic review contains which of the following elements? $(2 \ pts)$

- (a) A target population
- (b) An intervention of interest
- (c) Key comparators
- (d) Specific outcome(s)
- (e) Acceptable study design(s)
- (f) A, B, and D
- (g) All of the above

Q6: Briefly define confirmation bias and give an example (your own, not one from the video) (3 pts)

Q7: What is one way to help mitigate the problems caused by publication bias? (2 pts)

- (a) Search the grey literature
- (b) Publish a new paper
- (c) Find the publication's protocol details
- (d) Look for other papers in the journal
- (e) All of the above

Q8: How can you help to reduce reporting bias? (2 pts)

- (a) Find the study's planned protocol
- (b) Changing the results to match estimated omissions it the protocol
- (c) Asking the authors if there were any omissions in the publication
- (d) Ask clinicaltrials.gov for the results
- (e) A and C
- (f) A, C, and D
- (g) All of the above

Q9: Systematic reviews are a very useful tool when there are only a few published studies on a topic $(1 \ pt)$

- (a) True
- (b) False