

2.9 More TIPS of Conducting PhD Research

Research Design and Methods

- 4.1 Research Plan/Purpose of Research Design
- 4.2 Developing Conceptual of *Research Design and Methods*
- 4.3 Main Points Must Get Across



Research Plan

Portray

- What has been done so far
 - Preliminary Studies
- How you are going to do it
 - Research Design and Methods

- How you are going to do it
– Research Design and Methods

“Describe the research design conceptual or framework, procedures, and analyses to be used to accomplish the specific aims of the project.”

“include how the data will be collected, analyzed, and interpreted as well as the data-sharing plan as appropriate.”

“Describe any **new methodology** and its advantage over existing methodologies. Describe any novel **concepts, approaches, tools, or technologies** for the proposed studies.”

“Discuss the potential difficulties and limitations of the proposed procedures and **alternative approaches** to achieve the aims.”

“provide a tentative sequence or **timetable** for the project.”

Main Points That You Must Get Across

- Research design, if carried out successfully, will accomplish Specific Aims
- Methods are feasible and well developed
- Approach is original

Main Points That You Must Get Across

- Data will be analyzed correctly
- Enough subjects/specimens will be tested to lead to conclusive results
- Study can be accomplished in requested time

Data Analysis

Describe approach for data analysis in detail

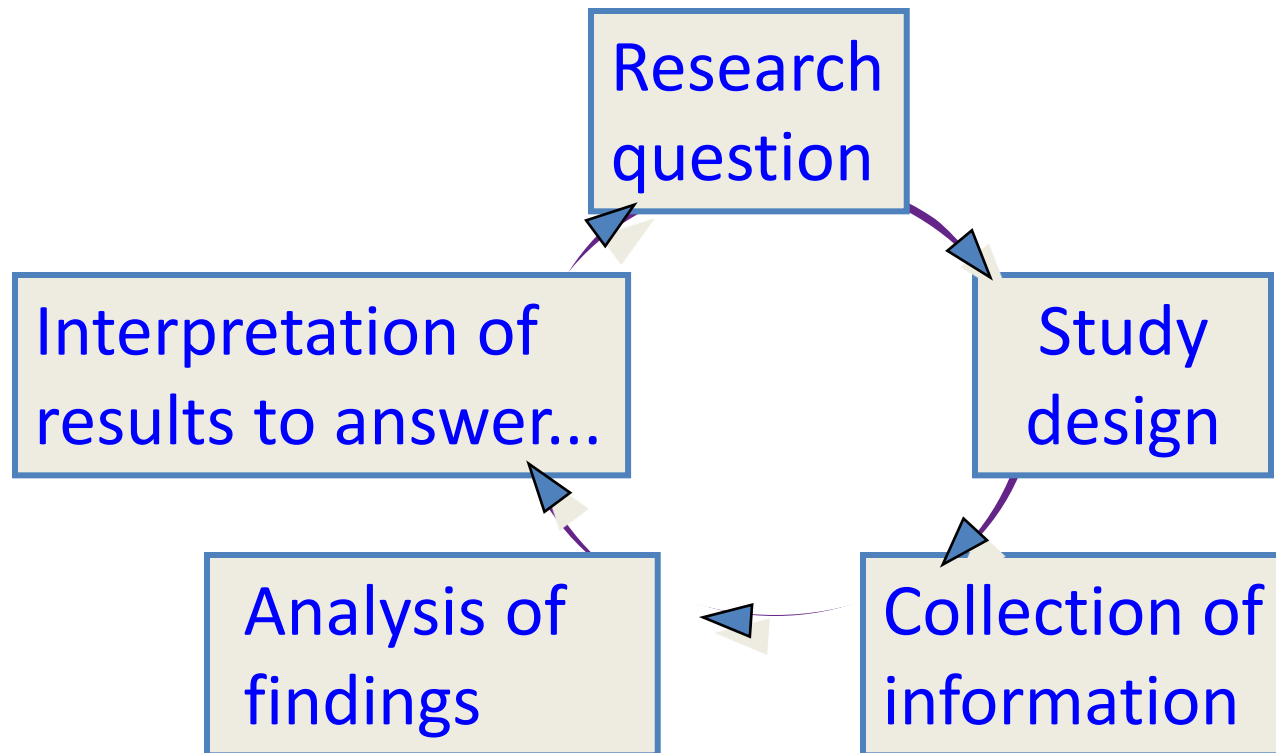


**Analysis should not
be Black Box**

Expected Results and Interpretation

Remember to discuss expected results and interpretation of analysis

Close
the
loop



Timetable

Include timeline or timetable at end of
Research Design and Methods

- Give enough detail for evaluation
- Make certain it is reasonable


GANTT Chart (Time line)

Task	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Survey	→			
Test GWT		→		
Analyze data		→	→	→
Write Thesis				

Budget

SUMMARY OF FUNDS REQUESTED (RO)				
	Year 1	Year 2	Year 3	TOTAL
Capital Equipment		7500		7500
Recurrent Items	8000	6000	16000	30000
Use of University Facilities	1000	1000	1000	3000
Local Travel Costs	1000	1000	1000	3000
Publication Costs	500	500	2500	2600
Miscellaneous	2000	2000	2000	6000
TOTAL	12500	18000	22500	53000

Summary: Successful Research Design and Methods

- Bright idea 
- Well developed and clearly described methods
- Appropriate data analysis
- Large enough sample size
- Plenty of time to do the work
- Only minor limitations
- Clear pathway to strong conclusions

Thank You

