RESEARCH METHODOLOGY

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RESEARCH METHODOLOGY

- is specific scientific procedures or techniques used to identify, select, process and analyze information about a topic.

- Overall theory on how the research should be undertaken

- **Research method/ design-** is a sub-set of the RM comprising of techniques and procedures used to obtain data

NB: Explains the what, how, why, When and where of the research process (How the research will be carried out)

Research Methodology SIX Step

Formulating & clarify the topic

Review Literature

Designing the Research

Collecting Data based on the design

Analyzing data

Writing –Write up

RESEARCH METHODOLOGY

PHILOSOPHICAL ORIENTATION

School of thought adopted to explain reality;

- Positivist stance (Objective view)
- Interpretivist stance (Subjective view)
- Social constructivism stance (Societal views)
- Critical realism stance(Objective and Subjective view)

NB: Ontology and Epistemology of the study

RESEARCH DESIGN

- The research design refers to the overall strategy that the researcher chooses to integrate the different components of the study into a coherent and logical way(Labaree, 2009).
- A research design is a strategy of inquiry (Williams, 2007).
- Well organized research procedure used in a scientific study leading to reasonable end result.
- The research design constitutes the blueprint for the collection, measurement, and analysis of data
- The research design depends on the different research approaches-quantitative or qualitative or multidimensional data(Ellis & Levy, 2009).

TYPES OF RESEARCH DESIGN

- Descriptive research design
- Explanatory research design
- Exploratory research design
- Evaluation research design

Qualitative Design

- Case study research design
- Ethnography Research Design
- Grounded Theory Study
- Phenomenological Research Design

Quantitative Design

- Survey Research Design
- Experimental research design
- Correlational research design

Mixed Research Design

- Descriptive research design
- Development design

POPULATION STUDY

- Total subjects/items under study (entire group of subjects under study)
- Indicate the Population size
- Sources from authentic national and international reports
- Published journals, magazines and articles
- Population size and source must be cited in the research document

UNIT OF ANALYSIS & INQUIRY

- **Unit of analysis:** who/what are you exacting studying? Individuals or companies or firm or own managers?
- Is your study anchored at individual or organizational level?
- Data analysis and discussion should be anchored on the unit of analysis
- **Unit of inquiry:** Who are the specific respondents or key informants? clients, managers, regulators,agents

SAMPLE SIZE AND SAMPLING PROCEDURE

SAMPLE SIZE

- A sub-set of the population under study (specific group)
- Scientifically derived-through reknown sample size determination formular or sample size determination table (Krejcie and Morgan (1973)
- The bigger the sample size the better (more than 100

SAMPLING STRATEGIES

- purposive sampling
- Simple random sampling
- Stratified random sampling
- Cluster random sampling
- Area random sampling
- Systematic random sampling

SOURCE AND TYPE OF DATA

- Primary sources (Field data) through surveys-First hand information

- Secondary sources (extant literature or published Literature) through desk reviews

METHODS & TOOLS OF DATA COLLECTION

- Questionnaire Method-Survey Questionnaires (Likert scale)
- Interview Method (Face to face and FGD interview) using interview/FDG guide.
- Desk Review Method-secondary data-Literature review checklist
- Observation Method- physical and social reality using an observation checklist

DATA MANAGEMENT

- Data sorting, coding, entry(SPSS)
- Data cleaning/editing
- Check for missing values, outliers, errors-wrong/double entries
- Transform and correct data-to address missing values & outliers/extreme values
- Test for common method bias
- Endogeneity test

Diagnostic Test:

Linearity: Normality, Multicollinearity Homoscedasticity test

- Reliability and validity tests (test for the accuracy of data)
- Correlation tests-to check for the relationships between the study variables
- EFA or CFA

NB: Check for robustness of the data or statistical power before analysis

ANALYSIS AND PRESENTATION

- Data analysis based on study objectives or hypotheses or research questions
- Presentation of the results (descriptively or in tabular form)
- Qualitative results, descriptive, matrix, Venn diagrams, vignettes

QUANTITATIVE ANALYSIS

- Descriptive analysis
- Measures of Central Tendency
- Measures of Dispersion
- Analyses of Comparison (ANOVA)
- Regression analysis [Simple Linear Regression Model and Multiple Linear Regression Model
- Structural equation modelling techniques

- $Yi = \beta 0 + \beta 1 Xi$
- $y = B0 + B1\ X1 + B2\ X2 + B3\ X3 + \ldots\ldots\ldots\ldots\ldots\ldots + BkXk$

QUALITATIVE ANALYSIS

- **Content Analysis:** a method for analyzing qualitative data that involves systematic coding and categorizing, hence exploring large amounts of textual information

- To determine trends and patterns of words used, their frequency, their relationships, and the structures and discourses of communication.
- The method also identifies themes or biases.

- Content analysis analyses both primary and secondary data in a systematic and objective way to describe phenomena

Thematic Analysis

- Thematic analysis is an independent qualitative descriptive method for identifying, analyzing and reporting patterns (themes) within data.

- Thematic analysis moves beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas within the data, that is, themes.

- Codes are then typically developed to represent the identified themes and applied or linked to raw data as summary markers for later analysis.

- However, thematic analysis may or may not involve comparing code frequencies, identifying code co-occurrence, and graphically displaying relationships between codes within the data set

Discourse Analysis

- Discourse analysis is a research method for studying written or spoken language in relation to its social context.

- Discourse refers to established ways of constructing the meanings of phenomena, knowledge and reality, and the networks linking them

DISCUSSION, CONCLUSION AND IMPLICATIONS

- **Discussion:** guided by the Research hypotheses or questions
- Discussion support by social reality and extant empirical and theoretical literature
- **Conclusion:** indicating the purpose, methodology, key findings, and supporting literature
- **Implications/recommandations** (Policy and practical implications)
- Implications based on the findings and addressing the existing policy gaps or strengthening existing policy measures

Thank you
for
your Attention

ASSIGNMENT

- **Topic: Client repayment behaviour and portfolio quality of microinsurance companies in Uganda.**

- Decribe the research methodology to guide the study of the topic stated above indicating;

I. Research philosophical orientation
II. Research design
III. Population
IV. sample size and strategy
V. Data collection methods
VI. Validity and reliability tests
VII. Data analysis
III. Ethical considerations

NB: Not more than 3 pages