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Sample design * In general * For PAMS

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- Success factors for a survey:
 - Updated sampling frame and population figures.
 - Representative sample of the population.
 - Unbiased, controlled fieldwork.
 - Correct weighting methodology.
 - Correct calculation of estimates and statistical analyses.

GTI Sampling frame NEW DEVELOPMENT

Mall of Africa area - 2011



GTI Sampling frame EA-type and Geo-type Updates



GTI Sampling frame GTI POPULATION & DEMOGRAPHICS



GTI Sampling frame NEIGHBOURHOOD LIFESTYLE INDEX (NLI)

- Multivariate statistics, based on HH info, are used to measure level of wealth in neighbourhood.
- NLI ranged from 1 (lowest income / poorest) to 10 (highest income / most affluent community).



- How should the sample be designed?
- Is proportional allocation always the best option?



- Best sample mirroring all characteristics in population.
- Optimum stratification to ensure population is divided into homogeneous groups.
 - Why? To increase precision.
- Which stratification variables should be used?

When to Use Disproportional Sampling

Disproportional sampling allows the researcher to give a larger representation to one or more subgroups to avoid underrepresentation of the said strata.

 Assume population can be divided into three homogeneous subgroups.



Is proportional allocation always the best option?

- NO
- Proportional allocation not always the optimum allocation for a survey.

Based on the 2017 Midyear estimated population figures per province, the following results were found for Gauteng, Northern Cape and Mpumalanga by using different power allocations:



Sample size for different Power allocations n=7500

Let us now consider the precision, based on these different sample sizes.



Comments

Questions?

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