Definition of survey

Survey is a descriptive research that aims to ask respondents questions related to the research. it is expected to obtain a representative sample of the target population.

Survey error

Random Sampling error:

Difference between the findings in the sample and the actual population caused by insufficient sample size and not representative enough

Systematic error (non-sampling):

Misunderstood research objectives, draw wrong hypotheses

- Eg: ambiguous questions, question wording, data analysis error, misinterpretation, survey layout and logic

How to overcome?

- talk to another researcher
- review of professional journals and observe how others did it
- communicate with the respondents again
- → a) Administrative error: Improper administration or execution of a survey.
- Data-processing error: incorrect computer programming, incorrect data entry
- Sample selection error: improper selection of smaple during a survey
- Interviewer error: failure to pose questions or record responses which lead to biased results
- Interviewer cheating: filling in fake answers or falsifying surveys

Stages of questionnaire design

1 Specify what information will be sought → 2 determine the type of questionnaire and survey research methods → 3 determine the content of individual questions → 4 determine the form of response →

5 determine the wording → 6 determine question sequence → 7 determine the physical characteristics → (revise previous steps) → 8 pretest the questionnaire

(1) The first step is to obtain accurate survey results that need to answer the report questions and problem. A questionnaire is relevant if no unnecessary information is collected. (2) Next is to determine the type of survey that depends on the types of respondents and nature of information required, using questionnaires rather than interviewers are best to ask sensitive questions and long series of questions; interviews are best to obtain open-ended information.

(7)

Moreover, it is important to determine the physical characteristics of the questionnaire such as drop box and status bars, as well as the use of color, animation sound and other layout effects that make the survey interactive and more interesting. (8) After all, pretesting the questionnaire helps to reveal errors and able to ensure the questions are necessarily included in the survey.

Probability sampling –
Every member of the population has an equal chance for getting selected. Random sampling error can be accurately ...

SPSS analysis
*$P>0.05$ = accept null hypothesis (Ho) – there are no significant differences/ relationship/ associations between x and y.
*$P<0.05$ = accept alternative hypothesis (Ha) – there are significant differences/ relationship/ associations between x and y.

Test of differences
Independent sample t-test

Step 1 – Find Indicators: Levene's test (F)/ F statistics and their (sig.)
Step 2 – identify smaller/larger than 0.05 significant value → there is no statistical difference → assume the variance are equal for the two samples
Step 3 – look at Equal variances assumed/ equal variances not assumed 's F and sig. → **

ANOVA (may come along with Coefficients ie Bivariate regression)
Step 1 – Find Indicators: F statistics and p value
Step 2 – identify groups with smaller/larger than 0.05 significant value → accept alternative hypothesis and there is a difference between groups
Step 3 – compare **post hoc** score to identify x is significantly higher than y

Tests of associations
Chi-Square (cross tabulation; Pearson Chi-square) (variables measured on nominal scale)