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No study is Perfect. Even a propely designed experiment can have biases.

Det A bias is the degree to which a procedure will over or underestimate a population's true parameter.

## & Types of Bias

- · Voluntary Response Bias willowly capture the opinion ated, or interested, and non-into houseted person.
  - · Self-Interest Bias is the polling organization's sponsor making an attempt to make their product more desirable.

Ford Pinto marketing grestions will avoid
saftey issures and to cas on affordability!

History: Rear end collision frequently resulted in exploding

Also, Corpanies polls frequently lead you Next consider People have known for 1000's of years that the Earth is round. Do you feel the earth is round? this is an example of a · Leading Question Bias is where the question being asked begs the pollsters desired response "Do you favor decreasing the heavy tax burdens that the middle-class families must suffer with ?" Do you favor decreasing taxes on middle-class families?" " Do you favor increasing taxes on middle class families so as to have better schools, more safety of better health?)

BTW: My moth is "The Properly Educated person will make the correct choices."

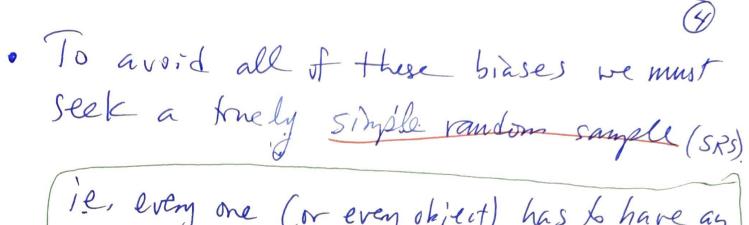
The opinion of the non-responders might be that they oppose the topic being addressed but they do NOT want potential conflictor con frontation.

Surveys with a lot of non-responses are based

· Saysling Bias occurs when the sampling process fails to cover all aspects or regions of a population.

Synasog or temple.

(Selection Bias = Sampling Bias but intentionally including or excluding segments of the population)



ie, every one (or every object) has to have an equally likely chance of being choosen.

· In addition to comprehence coverage you also need to have sufficiently large data taken.

· Failure to meet S.R.S., large enough & independence IS Garbage In -> Garbage Out.

butter study habits than Freshmen have.

[at issue here: 20% to 30% of Freshman, Sopho-

at issue here: 20% to 30% of Freshman, Sophomore and Juniors have dropped out in part to poor study habits.

If you have a room of people of varying heights, forcing the short people to leave will vaise the average But it does not make any one taller!"

First you have to get good data!