

Generating Good Research Questions in Health Professions Education

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- Generating a specific research question is an integral part of the overall research design.
- It lays the foundation for the research study and informs each step of the study design.

Steps		Examples
Identify an idea or problem A general research question lays the foundation for the entire study design.	Use local problems or ideas to formulate a general question <ul style="list-style-type: none"> • Problems, interests, or changes at your institution • Ideas from reading medical education journals 	Lapses during handoffs have been occurring at your institution. You are wondering how to improve handoff practices.
Perform a literature review A literature review helps identify what has already been published and a conceptual framework.	Review prior publications <ul style="list-style-type: none"> • Identifies prior methodology, gaps in understanding, and areas for elaboration Identify a conceptual framework¹ <ul style="list-style-type: none"> • Organizes related ideas into an overarching theme • Informs your research including the selection of study variables and the interpretation of results 	Few studies have looked at whether simulated handoffs improve the quality of handoffs (literature review). You begin to read more about simulation-based mastery learning ² (conceptual framework).
Generate a specific research question The general research question is narrowed to state the specific goal of the study.	Narrow your general research question to a more specific question <ul style="list-style-type: none"> • FINER question³ • Needs to be answerable 	Your first question: Does handoff simulation reduce unnecessary test ordering? You are unable to determine what is necessary ordering, and refine your question to whether handoff simulation decreases handoff errors on call.
Develop a study design The specific research question and conceptual framework identify study variables and inform the study design.	Consider common medical education study designs^{1,4} <ul style="list-style-type: none"> • Experimental • Quasi-experimental • Nonexperimental • Qualitative⁵ 	You plan a quasi-experimental design. Interns on half of the services will participate in the handoff simulation. You plan to use a validated tool identified in the literature to assess quality of handoffs in the two groups.

The “FINER” criterion is an example of available frameworks that can be used to “test” the specific research question.³

FINER research question	Feasible Is this question answerable with the resources you have available to you?
	Interesting and Important Is this question interesting to you as the investigator, as well as to the general health professions education community?
	Novel Does the question add to the current body of knowledge?
	Ethical Can you answer this question without putting anyone at risk?
	Relevant Does the answer to the question matter not only at your institution but also at others?

References:

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4. Torre DM, Daley B. AM Last Page: Common evaluation designs in medical education I. *Acad Med.* 2013;88:1784.
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Generate a Good Research Question – Call to Action

Steps	(enter ideas here)
Identify your idea or problem	
Perform a literature review	
Generate a specific research question using FINER framework: <ul style="list-style-type: none">• Feasible• Interesting and important• Novel• Ethical• Relevant	
Develop a study design	