

C023006 : MAJOR STATISTICS

KEY WORD : QUOTA SAMPLING/STRATIFIED RANDOM SAMPLING

PRACHA SUWATTANAPUNGUL : A COMPARISON ON THE EFFICIENCY OF QUOTA SAMPLING AND STRATIFIED RANDOM SAMPLING BY SIMULATION METHOD. THESIS
ADVISOR : ASSO.PROF. SORACHAI BHISALBUTRA, Ph.D. 215 PP.
ISBN 974-581-605-1.

The objective of this study is to compare the efficiency of Quota Sampling and Stratified Random Sampling using the Ratio Difference Average Mean (RDAM).

The result of this study shows that Stratified Random Sampling is more efficient than Quota Sampling in all situations.

The factors affecting the efficiency of both sampling methods are as follows:

Sample Size:

The RDM value will decrease if the sample size increases.

Number of Stratum:

The RDM value will decrease if the number of stratum increases.

Coefficient of Variation:

The RDM value will decrease if the coefficient of variation decreases.

Correlation between the interested variable and the variables used in Stratum grouping:

The RDM value will decrease if the correlation between the interested variable and the variables used in stratum grouping increases.

In case of low value of the coefficient of variation and high level of the correlation between the interested variable and the variables used in stratum grouping, Quota Sampling method should be used because data collection by Quota Sampling is more convenient than Stratified Random Sampling.