SURVEY TYPES &
SAMPLING TECHNIQUES
USED IN MARKET RESEARCH

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Introduction

- How should potential respondents for a survey be selected?
- What methods and sources are available, and when should they be used?
- Aim for a broad understanding, rather than details of sampling theory

Agenda

- Qualitative & Quantitative
- Universe and Coverage
- Sampling Methods
- Sample Size
- Error and Bias

Qualitative Research

"FOCUS GROUPS"

- To test and develop ideas
- For in-depth understanding
- To develop quantitative questionnaire
- Use a guide rather than a structured questionnaire

Quantitative Research

- To **measure** behaviour or opinions
- To **compare** data from different groups, or across time
- For segmentation - define different groups within a population
- Use a structured questionnaire, with limited open-ended content

Aims of Sampling

- To avoid bias
- To sample in a cost-effective manner; minimum error for a given cost

Universe & Coverage

- Need a clear statement of who should be interviewed
- Alternatives:
  - Representative sample - for description and measurement
  - Restrict to key groups only - for diagnostic understanding
  - Booster samples where extra clarity needed
  - Tracking and continuous surveys

Sampling Methods

- Random (Probability)
- Stratification
- Clustered Samples
- Quota
- Random Location
- Random Route

Random Samples

- Need a universe listing, from which individuals can be selected with equal probability
- Statistically ‘pure’, but may not be representative, and not cost-efficient for face-to face
- Sample controlled because specific individuals are selected

Improvements to Random Sampling?

- Almost never use a pure random sample
- Stratification - to ensure a representative sample
- Clustering - to ensure face-to-face interviewing can be carried out efficiently

Stratification

Stratification - sorting the universe list first, on one or more key variables, to ensure a representative sample

A 1

A 2

A 3

B 1

B 2 ……

Stratification

- For face-to-face, often stratify sampling points by region and geodemographics
- If sampling from a database, can stratify by 3 or 4 key characteristics to ensure they are represented correctly

Clustered Samples

- First sample geographic areas from a stratified list, then select several individuals within each area
- More cost-efficient for face-to-face, especially with callbacks

Quota Samples

- Select a representative set of (large) areas
- Interviewer can select any eligible respondent
- Controlled by quotas - simple, multiple, interlocking

Random Location

- Select Census Enumeration Districts from a list stratified by Region and geodemographics
- Interviewer can select any eligible resident within ED
- Controlled by selection of representative areas (and quotas)

Random Route

- Select a representative set of areas
- Identify a starting address in each area
- Devise instructions for route and selection process
- Controlled by selection of specific individuals, and quotas

Sampling Methods - The choice

- Random samples, with stratification and/or clustering are closer to theory, and allow errors to be calculated
- Quota samples are generally much cheaper, and give flexibility for minority samples
- Random Location largely avoids interviewer selection and allows close control of design

Sample Size

Depends on:

- **Accuracy required**
- **Degree of variation within population**
- **Budget available**
- **Level of subgroup analysis**

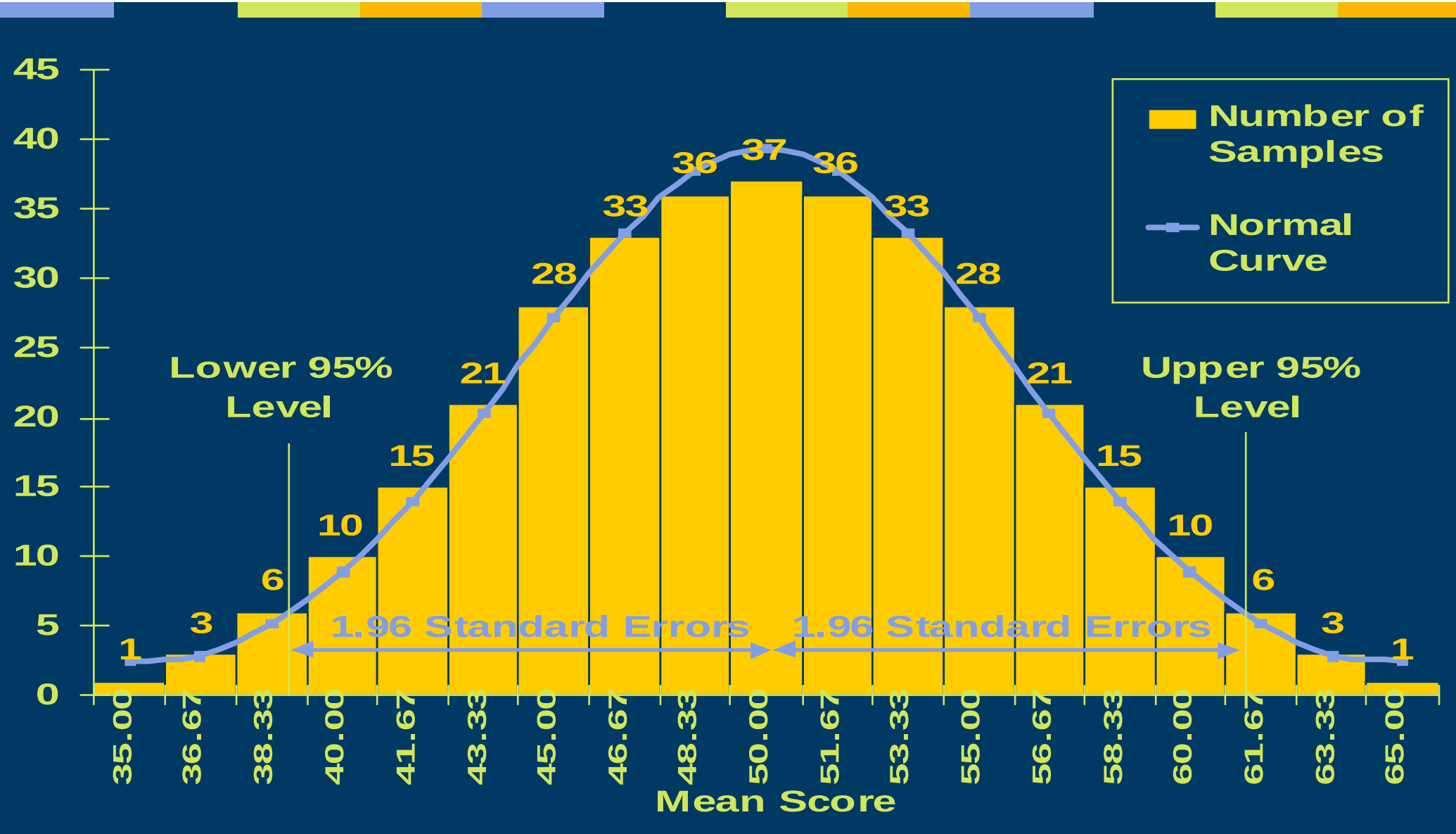
Sample Error

- Sampling theory shows that with a large number of samples, the sample estimates for a single figure will have a normal distribution

For this distribution:

- Mean = True Population Figure
- $\pm$ 2 Standard Deviations contain 95% of all samples

Sampling Frequency Distribution



Sample Bias

Due to:

- Incomplete coverage - due to sampling frame, or by choice
- Non-response (to survey or item)
- Non-availability
- Boosted subgroups - need to re-weight

Summary

- Define target population accurately
- Consider appropriate survey design
- Investigate sample sources
- Which sampling method is most suitable?
- Sample size v. Cost & accuracy
- Will sample source or fieldwork problems cause bias?