




Research Design




- ▶ In Research design we plan about what research we will be conducting, where we will be conducting this research, when we will be doing it, how much time and resources this research will take etc.
- ▶ So overall we try to arrange things that helps us to plan and execute things for data collection and planning for data analysis.
- ▶ So these things we plan in advance under the research design.



Questions to ask yourself while making research design

- (i) What is the study about?
- (ii) Why is the study being made?
- (iii) Where will the study be carried out?
- (iv) What type of data is required?
- (v) Where can the required data be found?
- (vi) What periods of time will the study include?
- (vii) What will be the sample design?
- (viii) What techniques of data collection will be used?
- (ix) How will the data be analysed?
- (x) In what style will the report be prepared?



Based on previous questions we can see different parts of the Research design

- ▶ Sampling design- planning about which sampling methods we will be using in our study to collect samples for our research.
- ▶ Observational design- planning about things related to how we will observe things in the field, what we will be observing, etc.
- ▶ Statistical design- planning about which statistical methods we will be using to analyse our collected data.
- ▶ Operational design- we plan about how to implement above three plans.

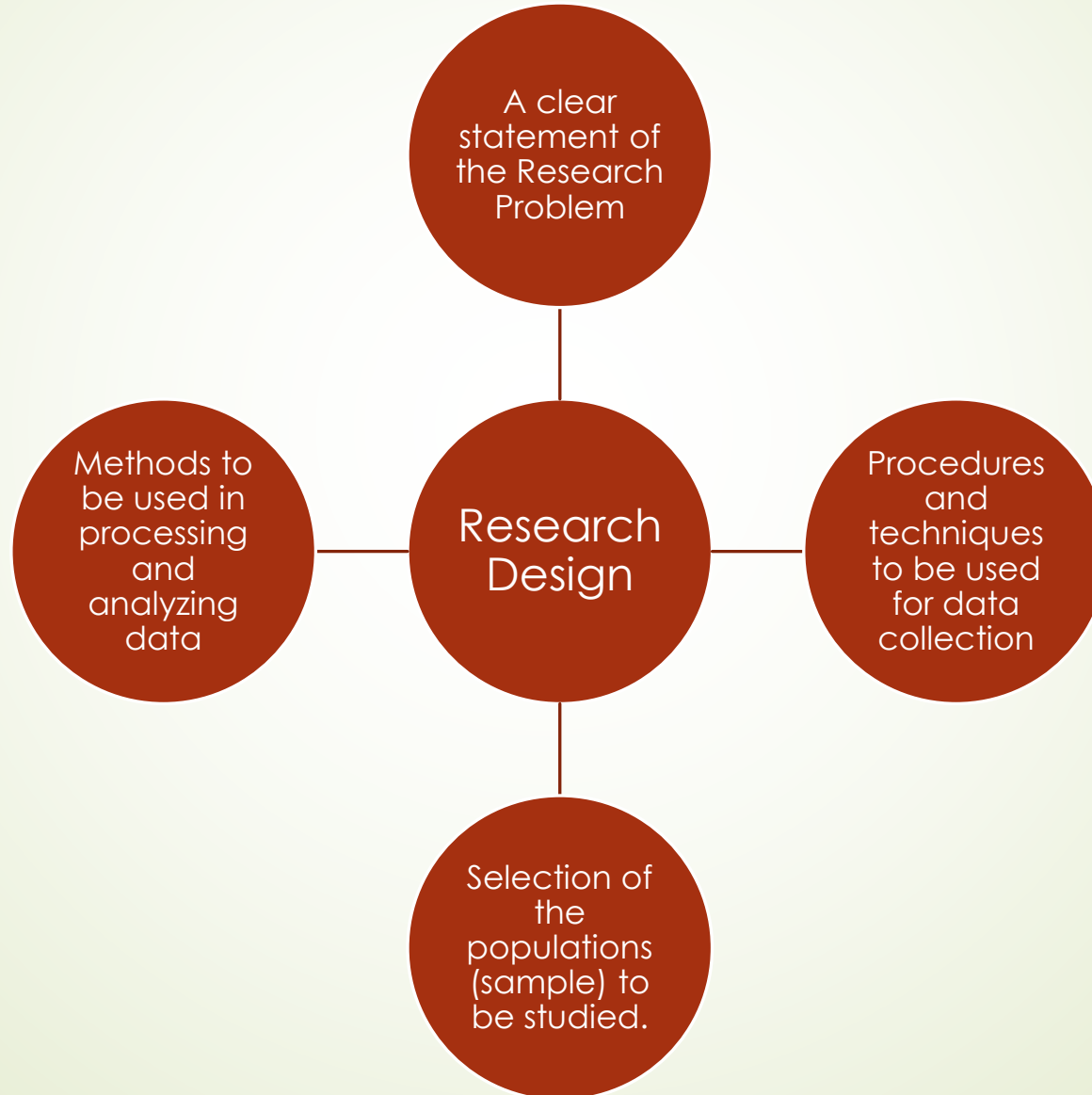


Conclusion



- ▶ So basically research design is about three things
 - ▶ First it is about planning and specifying the sources and types of information/data we will be needing and collecting.
 - ▶ Second it is about which approach (sampling techniques/methods) we will be using to collect the data.
 - ▶ Third, it is about planning the cost and time related to overall research.

So research design will include





Why do we need a research design?

Benefits of having a good research design

- ▶ So basically having a research design will help the researcher to conduct the research with having clear ideas about what she is going to do?, how she is going to do?, why she is doing this?, etc. Overall having research design will make this journey easy for a researcher.
- ▶ It will help to conduct research with efficiency with minimum cost and maximum results because we will be having clear blue print of what and how exactly we are going to conduct the research.
- ▶ The main part of research design which is planning about methods of data collection and techniques for analysis will help us to smoothly collect and analyse data.
- ▶ Lastly having a research design will also help the researcher to see if there is any problem in his research which needs consideration.



Important concept relating to Research Design

- ▶ Variable- a concept which can take on different quantitative (numerical) values is called variable. For example weight, height, income etc. Qualitative phenomena are also quantified to make them variable so that it can be analyzed if we are doing quantitative research.
- ▶ Independent variable- variable that exists on its own and does not depend on other variables for its existence for example age, sex/gender etc.
- ▶ Dependent variable- variable which are dependent on other variable for their existence for example if we say 'height depends on age' then in this height is a dependent variable since height is influence by the age and age is independent variable since it do not depend on height.
- ▶ Continuous variable- variables that can take different forms even in decimals. For example age.