

## Logical Reasoning Simple Percentage Analysis Method

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**Abstract:** Logical reasoning simple percent analysis method is a creative innovative idea, which is highly simplified, easily understandable method for data analysis, testing of hypothesis and presentation of accurate result. Dr. Mbieli with his many year of teaching experiences in the higher tertiary institution define hypothesis "As a statement positive or negative which validity subject to be correctly analyzed and the acceptable statement accurately stated". The concept LRSPAM uses:

- Specimen sample
- Data details
- Numerical Strength
- Percentage 100
- Simple percentage analysis
- Scores

The researcher has the discretionary power to select small manageable population from the large population of the area of research. SRSPAM also welcome all types of questions and uses all numbers except zero with the end product to be positive, negative or neutral. The researcher had 1000 population, selected 50 in determining whether or not democracy is operational in Nigeria with the end result testifying democracy is operational in Nigeria.

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### I. Introduction

Logical reasoning an innovative creative idea, highly simplified measurement skill with specific formula easily understandable, aimed at correct analysis of data and correct presentation of result. It also involves the interchangeability of constant values and variable values with the constancy of constant values remaining unchanged at the end of research operation.

#### Contribution on administrative thinkers on hypothesis

A hypothesis is a tentative generalization, the validity of which remains to be tested. In its most elementary stage the hypothesis may be any hunch, guess, imaginative idea, which becomes the basis for action or investigation.

#### George A. Lunberg

Without hypothesis the research is unfocused, a random empirical wandering. The results cannot be stated as facts with clear meaning, Hypothesis is necessary link between theory and investigations, which lead to discovery of addition of knowledge.

#### Hart Goody

The use of hypothesis prevents a blind search and indiscriminate gathering of masses of data which may later prove irrelevant to the problem under study.

#### P. V. Young

The more insight the researcher has into the problems, the simpler will be his hypothesis about it.

#### P.V. Young

Hypothesis is a statement positive or negative which validity is subject to be correctly analyzed and the acceptable statement accurately stated.

#### Dr. P. Mbieli

#### The Principles

1. Simplicity and easily understandable
2. Use of analytical table consists of specimen sample, data details, numerical strength, percentage, simple percentage analysis and scores.
3. A clear picture of interplay of constant values and variable values on the interchangeable roles of analysis with the constancy retained at the end of the operational research.
4. Selection of small manageable research population from the large number population in the areas of research.

5. Application of the highest percentage opinion of the research population in answer to a research question on verification exercises endorsement of the most acceptable statement and correct presentation of the result. The research population includes the researcher or investigator (singular or plural) large number population of area of researcher and small manageable research population (specimen sample or sample size).

This scale is easily applicable in solution to problem of social science which deals with human behaviour. The thinker experimented on a 1000 area population with the choice of 50 numbers research population to ascertain whether or not democracy exists in Nigeria. The researcher wanted to know the effect of some selected Nigerians on whether or not democracy exists in Nigeria.

The simplicity and objectivity of this analytical table starts with analysis of data, sex distribution (male and female), age, educational status and research question.

### Objectives

1. To make use of highly organized table to ease data analysis
2. To construct formular  
Numerical Strength x 100  
~~Specimen sample~~ ———— —1——
3. To ensure accurate data analysis and correct presentation of results
4. Enable researchers apply use of discretion hi selecting small research population
5. Offer smooth knowledge of research to simplify analysis to student community and researchers.

### Significance

The significance of logical reasoning simple percentage analysis method is centered on;

- Simplicity
- Speed.
- Accuracy
- Accessibility to the greatest number of researchers
- Student community, etc and also applicable to the use of all number except zero (0).
- It enables the researcher to discretionary select small manageable population for analysis from the large population of area of research.

## II. Determination of Specimen Sample

Specimen sample is the actual research population.

The specimen sample is determined on the researcher's use of discretion to select small manageable population for research from the large population of the area of research. The researcher can use any small number with the exception of zero in logical reasoning.

### Analysis of the formular

The formular is:

$$\text{Numerical Strength} \times \frac{100}{\text{Specimen sample}} = 1$$

The numerical strength is a product of detailed analysis of data contents such as research population, sex composition, age bracket, qualification and highest percentage answer to research questions. The specimen sample and the 100% are the constant values while the numerical strength provides relevant positions for variable values.

### Method of Analysis

The analysis is anchored on the use of logical table specified as follows:

### Analysis of Data

The researcher worked on an environment of 1000 population of area of research, but selected 50 specimen samples to be issued with questionnaire. The researcher issued questionnaire to 50 research population and retrieved the entire 50 questionnaire with responses.

Specimen sample	Data details	Numerical strength	Percentage 100	Simple percentage analysis	Scores
50	Research population opinion	50	100	$\frac{50 \times 100}{50}$	100%

This data table indicates 100% support of the research population

### Analysis of Sex Composition

The researcher on the study of questionnaire observed male 30 and female 20.

Sex composition table

Specimen sample	Sex	Numerical strength	Percentage 100	Simple percentage analysis	Scores
50	Male	30	100	$\frac{30 \times 100}{50}$	60%
	Female	20		$\frac{20 \times 100}{50}$	40%

Observance of 60% male and 40% female in analysis

Analysis of Age Distribution

Specimen sample	Age	Numerical strength	Percentage 100	Simple Percentage analysis	Scores
50	18-30	20	100	$\frac{20 \times 100}{50}$	40%
	31-43	20		$\frac{20 \times 100}{50}$	40%
	44, above	10		$\frac{10 \times 100}{50}$	20%

The researcher observed 40% age group 18-30, 40% age group 31 - 43 and 20% age group 44 and above.

### Analysis of Educational Status:

The researcher on the study of questionnaire on educational status observed M.Sc = 5, B.Sc. = 25, Hnd = 20.

Specimen sample	Qualification	Numerical strength	Percentage 100	Simple percentage analysis	Scores
50	HND	20	100	$\frac{20 \times 100}{50}$	40%
	B.Sc	25		$\frac{25 \times 100}{50}$	50%
	M.Sc	5		$\frac{5 \times 100}{50}$	10%

Observation of 40% for HND, 50% for B.Sc and 10% for M.Sc

It is good to note that logical reasoning welcomes both open and closed ended questions. e.g. what is your opinion about Nigerian democracy?

**Analysis of Research Questions:**

1. Is there Democracy in Nigeria?
2. Does Nigeria Administration Prepare Annual Budget?
3. Is there freedom of speech in Nigeria Administration?

**Table I:**

**Question 1: Is there Democracy in Nigeria?**

The researcher asked question: is there democracy in Nigeria? 40 persons said POSITIVE while 10 said NEGATIVE.

**Question 1 table**

Specimen sample	Data details	Numerical strength	Percentage 100	Simple Percentage analysis	Scores
50	Positive	40		$\frac{40 \times 100}{50}$ 1	80%
	Negative	10		$\frac{10 \times 100}{50}$ 1	20%
	Neutral				

80% agreed of the presence of democracy in Nigeria while 20% disagreed

**Table 2: Question II: Does Nigeria Administration Prepare Annual Budget?**

Specimen sample	Data details RQI	Numerical strength	Percentage 100	Simple percentage analysis	Scores
50	Positive	50	100	$50 \times 100$	100%
				50	
	Negative				
	Neutral				

The researcher observed a 100% respond to the preparation of budget In Nigeria Administration

**Table 3**

**Question III: Is there freedom of speech in Nigeria Administration?**

On the issue of freedom of speech, 45 persons answered POSITIVE while 5 said NEGATIVE

Specimen sample	Data details RQI	Numerical strength	Percentage 100	Simple percentage analysis	Scores
50	Positive	45	100	$45 \times 100$	90%
				50	
	Negative	5		$\frac{5 \times 100}{50}$ 1	10%
	Neutral				

The researcher observed 90% agreed on freedom of speech while 10% disagreed.

**Testing of Hypothesis and Presentation of Results**

The researcher has two hypotheses namely:

1. Democracy is operational in Nigeria
2. Democracy is not operational in Nigeria

The testing of hypothesis is validated under the following reliability instruments:

1. 100% support of the research population i.e 50% questionnaires was issued and 50% retrieved on analysis.
2. Appreciable presence of male and female cooperating in the research.
3. Matured age capable of expressing wise opinion.
4. Educated research population with the ability to offer intelligent answers to research question.
5. Highest percentage 'opinion of the research population in answer to research questions verifies the hypothesis on the 80% presence of democracy in Nigeria, 100% for preparation of budget and 90% for freedom of speech in Nigeria Administration.

This highest percentage variable favours the hypothesis that democracy is operational in Nigeria while second hypothesis that democracy is not operational in Nigeria is rendered insignificant.

**Presentation of Result**

In the light of the above submission the hypothesis that democracy is operational in Nigeria is tested and proved correct.

**Logical reasoning**

Simple percentage analysis method to solution to problem in observable balance in opinion of the research population in answer to research question. The researcher has the discretionary power to represent all the number as 1 (one) both in positive and negative and operate on a new specimen sample three (3) with the researchers inclusive.

New Analytical table to solution in balance of opinion

Specimen sample	Data details	Numerical strength	Percentage 100	Simple percentage analysis	Scores
3	Research Opinion			Analysis	
	Positive	1		$\frac{1 \times 100}{3}$	33.3%
	Negative	1		$\frac{1 \times 100}{3}$	33.3%
	Researcher	1		$\frac{1 \times 100}{3}$	33.3%
	Neutral	-		-	-
					100%

In reflection to the above analytical study the researcher has the power to use his discretion taking his/her own number 33.3 to add to either the negative or positive opinion and declare the acceptable statement as current.

In the event of the researcher observing a balance of opinion on the size of positive; negative and Neutral for example 30 specimen sample, 10 positive, 10 negative, 10 neutral.

In the event of the researcher not wanting to use the neutral strength represented by one (1) both on the side of specimen sample and data details.

Specimen sample	Data details	Numerical strength	Percentage 100	Simple percentage analysis	Scores
4	Research Opinion	1	100	$\frac{1 \times 100}{4}$	25%
	Positive	1	100	$\frac{1 \times 100}{4}$	25%
	Negative	1	100	$\frac{1 \times 100}{4}$	25%
	Researcher	1	100	$\frac{1 \times 100}{4}$	25%
	Neutral	-		-	-
					100%

Thus the researcher can make use his or her own number of 25% to be added to either positive or negative as the acceptable statement in the clearly accurate result without using the neutral which is unpredictable. In concluding remarks, logical reasoning is highly simplified, easily understandable based on accuracy that is open to students, scholars, research fellows for ease of reference and application for data analysis and accurate presentation of result.

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