

2.2 Sampling

	What it is	When to use	Advantages	Disadvantages
Census	A collection of data from an entire population	Gives a completely accurate result	<ul style="list-style-type: none">• Small population• Easy to collect data• Large variation of opinion	<ul style="list-style-type: none">• Time consuming+Expensive• Can not be used when testing involves destruction• Large volume of data to process
Random Sampling	Each sample has an equal chance of being selected	<ul style="list-style-type: none">• Large population• Have a sampling frame	<ul style="list-style-type: none">• Numbers truly random and free from bias• Easy to use• Each number has a known equal chance of being selected	<ul style="list-style-type: none">• Needs a sampling frame
Systematic sampling	Required elements are chosen at regular intervals in an ordered list	<ul style="list-style-type: none">• Time constraint	<ul style="list-style-type: none">• Simple to use• Suitable for large samples	<ul style="list-style-type: none">• Only random if ordered list is truly random• Can introduce bias
Stratified sampling	Population is divided into groups and a simple random sample is carried out in each group	<ul style="list-style-type: none">• More accurate when strata are present• Reflects population structure	<ul style="list-style-type: none">• It can give more accurate estimates than simple random sampling where clear strata are present• Reflects the population structure• Allows you to observe relationships between subgroups	<ul style="list-style-type: none">• Within the strata, the problems are than same as for any simple random sample• If the strata are not clearly defined they may overlap
Quota sampling	The population is divided into groups by gender etc. A quota of people in each group is set to try and reflect the group's proportion in the whole population	<ul style="list-style-type: none">• There is no sampling frame	<ul style="list-style-type: none">• Enables fieldwork to be done quickly because a small sample size is taken.• Costs kept to a minimum• Administering test is easy	<ul style="list-style-type: none">• Not possible to estimate the sampling errors• Interviewers may not be able to judge characteristics easily• Non responses are not recorded• Can introduce interview bias