"Getting Started in Medical Education Research"

CORD Academic Assembly 2019
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Steps for completing a medical education research study

Identify an education topic of interest or an education problem you would like to investigate.

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Perform a literature search. This will help you: 1) identify what is currently known about the topic, 2) observe what methods have been used to investigate similar questions, 3) identify or compose a conceptual framework.

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Identify a mentor(s) with expertise in medical education research and the specific content area you plan to investigate.

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Write a clear and important research question (utilize PICO format and FINER criteria).

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Gather support from all relevant stakeholders (i.e. departmental leadership, program leadership, potential participants, owners of resources you may wish to use for your study, etc.)

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Determine what outcomes you will measure.

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Determine what you will use to measure your study outcomes. (If you are creating a new instrument, be sure to gather validity evidence to support its use and pilot the instrument prior to implementation.)

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Determine your study design, one that is aligned with your research question.

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Determine your sample size (consider performing a power calculation) and sampling technique.

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Determine your plan for data analysis. (This should be appropriate for the type of data you are collecting.)

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Write your study protocol.

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Obtain IRB approval.

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Collect and analyze data systematically, strictly adhering to your study protocol.

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Interpret your results and draw conclusions.

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Write your manuscript and submit to a venue that publishes education research.

Questions to ask yourself about your manuscript prior to submission

1. Have you provided a clear description of background literature so the reader can understand the context of the topic?

2. Have you clearly framed the problem or need your research question addresses?

3. Have you identified a conceptual framework?

4. Do you have a clear objective and/or hypothesis statement?

5. Do you provide a clear description of your study methods with enough detail that the reader could replicate your study?
     Do you include a description of all the following: study design, study setting and participants, instrument development, study protocol, and statistical analysis.

6. Have you double checked that your analysis is appropriate for your study design and type of data you have?

7. Have you reported all results clearly, accurately and without subjective commentary?

8. Have you explained how your results should be interpreted and plausible reasons for the findings?

9. Have you placed the results of your study in the context of existing literature?

10. Have you discussed how the findings should be applied or direct next steps?

11. Have you honestly identified all limitations of your study?

12. Does your conclusion follow directly from the data and address your study objective/hypothesis?

Selected Resources

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