

Instruction Manual: Research Methodology

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Volume 1

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(This book will be used as a Training Material for Training of Teachers (TOT) Program or Workshop on Research Methodology for young faculties.)

**With Respect
To
Eminent Educationist
Professor Abdul Mannan
Chairman
University Grants Commission of Bangladesh**

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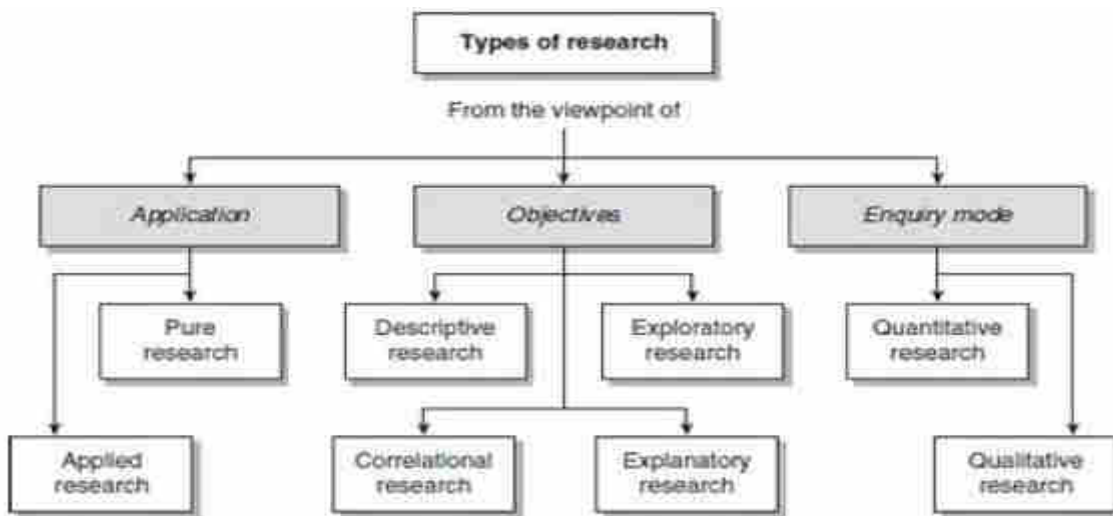
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CHAPTER ONE INTRODUCTION

Research refers to search of knowledge. A scientific and systematic search for information on a particular topic or issue is research. Research is indeed an attempt to know new things, facts, information and generate new knowledge in a scientific manner. Research is a human activity based on intellectual investigation and is aimed at discovering, interpreting, and revising human knowledge on different aspects of the world. In other words, research is a careful and critical enquiry or examination in seeking facts or principles; diligent investigation in order to ascertain something. Research is necessary to examine the extent of the validity of the old conclusions or to find out some new facts and generalizations in connection with the existing ones. The objective of research is to find answers to the questions by applying scientific procedures. Although every research study has its own specific objectives, the research objectives may be broadly grouped as follows:

1. To gain familiarity with new insights into a phenomenon (i.e., formulative research studies);
2. To accurately portray the characteristics of a particular individual, group, or a situation (i.e., descriptive research studies);
3. To analyze the frequency with which something occurs (i.e., diagnostic research studies); and
4. To examine the hypothesis of a causal relationship between two variables (i.e., hypothesis-testing research studies).

Based on the application, objective and enquiry, research can be classified in different types. The basic ones are as follows.



Source: Kumar 2005

Steps in Research

- Observation
- Preliminary information gathering
- Theory Formulation
- Hypothesizing
- Further Scientific Data Collection

- Data Analysis
- Interpretation

Characteristics and Requirements for Research Process

Research is a complete process to answer questions through collecting, analyzing and interpreting information to answer questions. A process will be qualified as research, if it contains the following certain characteristics:

Controlled - in exploring causality relation between variables, set up study in such a way that the effects of other factors are minimized.

Rigorous - to ensure that the procedures will find relevant, appropriate and justified answers to Questions.

Systematic – The process follows a certain logical sequence.

Valid and verifiable – Findings of the process may be corrected, verified and improved by previous study.

Empirical – conclusion of a study represents real-life experiences or observations.

Critical – The process adopted and the procedures used must be able to withstand critical scrutiny.

Importance of knowing how to conduct research has been listed below:

- i. The knowledge of research methodology provides training to new researchers and enables them to do research properly. It helps them to develop disciplined thinking or a 'bent of mind' to objectively observe the field.
- ii. The knowledge of doing research inculcates the ability to evaluate and utilize the research findings with confidence.
- iii. The knowledge of research methodology equips the researcher with the tools that help him/her to make the observations objectively; and
- iv. The knowledge of methodology helps the research consumers to evaluate research and make rational decisions.

Qualities of a Researcher

It is important for a researcher to possess certain qualities to conduct research. He, being a scientific knowledge seeker, should be firmly committed to the 'articles of faith' of the scientific methods of research. This implies that a researcher should be a social science person in the truest sense. According to Michael Foster, a true research scientist should possess the following qualities:

- (1) First of all, the nature of a researcher must be of the temperament that vibrates in unison with the theme which he is searching.
- (2) A researcher must possess an alert mind.
- (3) Scientific enquiry is pre-eminently an intellectual effort. It requires the moral quality of courage, which reflects the courage of a steadfast endurance.
- (4) Seeker of Truth and Knowledge

A seeker of truth and knowledge has to:

- be truthful and sincere
- have desire for knowledge
- be prepared to make any sacrifice in terms of money, time and energy to find out the real truth.

Organizations and culture are said to exist as a tangible object, external to the social actor. Social phenomena and their meanings are continually being accomplished by social actors that are not only produced through social interaction, but also remain in a constant state of revision.

Market Research

The purpose of market research is to examine the market associated with a particular good or service to determine how the audience will receive it. This can include information gathering for the purpose of market segmentation and product differentiation, which can be used to tailor advertising efforts or determine which features are seen as a priority to the consumer.

Market Research Process

A business must engage in a variety of tasks to complete the market research process. It needs to gather information based on the market sector being examined. The business must analyze and interpret the resulting data to determine the presence of any patterns or relevant data points that it can use in the decision-making process.

Problems Encountered by Researchers in Bangladesh

- a) Data bank is not available.
- b) Research grant is limited and mainly for public university faculties.
- c) Field investigation may be hampered due to lack of knowledge of investigator or respondents.
- d) Ethical committee does not work in Bangladesh where the questionnaires need to validate.
- e) Time constraint is a problem.
- f) Lack of funding is a barrier for quality research.
- g) Sometimes Higher Education Institute, does not encourage researcher to do research work.
- h) At the institutional level or individual level, respondents may feel discouraged to have data.
- i) Secondary sources of data may not be reliable.

Ethical Issues in Research

For the any kind of research report, a general guideline in ethical issues are:

Publication includes author's original research work which contributes to new knowledge within the scope of the journal. Research results will benefit societies, communities, economies, countries and the world at large irrespective of caste, creed, sex, religion, etc. The author/authors must ensure the accuracy, appropriateness, ownership of data and research results. In conducting the research, the person/persons making significant contribution, may be included in the authors' list. Status such as first author, second author, etc. will depend on the portion/share of the contribution. Plagiarism, the most common offense under the Academic Code of Conduct, includes copied data/information, falsification, fabrication or omission of significant results will not be accepted.

The followings are a rough and general summary of some ethical principles (Shamoo&Resnik; 2015):

Honesty - strive for honesty in all scientific communications. Do not fabricate, falsify, or misrepresent data. Do not deceive colleagues, research sponsors, or the public.

Objectivity - strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity is expected or required.

Integrity - keep promises and agreements; act with sincerity; strive for consistency of thought and action.

Carefulness - avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.

Openness - share data, results, ideas, tools, resources.

Respect for Intellectual Property - honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission.

Confidentiality - protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

Social Responsibility - strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.

Legality - know and obey relevant laws and institutional and governmental policies.

Animal Care - show proper respect and care for animals when using them in research.

Human Subjects Protection - when conducting research on human subjects, minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy; take special precautions with vulnerable populations; and strive to distribute the benefits and burdens of research fairly.

Anti-Plagiarism Strategies for Research Papers

1. Make the assignment clear.
2. Provide a list of specific topics and require students to choose one of them.
3. Require specific components in the paper.
4. Require process steps for the paper.
5. Require oral reports of student papers.
6. Have students include an annotated bibliography.
7. Require most references to be up-to-date.
8. Require a meta learning essay.

(Source:<http://www.virtualsalt.com/antiplag.htm>. Viewed on 31st July, 2016)

CHAPTER TWO RESEARCH PROBLEM

A research problem is a clear statement about an area of concern, a condition to be improved upon, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or within existing practice that points to a need for meaningful understanding and deliberate investigation.

A researcher must define a research problem and formulate it in such a way that the nature of the problem can be identified and come to a solution of the problem. A research problem refers to some difficulty which a researcher experiences in the context of either a theoretical or practical situation and wants to obtain a solution for the same.

Actually a research problem statement is a short (a paragraph or two) description of a specific research part or subject that researcher aims to address, with an explanation of why that part/matter essentials to be spoken, why speaking this part/matter is of significance, and what general advantage (i.e, to society as a whole or to other researchers) speaking the matter may deliver. On the other hand research question refers to a situation- when a researcher narrowed down the research problem to one or more precise questions that are solid and can be replied by trial/evaluation of data/literature review, etc.

A *hypothesis* is the guess to the answer of the research question. Hypotheses are generated from theories. Research questions often attempt to refute/validate theories through the testing of hypotheses.

The purpose of a problem statement is to:

1. introduce the importance of the topic being studied
2. place the topic into a particular context that defines the parameters of what is to be investigated
3. provide the framework for reporting the results and indicates what is probably necessary to conduct the study and explain how the findings will present this information

Selecting the Problem

The following points may be observed by a researcher in selecting a research problem or a subject for research:

- (i) Subject matter which is done before should not be generally chosen, for it will be a difficult task to throw a new light through an older problem
- (ii) Controversial subject should not become the choice of an average researcher
- (iii) Too narrow or too vague problems should be avoided.
- (iv) The subject selected for research should be familiar and feasible so that the related research material or sources of the research are within the reach of the researcher.
- (v) A researcher must know his/her strength before selecting a research problem. Answers to the following questions may help to understand feasibility of the problem:
 - (a) Is he well equipped in terms of his background to carry out the research?
 - (b) Does the study fall within the budget he can afford?
 - (c) Can the necessary cooperation be obtained from those who must participate in research as subjects?
 - (d) The selection of a problem must be preceded by a preliminary study.

Techniques Involved in Defining a Problem

Defining and formulating a research problem is more important than its solution. A well-defined research problem can guide to collect data, methodology, exploring relation between variables. Hence, the research problem should be defined in a systematic manner, giving due weightage to all relating points. The technique for the purpose involves the undertaking of the following steps generally one after the other:

- (i) Statement of the problem in a general way;
- (ii) Understanding the nature of the problem;
- (iii) Surveying the available literature
- (iv) Developing the ideas through discussions;
- (v) Rephrasing the research problem into a working proposition.

We may conclude that the major variable of a research problem can be measured in meaningful way. “What is the best way to train for use of fertilizer?” may not sound as a good question because of the difficulty of defining the major variables. On the other hand, “What is the relationship between farm productivity and farmer’s use of fertilizer?” may appear as a good research question because of identified variables (productivity level and amount of fertilizer use).

Example of Research Problem: How to increase student attendance in classroom?

Research Question: Why do students attend in classroom?

Matching hypothesis: The main reason that students attend for attendance mark because it is required for sitting in the final exam.

CHAPTER THREE THEORY BUILDING

Research stands on a sound theoretical basis and strong methodology. An intelligible customary of overall proposal recycled as philosophies of clarification of the deceptive dealings of assured experiential wonders. Good theory includes: Validity (It fits the facts); Generalization (Makes predictions about future or other events); Replication (It can be repeated with similar findings). There are three reasons behind the importance of theory in research: (a) it provides a framework for analysis, (b) it provides an efficient method for field development, and (c) it provides a clear explanation for the pragmatic world. Theory generates research and research generates and refines theory (Gelso, 2006). Effective theories have explanatory and predictive power. So it is straight applicable to practice and useful to the arena. In deductive research, the area of the investigator is to examine ideas and designs identified from theory using fresh empirical data. Therefore, inductive research is also called theory-building investigation, and deductive research is theory-testing investigation. Objective of theory-testing is not fair to exam a theory, perhaps to enhance, advance, and spread it. Theory-building (inductive research) and theory-testing (deductive research) are together acute for the progression of knowledge.

Sophisticated theories are not respected if they do not contest by authenticity. Similarly, elevations of data are also impractical pending they can subsidize to the structure to significant theories. Somewhat than inspecting these two procedures in a circular connection, maybe they can be better observed as a spiral, by every iteration amid theory and data causative to improve enlightenments of the wonder of attention and improved models. However, together inductive and deductive investigation are significant for the progression of science, it seems that inductive (theory-building) investigation is additional valuable when there are insufficient previous models or descriptions, though deductive (theory-testing) investigation is additional creative while here are several rival models of the similar occurrence and investigators are absorbed in meaningful which concept workings finest and below whatever conditions. Theory building and theory testing stand mainly problematic, assumed the rough nature of the theoretic ideas, insufficient gears to amount them, and the attendance of numerous unaccounted issues that can also effect the wonder of interest. It is also very problematic to disprove theories that do not work. However, one thing in real life scenario prevails Theory changes but facts remain. For example, Milton Friedman's theory of Permanent Income in 1957 described that a permanent income is a concept of consumer expenditure which conditions that people will devote money at a level dependable with their predictable lengthy period of average income. The level of predictable extended period of income then becomes assumed of as the level of "permanent" income which can be surely expensed. An employee will save only if his or her current income is greater than the expected level of permanent income, in order to safeguard alongside forthcoming declines in income. Now if a researcher want to examine applicability of permanent income hypothesis in Bangladesh, which provides numerous opportunities for researchers to improve those theories or build their own alternative theories. Conducting scientific research, therefore, requires two sets of skills –theoretical and methodological – needed to operate in the theoretical and empirical levels respectively. Bendassolli (2013) described that the problem of induction refers to the difficulties involved in the process of justifying experience-based scientific conclusions. More specifically, inductive reasoning assumes a leap from singular observational statements to general theoretical statements. It calls into question the role of empirical evidence in the theory-building process. In the philosophy of science, the validity of inductive reasoning has been severely questioned since at least the writings of David HUME. At the same time, induction has been lauded as one of the main pillars of qualitative research methods, and its identity as such has consolidated to the detriment of hypothetical-deductive methods. This article proposes reviving discussion on the problem of induction in qualitative research. It is argued that qualitative methods inherit many of the tensions intrinsic to

inductive reasoning, such as those between the demands of empiricism and of formal scientific explanation, suggesting the need to reconsider the role of theory in qualitative research. There are three main activities involved with the process of theory building:

1. Conceiving a theory (abduction)
2. Constructing the theory (logical deduction)
3. Justifying or evaluating the theory (induction)

So, each of these steps involves a different type of reasoning. However, abduction which initiates this process requires induction so that the theory can be tested via its consequences, which are themselves derived through the process of deductive reasoning; One of the most difficult questions to answer about theory is: when does a theory become a 'good' theory? The answer to that question is inherently controversial since it involves the degree to which individuals believe in adhering to the formal definition of theory and follow the virtues of 'good' theory. A 'good' theory should meet the definitional criteria of theory as well as follow the virtues of 'good' theory. Therefore, 'good' theory must first be a theory i.e., have definitions, have a domain, have relationships, and make predictions and must meet each 'good' theory virtue to some degree. Any theory which adheres to both the definition of theory and the virtues of a 'good' theory is a 'good' theory. This adherence, however, does not mean that the 'good' theory is valid since 'good' theories can be 'just plain wrong'. Wacker (1998) commented that Yet, 'good' theories which are wrong are more quickly identified as being wrong since they are more easily refuted internally inconsistent or empirically invalid . Still, 'good' incorrect theories serve a very important purpose for field development, since 'good' theory is a beginning point to determine why the theory is wrong. Therefore, because 'good' theory is easily refuted and is a beginning point for future investigation, using 'good' theory for empirical tests seems to be a laudable objective for the development of an academic field.

Lynham (2002) described that the problem and the solution. One of the challenges of theory-building research in applied disciplines is making the logic used to build the theory explicit and accessible to the user of the developed theory. Although different methods of theory building advocate different theory-building research processes, there is an inherently generic nature to theory building.

Theory is an explanation for events a rationale for why something occurred is the scientific explanation of a condition that has been observed.

Theory construction

Inductive - particular to general

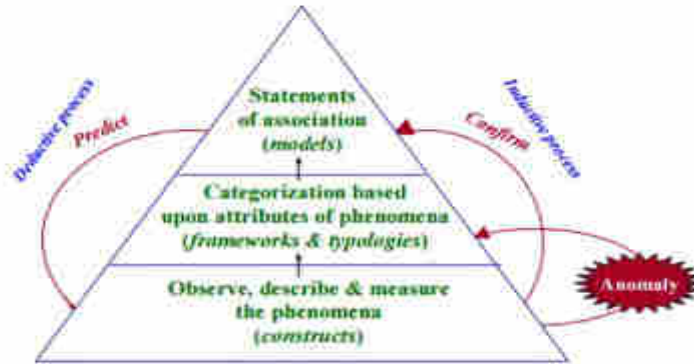
Deductive - General to particular.

Abductive - form of logical inference which goes from an observation to a theory which accounts for the observation, ideally seeking to find the simplest and most likely explanation.

The Building of Descriptive Theory

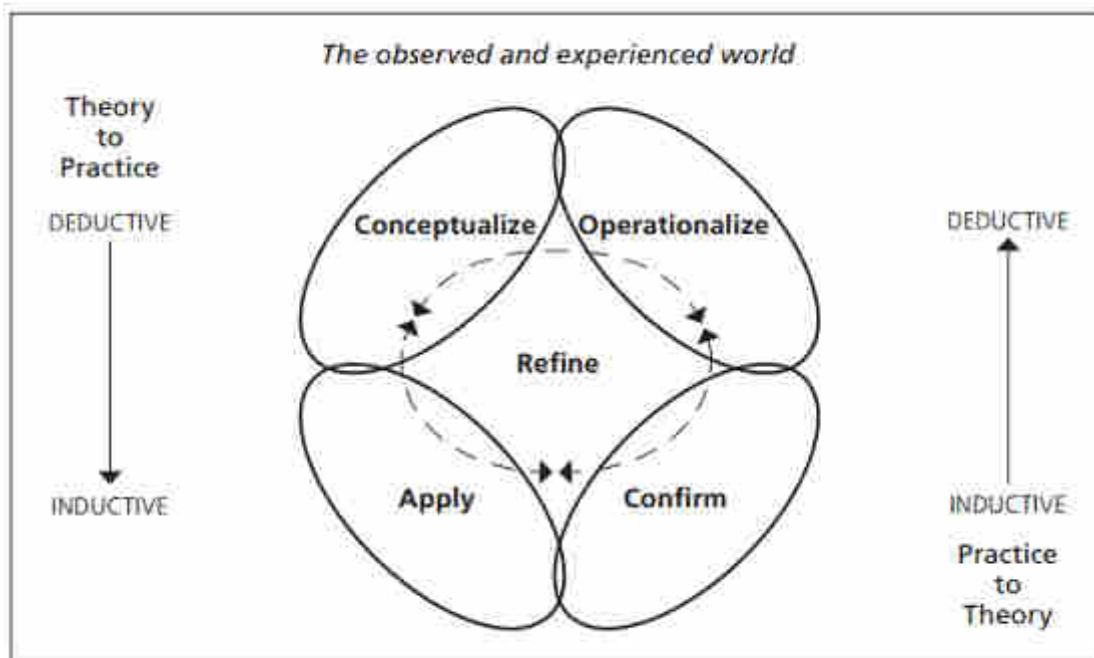
The descriptive stage of theory building is a preliminary stage because researchers must pass through it in order to develop normative theory. Researchers who are building descriptive theory proceed through three steps: observation, categorization, and association.

The Process of Building Theory



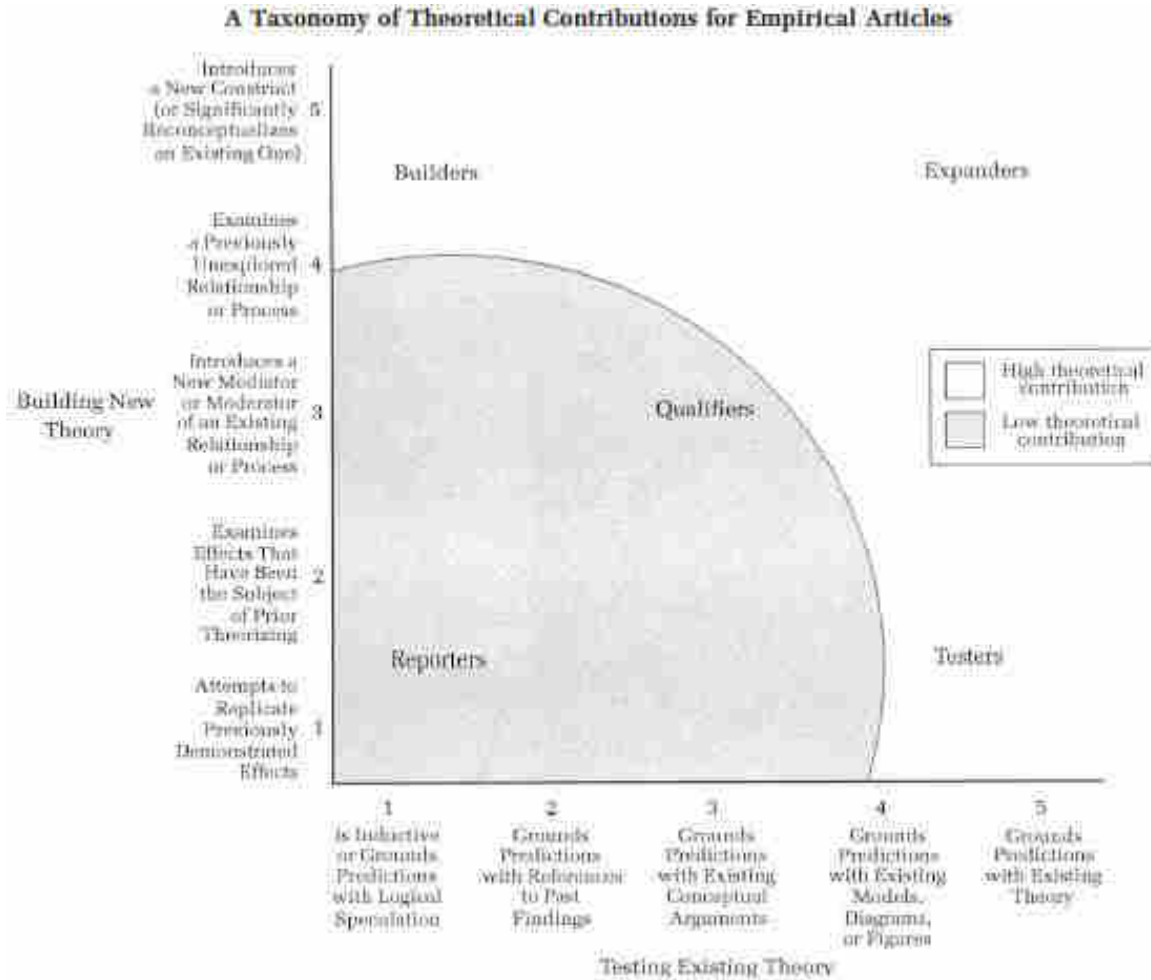
Source: Carlile and Christensen (2004)

Based on specific need conceptual framework will be built. In case of study there must be research questions which need to be justified by both the statement of problem and literature review.



Source: Adapted from Lynham (2002).

Figure: General Method of Theory Building in Applied Disciplines
Below we have shown a Taxonomy of Theoretical contributions for empirical articles



Source: JASON A. COLQUITT and CINDY P. ZAPATA-PHELAN, (2007): "TRENDS IN THEORY BUILDING AND THEORY TESTING: A FIVE-DECADE STUDY OF THE ACADEMY OF MANAGEMENT JOURNAL", *ACADEMY OF MANAGEMENT JOURNAL* Vol. 50, No. 6, 1281–1303

Criteria for Good Theory

A good theory has to include the three criteria: generality, integration, and thickness.

Generality - intended to apply to all relevant cases, both all those that have been observed and all that could be observed.

Integration - a generalization must be integrated into a systematic set of other laws--a theory--in order to be truly general.

Thickness - involves many intertwined variables with effects that are conditional on time and place. Only a complex theory can begin to approximate the richness of reality.

CHAPTER FOUR LITERATURE REVIEW

A literature review is a survey of relevant literature on a particular research topic or question to know the research gap. In a literature review, researcher needs to dig the information not only list describing or summarizing.

Necessity of Literature Review

1. To find out what has been written about the selected research topic
2. To understand the relationship between the various contributions, identify and (if possible) resolve contradictions, and determine gaps or unanswered questions

The main theme of literature review is to but not limited to evaluate the literature, determine the relationship between the sources and ascertain what has been done already and what still needs to be done.

Steps to writing an effective literature review:

Focus on research topic - aims of a literature review is to cover all the research on the given topic.

Read with a purpose - a good literature review requires to determine the key themes or issues related to research interests.

Evaluating sources - determine the differences within the literature of the research topic and reasons for the differences

Gaps or omissions - What questions are raised by the literature?

According to Taylor (2016), a researcher should ask the following question himself/herself a good literature review:

1. What is the specific research problem or research question that the literature review helps to define?
2. What type of literature review am I conducting? Am I looking at issues of theory? methodology? policy? quantitative research (e.g. on the effectiveness of a new procedure)? qualitative research (e.g., studies of loneliness among migrant workers)?
3. What types of publications am I using (e.g., journals, books, government documents, popular media)? What discipline am I working in (e.g., nursing psychology, sociology, medicine)?
4. How good was my information seeking? Has my search been wide enough to ensure I've found all the relevant material? Has it been narrow enough to exclude irrelevant material? Is the number of sources I've used appropriate for the length of my paper?
5. Have I critically analysed the literature I use? Do I follow through a set of concepts and questions, comparing items to each other in the ways they deal with them? Instead of just listing and summarizing items, do I assess them, discussing strengths and weaknesses?
6. Have I cited and discussed studies contrary to my perspective?
7. Will the reader find my literature review relevant, appropriate, and useful?

Basic Elements of Literature Review

Literature reviews must contain three basic elements: (i) an introduction or background information section; (ii) the body of the review containing the discussion of sources; finally, (iii) a conclusion and/or recommendations section to end the paper.

Introduction - gives a quick general idea of the topic of the literature review

Body - contains chronologically, thematically, or methodologically discussion of sources

Conclusions/Recommendations - what is the output of the reviewing a literature

What should contain in a literature review

- **Use evidence** - researcher refer to several other sources when making their point.
- **Be selective** - Select only the most important points of thematic, methodological, or chronological in each source to highlight in the review.
- **Use quotes sparingly** - do not use any direct quotes.
- **Summarize and synthesize** - summarize sources and synthesize within each paragraph throughout the review.
- **Express own explanation** - though literature review presents others' ideas, researcher should remain front and center.
- **Use caution when paraphrasing** - when paraphrasing a source, be sure to represent the author's information or opinions accurately in own words.

Sample Literature review of a Journal article:

Medical Tourism

India Medical Tourism (2009) defines medical tourism as provision of 'cost effective' private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialised treatment. This process is being facilitated by many private corporate hospitals such as Apollo Group, Wockhardt, Fortis as well as the tourism industry. Carrera and Bridges (2006) conceptualise, distinguish and clearly define the two terms health tourism and medical tourism. According to them "Health tourism is defined as an organised travel outside one's local environment for the maintenance, enhancement or restoration of the individual wellbeing in mind and body". Medical Tourism, on the other hand, is defined as "the organised travel outside one's natural healthcare jurisdiction for the enhancement or restoration of the individual's health through medical intervention" (p.449). For this paper we define medical tourism "as a phenomenon where a patient travels with or without a companion outside his or her country of residence, across border for medical treatment which could be risky, invasive and involves complex surgical procedures with the use of highly specialised medical equipment, technology and experienced surgeons, for the improvement of overall physical health and quality of life, and may be combined with a vacation at an exotic destination" (Medhekar, 2010, p.4).

Medical tourists gather information from various sources such as friends, family, doctor, media, print and the internet to make informed healthcare decisions and choice to travel overseas for medical treatment (Miller & West, 2007; Medhekar & Newby, 2011). Travel abroad for medical treatment is growing fast in the twenty first century due to various pull and push factors such as: long waiting list, high healthcare cost and health insurance in developed countries; state of the art medical facilities, technology and skills in destination countries, ease of travel, medical travel facilitators and internet marketing, have all played a key role in patients travelling from developed and developing countries, to the countries which are leading destinations for medical surgery such as Thailand, India, Singapore, Malaysia, Dubai, Poland, South Africa and Mexico having a competitive advantage (Lee, 2006; Bookman & Bookman, 2007; Horowitz & Rosensweig, 2007; Hopkins, Labonte, Runnels & Packer 2010; Lunt et al., 2010; Ghose,

2010; Stanley, 2010, Turner, 2011; Ferrer&Medhekar, 2012). Various medical treatments are in demand in the global market for healthcare, for example, orthopaedic, cancer treatment, cardiac, hip and knee-replacement, neuro-surgery, spinal fusion, cosmetic, kidney transplant, dental, reproductive, and surrogacy to Ayurvedic, spa, and herbal treatment (Blyth & Farrand, 2005; Ali, 2012).

Literature identifies numerous conceptual models of medical tourism from international trade, economics, marketing, legal, ethical and quality perspective. For example Smith and Forgione (2007) have identified the key factors influencing the patient's choice of specific destination. Caballero-Danell and Mugomba (2007) have broadly described two models of medical tourism the market of medical tourism and the distribution channel model of medical tourism. Bookman and Bookman in (2007) provided an economic argument for the emerging global medical tourism industry in developing countries in their book called 'Medical Tourism in Developing Countries'. They have categorised that medical tourists travel for invasive, diagnostic and lifestyle treatment. An analytical framework model of Hong Kong medical tourist motivations was developed by Ye, Yuen, Qiu and Zhang (2008). Further, Heung, Kucukusta and Song (2010), have proposed an integrated supply and demand model of medical tourism and identified supply side barriers to development of medical tourism in Hong Kong (Heung, Kucukusta & Song, 2011). Lunt et al., (2010), in their paper titled "Medical Tourism and Emergence of Web-Based Health Information" have discussed "understanding of the internet's role in facilitating access to treatments" (p.3) in a globalised medical tourism industry. They argue that, "A key driver in the medical tourism phenomenon is the platform provided by the internet for gaining access to healthcare information and advertising" (p.1). Further, for example, in case of medical tourism, family and friends as well as internet is taken as the key information source for making a decision to travel abroad for medical treatment (Medhekar & Newby, 2011). Medhekar and Haq (2015) suggest how to market Indian medical tourism to Muslim patients and attract medical tourists from Islamic as well as neighbouring countries in South Asia. Further, medical travel is also examined from the perspective of global quality, regulatory, legal and social anthropology (Whittakar, 2010; Widdows, 2011; Turner, 2011; Wang, 2012). Medhekar et al., (2014) conceptualise medical tourism as an innovation in global healthcare provision in the 21st century, where patients from developed countries are travelling to developing country for complex surgeries.

Globally medical tourism is one of the fastest growing and niche global health-care service segments of the tourism industry. Historically pilgrims from Europe have been travelling for healing to Greece and Rome (Stanley, 2010), and to Ashrams in India for Ayurveda, Yoga, Unani, Siddhi and herbal treatment (AYUSH). Thus in the 21th century, the success of cross-border trade in medical services can be determined by the number of medical tourists travelling overseas for medical treatment and the foreign exchange revenue earned by the host country. India was ranked second only to Thailand in the global medical tourism industry in 2009 (IMT, 2009) and since 2014 India has fallen to third position with Malaysia in the first followed by Thailand, Mexico and Singapore (Tourism Review, 2014). It is likely that besides low cost of treatment and surgery, no waiting period, availability of treatment and medical expertise (Hutchinson, 2005; Bookman & Bookman, 2007; Horowitz & Rosensweig, 2007; Singh, 2008; Hopkins et al., 2010; Medhekar et al., 2014) various other factors such as; economics, social conditions, food, cultural affinity, language, religious sensitivities, political and economic conditions influence the consumer's decision to travel abroad for medical treatment (Medhekar&Haq, 2015) from neighbouring countries in South Asia such as Bangladesh to India.

Medical tourism is an example of not only outbound travel to another country for medical treatment but also international trade in healthcare services across border (Chanda, 2002; Wagner & Linder, 2010; Ferrer&Medhekar, 2012) between neighbouring developing countries. According to Rahman (1999) medical tourism is an example of bilateral trade in healthcare services between India and Bangladesh. Ali (2012) argues that there is an increasing evidence of outbound medical tourism where Bangladeshi patients travel to neighbouring countries for treatment due to "inefficient human resources in healthcare management industry" (p.2). According to Patnaik (2010) collaboration among the appropriate academic

groups, professional associations, and health care institutions, with leadership from the state bodies, is essential to create best learning environment for dissemination of knowledge for professional development of physicians. Dasgupta (2011) notes that in some of the less developed countries, such as Bangladesh, specialised treatments are not available and there is overcrowding in the hospital, high cost, demographic pattern, inadequate infrastructure and medical technology, lack of qualified professionals and lack of quality of health care services, which motivates the patients to travel across border to various cities in India for medical treatment.

This paper addresses a research gap by critically examining the healthcare management situation and exploring and identifying the reasons to travel abroad for medical treatment by Bangladeshi citizens. To achieve this objective, structured questionnaire was distributed in 2010-2011, to 1282 number of participants who had travelled across border from Bangladesh to capital cities in India such as: Calcutta, Chennai, Bangalore, Delhi, Hyderabad and Mumbai for medical treatment, returned the questionnaire. This paper focuses on medical tourists who have travelled from Bangladesh, across border, to major capital cities in India and other minor cities of West Bengal and Bihar which is mostly visited by middle income and lower middle income group patients (see Figure-3) for complex invasive medical surgeries such as: heart surgery, eye-cataract surgery, kidney related problems, different types of cancer, bone fracture, stomach, diabetes, gynaecology, spleen, brain, Liver, dental, mental, dental, Tuberculosis, and others (see Figure-4).

Health is a state of complete physical, mental and social wellbeing, and an important indicator of Human Development Index (HDI). Healthcare system in Bangladesh is in dire straits due to many recent incidents where the Bangladeshi patients have lost confidence in their country's health system, to deliver quality of health and medical care with a human touch. For the last two decades many Bangladeshis are travelling to India or other countries for medical treatment (Paul, 1999; Rahman, 2000; Mamun&Andaleeb, 2013) and "more than 75% travel to India, stay one month on average, and collectively spend about US\$100 million every year" (Paul, 1999, p.680). Medical patients from Bangladesh feel at ease to visit India due to similarities in culture, language, food, familiarity with the society and country besides, low cost, quality of medical services and healthcare professionals and technological superiority. This exploratory research draws together the medical tourism literature with the findings of the exploratory study of cross-border medical tourism. In this exploratory study data from interviews is designed to reveal why medical tourists from Bangladesh travel across border to India for medical treatment. The empirical findings support theory development specific to medical travel as there is little previous empirical work found on medical tourism from Bangladesh to India, except by (Paul, 1999; Rahman, 1999; Ali, 2012; Medhekar& Ali, 2012; Pramanik, Law & Roy, 2012; Mumam&Andaleeb, 2013).

Health Care Management Situation in Bangladesh

Bangladesh is a densely populated developing country, bordering with West Bengal in India. Large numbers of people are living below poverty line and they are faced with natural disasters like floods every year during the monsoon season. There is some improvement in primary healthcare provision but still large numbers of people have problem of availability, accessibility, and affordable quality of medical facilities and treatment due to overcrowding, non-availability of treatment and medical facility, lack of qualified and experienced medical specialists and growing corruption (The Financial Express, 2012). Further, Bangladeshi nationals are travelling to neighbouring countries for diagnostic, pathology and complex surgeries, as they are seeking lower cost, high quality of care, better access for treatment than they would receive at home (Ali, 2012). The public hospitals suffer from full capacity problems, shortage of essential medical equipment, facilities, essential lifesaving medication, diagnostic services, experienced specialist doctors and trained nurses. Every year Central Government of Bangladesh allocates large sums of money in the budget for health care, but it is inadequate to meet domestic demand for healthcare. There is also evidence of wide spread corruption in the provision of public health as exposed by media.

There has been a rise in number of private clinics in Bangladesh since 1990's. Provision of healthcare has been taken over by private hospitals and private medical college hospitals. Since 2004-2005, there has also been presence of state-of-art private hospitals in Dhaka, such as Apollo Hospital Dhaka, Square Hospital and United Hospital (Ali, 2012). This growth is in Dhaka and patients have to travel from regional, rural and remote area to capital Dhaka to see the specialist in the private medical hospitals with increasing domestic medical travel.

Major concern for the private sector is lack of highly qualified and experienced health-care professionals and high medical, diagnostic and surgical costs. There is also widespread public perception about the low quality of healthcare service delivery provided by the public and private sector hospitals in Bangladesh. A report titled Bangladesh-India Bilateral Trade: An investigation into trade in services of health and the education sector by Rahman (2000, p.38) concluded after an empirical study that quality of healthcare has declined in Bangladesh with increasing cost and non-availability of certain treatments, which has resulted in an increase in cross-border medical travel to India. Further, Bangladeshi patients overall have had a good experience in India in terms of quality of health care, less waiting time, less costly, cordial and caring doctors and nursing staff, reliable pathological and diagnostic tests and convenience of travel, close to home, cultural, food, tourism and no language problem in India compared to Bangladesh (Rahman, 2000; Ali, 2012).

In case of Bangladesh access to basic primary and secondary healthcare is a problem for the poor, resulting in inequities in healthcare provision across socio-economic groups and geographical regions. The marginalised people of rural areas as well as slum dwellers of the urban areas are treated in a highly discriminatory manner as regards to access to public health care services. Even the lower middle class and the middle class do not get proper medical treatment. On the other hand, the affluent sections of the society only in case of emergency take treatment in Bangladesh modern hospitals, otherwise travel abroad for medical treatment. According to one patient's statement, "unethical or inhumane professional practices are not uncommon in India, but the number of cases is relatively much less compared to Bangladesh. A common complaint against the doctors in this country is that they often send their patients for unnecessary diagnostic tests to labs, thus pocketing 50-60% of the charge. Taking hostage of dead bodies for not clearing the hospitalisation costs by some of the hospitals is becoming quite common" (The Daily Sun, 3-9-2011).

There is also an increase in child mortality rate. On average 83,000 new born babies die each year due to inadequate paediatric facilities, training for the doctors, poor weight of the babies, illiteracy and ignorance among the expectant mothers regarding pre and postnatal care (The Daily Star, 8-7-2012). Besides, unethical malpractice and lack of human touch in pre and post-surgery care, lack of quality of healthcare service, high cost, non-availability of treatment and latest medical technology, and shortage of specialist medical staff are some of the main reasons why Bangladeshis travel across the border, to India or other countries for medical treatment (The Financial Express, 2012). All this has damaged the reputation of the healthcare professionals and image of the private and public hospitals in Bangladesh.

Current logistics of the health sector in Bangladesh is characterised by centralised procurement of the medical supplies with some decentralised provision. Delay in health sector's procurement has always been questioned and identified as one of the prime causes of low absorption of budgetary allocations each year by the Government of Bangladesh. Irregular supply chain management in healthcare and inappropriate supplied items were experienced in procurement. In many cases, supplied goods did not match with the requirement of the hospital. In addition, repair and maintenance of medical equipment and facilities remain inadequate and of sub-standard quality. Further, accident and trauma patients as well as those needing emergency attention are least served by the private clinics and hospitals, compared to the

public hospitals which provide these services. Andaleeb (2000) notes that at all stages of healthcare delivery when appropriate combination of incentives are designed and applied, it encourages a variety of activities in health care service improvement such as “training, continuous quality improvement (CQI) and total quality management (TQM), organizational restructuring, six sigma programmes and other innovations that have served proactive organizations in other countries. It is also important to monitor the extent and direction of change in the overall quality of services in the hospitals. Such oversight measures should provoke the pride and professionalism of the country’s health care providers to deliver what patients have long expected from them; when this happens, the neglected health care recipient is likely to get a better deal” (Andaleeb, 2000, p.101).

Complaints about the weak governance in the public sector relate to unavailability of designated health personnel, pilferage of drugs and other essential supplies, mistreatment and negligence of the clients, unauthorized and illegal payments at public health premises. Thus weak governance in health-care sector has caused the very vulnerable members of the society to suffer the most in terms of high costs, deficient service delivery and negative healthcare outcomes. Bangladesh has a shortage of doctors, nurses and medical technologists; besides lack of trust, corruption, accountability in use of public money, poor quality of health care service provision, lack of availability of treatment and timely and reliable medical intervention creates dissatisfaction due to which many Bangladeshi’s are seeking medical treatment in other countries.

Everyone in Bangladesh is aware that medical doctors in public hospitals either own or have a contractual relationship with private clinics. For doctors, public service is a false front-up identity. Their main purpose is making money through their private practice or business. They appoint public hospital staff members as brokers to bring clients to private clinics instead of properly treating them in public hospitals. Even if people are treated in a public hospital, they are forced by the doctor to visit private clinics for diagnosis purposes and in return doctors earn ‘commissions’. The greed of doctors in Bangladesh is also reflected in their relationship with other allied healthcare professionals. They rarely delegate responsibilities to other medical specialists, such as physiotherapists, psychologists, counsellors, nurses, speech therapists and so on, who are often looked down upon as lower class members of the health care profession in Bangladesh.

In public hospitals, from the time patients arrives for treatment, the staff encourages them and their relatives to move to a private clinic to seek better treatment. Doctors neither seriously listen to the patients nor explain their health problems and discuss possible treatments, including the diagnosis and medication. As a result, patients and their relatives always remain confused about the role of the doctors as well the possibilities for treatment for alleviating their suffering. Furthermore, medical equipment in public hospitals is intentionally kept out of order by the doctors and technicians for years, in anticipation of increasing the business of private clinics and earning commissions. Patient cannot expect a simple pathological or radiological examination in a public hospital. Ultimately, patients are forced to go to private clinics and spend far beyond their financial affordability.

This culture of greed has created a class of neo-rich medical professionals in Bangladesh as the owners of up-market private clinics. In addition, hundreds of people who can afford (rich and upper middle-class patients) travel abroad, to avoid the inefficient, inequitable and ineffective health care service in Bangladesh; while a lack and absence of corporate governance, accountability and government monitoring helps to survive and sustain such a corrupt healthcare systems. Patients with serious illnesses or injuries painfully learn about the country's corrupt and inadequate healthcare system through their experiences, often paying the price with their life. While the government authorities have no conscience, and the medical staff never reflect on their irresponsible and unethical practises, at the cost of patient’s health and well-being.

According to the patients the healthcare services is of poor standard and they are ill-treated by the doctors and the hospital staff in public hospitals compared to the private medical colleges, specialised hospitals. They charge exorbitant amount of money without ensuring good treatment and quality of services. In case of quality of medicine in Bangladesh, patients often complain that although medicines manufactured by some companies are of international standard. However, due to lack of proper monitoring and supervision some companies sell low quality of medicines and doctors are bribed by the companies to prescribe these medicines. Patients also commented that the charges at good diagnostic clinics in Bangladesh are higher relative to India. In defence, the diagnostic clinics in Dhaka and Chittagong informed the researcher that, they have to pay 25-45 per cent commission to the doctors who send them patients for diagnostic tests. Moreover, specialised doctors usually see 80-100 patients on an average per day, resulting in poor diagnosis. According to the Daily Star (18-9-2012) due to wrong diagnosis of bone cancer at Anwara Diagnostic Centre on January 20, 2010 followed by the cancer treatment based on the findings has resulted in a 35-year-old former radiographer of Labaid Cardiac Hospital invalid for life. The patient said that “he was shocked when he later went to Apollo Hospital in capital Dhaka for biopsy and came to know that he had no symptom of cancer. He then, upon his doctor's advice, went to Delta Hospital for a second opinion. They also confirmed that he did not have cancer at all” (The Daily Star, 18-9-2012). This situation reflects a pitiable condition of the health sector in Bangladesh as regards to doctor-patient ratio, or nurse-patient ratio, or physician per nurse ratio, or population per bed. Thus very poor and ineffective healthcare service provision with negative healthcare outcomes has largely given rise to outbound medical travel/tourism from Bangladesh.

In case of medical education, there are large numbers of private medical colleges, which charge exorbitant capitation, admission and tuition fees. A student needs 3 to 6 million taka to complete MBBS degree in a country where per capita GDP in the fiscal year 2010-11 was US\$ 715 and in 2014 it increased to US\$750. When a student qualifies as a doctor, the attitude is to recover the cost of education by charging high price to the patient. Medical Degree colleges for doctors and nurses have low quality of education. There is also shortage of medical professionals and nursing staff. The current nurse-doctor ratio is 0.4, (that is 2.5 times more doctors than nurses) compared to the international standard of around three nursing staff per doctor. To meet this skill shortage in nursing care, the first Grameen Caledonian Nursing College was inaugurated in Dhaka on 1st of March, 2010. However; there is speculation that these nurses after completion of courses may travel overseas for jobs. An estimate of shortage based on the doctor-population ratio currently prevalent in low-income countries revealed a shortage of over 60,000 doctors, 280,000 nurses and 483,000 health technologists in Bangladesh (Ahmed et al., 2012).

A recent study by Nurunnabi and Islam (2012), confirms the accountability gap in the privatised healthcare hospitals in Bangladesh and they have concluded that patients do not have trust and faith in the healthcare professionals and managers. Thus, healthcare professionals such as doctors’ nurses, pathologists, administrators, managers, legal and the government medical and health officers should be accountable for their corrupt malpractices and culture of greed. They are “not liable for any medical malpractice and medical services are not delivered as promised or advertised. Laws are too lenient to hold parties liable” (Nurunnabi& Islam, 2012, p.3). Further, healthcare practitioners and managers are driven by the profit motive. Nurses are not well trained and qualified and with an unreliable pathology-diagnostic service drives many Bangladeshi’s to travel cross-border to India and other neighbouring countries for medical treatment.

This study has highlighted that India, is not only the preferred choice of medical travel for Bangladeshi patients from middle and lower income families due to relatively low cost and better quality of care, but also it has identified shortcomings of the Bangladesh health-care system, due to which an increasing number of Bangladeshi patients are crossing the border for medical treatment every year. The main

destinations for Bangladeshis include India and Thailand. Singapore and Malaysia are destinations preferred by the affluent section of Bangladeshis. From qualitative interviews of medical tourists from Bangladesh, a kidney-transplant patient from Sylhet informed that she went to India mainly for three reasons: firstly, kidney transplant treatment was not available in Bangladesh, secondly, it was relatively cheaper than Singapore and Thailand, and finally, she received positive feedback about the medical services of India from friends and family. Another patient from Chittagong said that, he went to India due to dissatisfaction over Bangladeshi doctors, incorrect diagnosis and corruption. Whereas in India, he received excellent healthcare service, qualified medical doctors and excellent nursing care at low cost and no waiting period. Both asserted that geographical proximity, cultural, religious affinity and familiarity with the Hindi and Bengali language were also beneficial.

From the qualitative data it can be observed that Bangladeshi patients are travelling to India for medical treatment as in most of the cases they did not receive basic diagnostic and primary medical treatment. Due to corruption, some doctors are engaged in different types of business and active politics which greatly harms provision of health care services in an equitable, efficient, effective, ethical and transparent manner. The ongoing corruption in the public health care sector, the irresistible greed, ignorance of behavioural science, lack of ethical and professional commitment by doctors, and the preoccupied brokers of such business along with the health care professionals and senior government healthcare officials, are responsible for poor health care service delivery, thus resulting in outbound medical travel from Bangladesh to India. The results of our study thus confirms that, Bangladeshi patients travel to India for quality of health care, state of the art medical treatment, skilled doctor and pre and post-nursing care which they don't get in their own country, besides geographical proximity, familiarity with culture, food, language, meeting relatives along with a short vacation.

(Source: Globalisation, Medical Travel and Healthcare Management in Bangladesh by Muhammad. Mahboob Ali & Anita Medhekar in Journal "Problems and Perspectives in Management", Vol. 2 (cont. 2)/2016)

CHAPTER FIVE QUESTIONNAIRES AND DATA PROCESSING

In contrast with interviews, where an enumerator poses questions directly, questionnaires refer to forms filled in by respondents alone. Questionnaires can be handed out or sent by mail and later collected or returned by stamped addressed envelope. This method can be adopted for the entire population or sampled sectors. Questionnaires may be used to collect regular or infrequent routine data, and data for specialized studies. While the information in this section applies to questionnaires for all these uses, examples will concern only routine data, whether regular or infrequent. Some of the data often obtained through questionnaires include demographic characteristics, fishing practices, opinions of stakeholders on fisheries issues or management, general information on fishers and household food budgets. A questionnaire requires respondents to fill out the form themselves, and so requires a high level of literacy. Where multiple languages are common, questionnaires should be prepared using the major languages of the target group. Special care needs to be taken in these cases to ensure accurate translations.

Direct observations

Observers can make direct measurements on the fishing vessels, at landing sites, processing plants, or in markets. The variables that enumerators can collect include catch (landing and discards), effort, vessel/gears, operations, environmental variables (e.g. sea state, temperature), biological variables (e.g. length, weight, age), the values and quantities of landings and sales. In practice, observers do not only make direct measurements (observations), but also conduct interviews and surveys using questionnaires. They might also be involved in data processing and analysis. The tasks of an observer are difficult and adequate training and supervision are therefore essential. Clear decisions need to be made on the nature and extent of data collected during any one trip. Often, the amount of data and frequency of collection can be established analytically with preliminary data.

Key informants are individuals with specialized knowledge on a particular topic. They may include academic specialists, community leaders, or especially skilled fishers. Interviews are usually begun with a set of baseline questions, but the interviewer expects to elicit new and perhaps unexpected information by requesting that the key informant expands on his or her answers to these initial questions. This method is ideal for obtaining in-depth descriptive data on beliefs and practices, including historical practices.

Participant-observation is a technique whereby the researcher spends an extended period of time (from weeks to years, depending on the objective and the context) living with a target community, both observing their behaviour and participating in their practices. During this time, the researcher will be conducting formal and informal open-ended interviewing on a variety of topics. This is a good method for learning about the actual processes of decision-making, as opposed to the formal procedures. Cultural and institutional rules are rarely followed to the letter, and there are usually informal standards for an acceptable flexibility. However, information on these standards can often only be obtained through participant-observation.

Schedule and Questionnaire

Meaning of Schedule:

Schedule and questionnaire are the most important tools generally used in social-science research. The two forms are similar in nature but different in its construction and usage. Schedule is the form containing some questions or blank tables which are to be filled by the investigator after getting information from the respondents. "Schedule is the name, usually applied to a set of questions, which are asked and filled in by the investigator in a face to face situation with another person" (Goode & Hatt).

Characteristics of Schedule:

- The schedule is presented by interviewer where the investigator asks the questions; notes down the answers himself/ herself. The list of questions is a formal document.
- A schedule contains three sections such as-
 - Instructions
 - Introductory part
 - Main text

The main purposes of schedule are as follows:

- To provide objective tool for objectivity
- To act as a memory tickler
- To facilitate the work of tabulation and analysis.

There are five steps for constructing schedule:

- Study various aspects of the problems
- Sub-divide the problem to get necessary information
- The framing of actual questions
- Testing the validity of schedule
- Questionnaire Method

Questionnaire

Goode & Hatt stated that in general questionnaire refers to a device for securing answers to questions by using a form which respondent fills in himself.

- Questionnaire method is a method in research in which information is obtained with the help of a questionnaire which is prepared exclusively for the purpose.
- In this method the investigator does not go to any respondent for the collection of information. He simply mails the questions and collects the required information on the basis of replies received by him.
- According to Bogardus, a questionnaire is list of questions sent to a number of persons from them to answer. It secures standardized result that can be tabulated and treated statistically.

Types of questions to be asked in schedule/questionnaire

Open-ended questions: Questions entailing non-standardization format for answers.

Closed questions: Questions entailing standardization format for answers.

Dichotomous questions: two Alternatives are provided.

Multiple Choice Questions: Many choices are provided.

Ranking Items of Questions: Answers have to be ranked or in order.

Pictorial Questions: Questions with the help of pictures to make it interesting.

Qualities of a Good Questionnaire

- Language of the questions should be concise, clear & straight forward.
- Such face & expression which are understood by only few persons & are not used in common.
- If the questionnaire is being mailed to group of persons who are not experts in terminology than technical words jargons should be avoided.
- Units of the questions should be precisely stated.
- Specific period of time should be stated in the questionnaire. e.g. fiscal calendar, year etc.
- The questions themselves should be precise & long questions should be avoided.
- No single question should deal with more than one issue.
- Non sensitive & easily answerable question should be kept in the begging and difficult & sensitive questions should be kept at the bottom.
- Only such questions should be asked about which it is believed that the people have sufficient information.
- If question is too long, it should be split-up in the best possible manner.

Questions to be avoided

- Long questions
- Complex questions
- Presumptuous questions
- Questions involving memory
- Hypothetical questions
- Embarrassing questions
- Questions regarding social & moral ideals
- Unnecessary questions
- Upsetting questions
- Leading questions (questions in which answer is suggested in an indirect way)
- Ambiguous questions

Important Aspects for Aesthetic Consideration of the Questionnaire

- i) Format (e.g. question format)
- ii) Content
- iii) Wording
- iv) Sequence
- v) Paper
- vi) Size of schedule
- vii) Length of schedule
- viii) Organization of units
- ix) Margin

- x) Spacing
- xi) Printing
- xii) Use of pictures

Mailing Questionnaire

- A questionnaire is a form prepared & distributed to secure responses to certain questions. It is a device for securing answers to questions by using a form, which the respondent fills herself/himself.
- The procedure of questionnaire normally comes into use where/when one cannot readily see what he needs and attempts to find out.
- In the questionnaire investigator expects responses of persons where there is no particular reason to see them personally.

Forms of Questionnaire

Structured vs. Non- structured

- Closed form vs. Open form
- The mixed questionnaire
- Fact and Opinion questionnaire
- Pictorial questionnaire

Distinction between Schedule & Questionnaire

- Methodology
- Types of questions
- Reliability
- Area
- Classification of questions
- Collection of confidential information
- Use in sampling method: Questionnaire is not useful for sampling unlike schedule
- Representativeness

Advantage of Questionnaire

- Economical (e.g. in terms of money, time & energy).
- Time saving (e.g. mailed questionnaire saves time).
- Suitable in special type of responses (e.g. personal matters; sexual habits etc. can be obtained by keeping names of respondents anonymous).
- Ensure anonymity (e.g. if respondents are not required to indicate name may free to express their views or opinions).
- Less pressure on the reply of respondents. (e.g. it gives comfort for properly answering).
- Uniformity (e.g. sequence & standardized format necessary).

Disadvantage of Questionnaire

- Illiterate & less educated population cannot be the respondents.

- Proportion of returns is usually low (e.g. in case of mailed questionnaire proportion of returns usually low).
- Question asked in questionnaire forms there is possibility of misinterpretation.
- Unintelligible reply (e.g. meaningless or incoherent answering is possible).

Interview Method

Interview is one of the important methods of collecting data in social science research. Literally interview means mutual view of each other. It is called a conversation with purpose but it is not a simple conversation or verbal exchange. Its objective is to exchange ideas, elicit information regarding a wide area in which the interviewee may wish to recollect the past interpreting the present and advocate his future course of action or plan.

- Interview is one of the powerful tools for the data collection in social science research. The interview technique is a (verbal) method of securing data especially in the field of research connected with the social problems.
- The person who is interviewing is called interviewer and the person who is giving interview is called interviewee or respondent.
- “The interview is perhaps the most ubiquitous method of obtaining information from people” (Fred. N. Kerlinger).

Goode and Hatt stated that ‘interview is fundamentally a process of social interaction. According to P.V. Young ‘personal interview may be seen as an effective informal, verbal, non-verbal conversation, initiated for specific purposes and focused on certain planned content area.’ William C. Emory has pointed out that ‘personal interviewing is a two-way purposeful conversation initiated by an interviewer to obtain information that is relevant to some research purpose’.

Objectives of Interview

The major objectives may be considered

- Exchange ideas & experiences
- Eliciting of information
- Ethical concern of the question
- To know personal knowledge
- To prepare report establishment
- To gain access objective of data
- To obtain opportunity for observation
- To determine facts in particular circumstances
- To ascertain opinions, attitudes, trends, values etc.

Types of Interview

- The interview can be classified according to (i) Number (ii) Purpose (iii) Period of contact (iv) Subject- matter and (v) Role.

Classification according to number

- Personal Interview (e.g. a single individual is interviewed).
- Group Interview (e.g. it is the opposite to personal interview because two or more persons are interviewees).
- Main text

Classification according to Purpose

- Diagnostic Interview (e.g. this type of interviewers try to understand the causes of a malady).
- Treatment Interview (e.g. after the diagnostic interview further interviews are held to know the patients' mental complex or faulty life).
- Research Interview
- Interviews to fulfill Curiosity

Classification according to Period of Contact

- Short contact Interview
- Prolonged Interview

Classification according to Subject Matter

- Qualitative Interview
- Quantitative Interview
- Mixed Interview

Classification according to Approach

- Structure or directive Interview
- Unstructured or Non-Directive Interview
- Focused Interview
- Repeated Interview
- The Depth Interview

Classification according to Formalities

Formal Interview: (the interviewer presents a set of well-defined questions & notes down the answer accordance with prescribed rules). Informal Interview (the interviewer has full freedom to make attention in the questions to suit a particular situation).

Structure or Directive Interview

- This interview uses highly standardized technique & a set of predetermined questions. It is especially useful for administrative & market research of various types. In structured interview the researcher puts questions to the respondents exactly in the same order.
e.g. the respondents may be asked to choose several answers such as yes/no/don't know or likely/unlikely/ very likely.

Unstructured or Non-directive Interview

- This type of interview is also known as uncontrolled interview. This kind of interview does not follow a system or list of predetermined question.
- The unstructured interview is much more flexible & open-ended. Here researcher puts more general questions to the respondents & follows up their comments. e.g. Elizabeth Bott's (1957) study of twenty London families can be cited here as a good example of unstructured interviewing.

The Focused Interview

It is different from other types of interview with the following characteristics:

- It takes place with persons who are known to be involved in particular concrete situation
- It refers to situations which have been analyzed prior to the interview.
- It is focused on subjective experiences with attitudes & emotional responses.

The focused interview is based on the assumptions. Therefore, it is possible to secure precise details of personal reactions, specific emotions etc.

The Repeated Interview

This kind of interview is particularly useful for trace the specific development of social, psychological process which determine a given behaviour or social situation.

e.g. it can be focus group discussion for non-formal education in rural or urban areas.

The Depth Interview

This type interview aims to elicit unconscious material relating especially to personality dynamics & motivations. Depth interview can reveal important aspects of psycho-social relations which are not reality available.

Major Symptoms of Inadequate Response

According to Kahn and Cannell, there are five major symptoms of inadequate responses which are as follows:

- Partial response (Incomplete answerer)
- Non-response (Respondent remaining silent)
- Irrelevant response
- Inaccurate response
- Verbalized response problem

(Respondent explains s/he cannot answer because s/he fails to understand it, or s/he does not have necessary information for answering the question, or he considers it irrelevant or inappropriate questions).

Advantage of Interview

- It is possible to secure dependable & reliable information about issues, people & event.
- Interview may help us to obtain depth knowledge in social issues.
- It is possible to secure information about past, present & about future course plans.
- The active & intelligent role of the interviewer can add to the high rate of response.
- The interview method can be used to obtain information from almost all types of persons.

Disadvantage/ Limitation of Interview

- In terms of cost, energy and time, the interview is more expensive.
- If the interviewer is not properly trained, the data collected may be incomplete and inaccurate.
- In the interview method, the organization required for selecting, training and supervising a field staff is more expensive.

- The basis of the interviewer may be reflected in his data collection.
- Interviewers' incapability sometimes results into drawback of the interview.
- Prejudice or bias knowingly or unknowingly may mislead interview.
- The interviewer may fail to select a right person to obtain information.
- It is difficult to get skills of interviewing and needs huge to get training.
- There is no guarantee that the interviewee gives with honest opinion & it can be misled.
- Costly method
- Validity measurement problems
- Possibility of changing meaning
- Too much reliance on memory
- Problems of large scale training

In-depth Interview Guideline

Greetings, Introduction & Taking Consent

[For example, you could say, "I am here from Khulna University for a field exercise. I have come to learn from you. Could you please give some time? I would like to discuss few issues with you. Do I have your permission to begin?" You should inform him/her that you like to discuss about life in general, work, thoughts & feelings, pleasures or joys, pains and challenges etc.]

General questions

[For example, you could say, "I would like to know you a little more, if do not mind." At this point, you can also talk about himself/herself to build rapport; or ask circumstantial question by talking cues from that the interviewee was doing at that time, e.g., what is it that you are doing? Etc. Remember that the process should closely reflect the flow of a natural conversation and must not be conducted in an interrogative manner.

The following questions are important but do not ask them in the beginning. Sometimes within the flow of conversation, the interviewee answers these questions without you even asking for it. So, it is better to keep these questions in mind and ask them at some points only if there is no other way to elicit such information]

- a. Would you mind asking your name?
- b. When were you born?
- c. What do you do? Could you tell us more about your work?
- d. How long have you been doing this? How much do you earn? etc.
- e. Where do you live? Do you always live here? etc.
- f. Are you married? Could you tell us little about your family?
- g. Which religion do you belong to? (if name does not indicate the religion)
- h. How do you spend your spare time?

Specific Interview Question

[Could I ask you a few more specific questions? I would like to know more about how you have lived your life, how it is now, and also about your future. Begin with the present. Rephrase if you need to clarify the question.]

a. Present

- i. What do you think about your life in general? Do you wish it were different?
- ii. What are your main joys in life, work, family, society, spare time?
- iii. What are the main challenges you face in life, work, family, society, spare time? How do you cope with these challenges?

[Relate the answers to these questions to the past.]

b. Past

- i. Was your life different in the past? What did do then?
- ii. What were your main joys in life, work, family, society, spare time?
- iii. What were the main challenges you face in life, work, family, society, spare time? How did you cope with these challenges?

c. Future

- i. What are your future hopes and dreams? Do you think they will be fulfilled? How? If not, why not?

4. Probe gently if any story, incident comes up and ask him/her to describe in details
[Ask the what, when, where, who, how, why questions]

5. End of the interview [For example, you could say, “I have asked all the questions I needed to ask you. Do you wish to ask me anything or add something?” finally, thank him/her for giving time and take leave. Do not just abruptly end the conversation.]

Transcript Format for in-Depth Interview

Participant ID:

Interview Name:

Interviewee Subgroups # (if any):

Site:

Date of Interview:

Time of the day/ duration/ timing of interview:

Interviewer ID:

Transcriber:

[Describe the whole process as it happened in the field. Take help from field notes]

[Verbatim (exactly same word/ word for word) description for the interview]

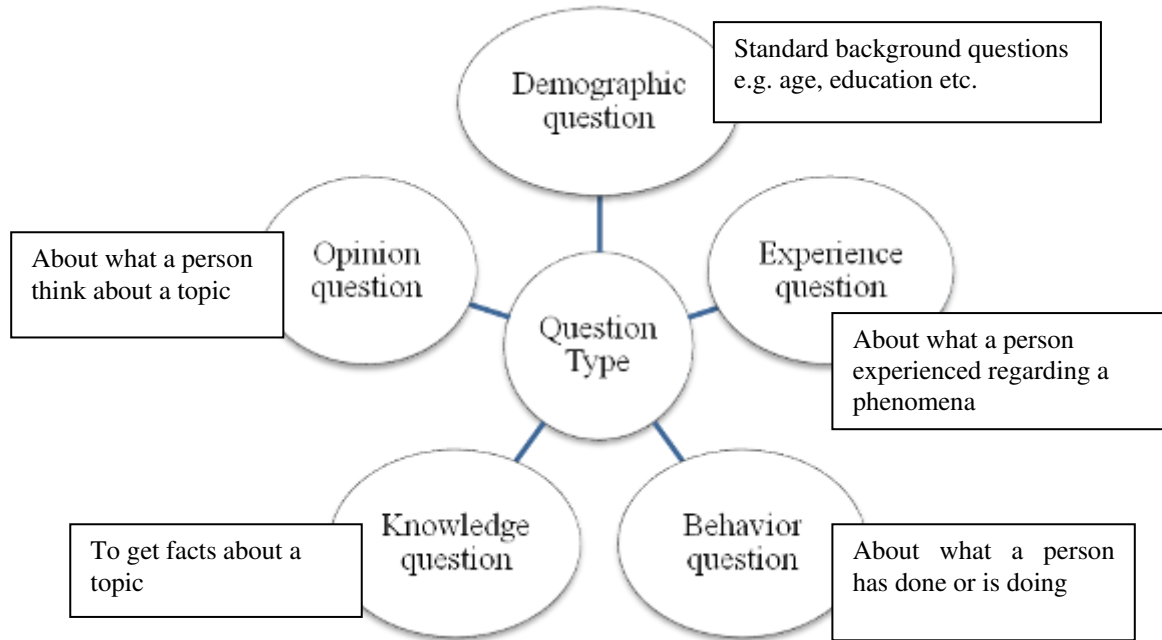


Figure: Type of Questions in Questionnaire

Non-Survey Data Collection:

Qualitative Research Methods/ Tools

Some of the non-survey data collection methods include Focus Group Discussions, Key Informant Interviews, Case Studies, etc. Enable participants to understand how non-survey data can contribute to their findings and the effectiveness of their advocacy. Help participants to understand the available non-survey data collection options and what these options are best suited for. Guide participants on selecting and planning for appropriate non-survey data collection methods their organizations want to collect for their own studies.

- In-depth Interview
- Observations
- Focus Group Discussions
- Key Informants (KII)
- Case Histories/Studies
- PRA, PGA, FFA

Focus Group Discussion (FGD):

The focus group discussions (FGDS) are assessment of semi-structured data gathering methods in which a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher/facilitator (Kumar 1987). This qualitative research technique was originally developed to give marketing researchers a better understanding of the data from quantitative consumer surveys. As an indispensable tool for marketing researchers (Krueger 1994), the focus group discussion has become extremely popular because it provides a fast way to learn from the target audience. FGDs work alongside other data collection methods. Now it uses different public health & feminist research issues.

Logistical arrangements for FGDs

- Invitations (an invitation sent to the participant 1-2 weeks in advance; a reminder a day to the session)
- Group composition (members should be knowledgeable about the topic; optimal number to be between 8-10 people—just enough to control and avoid domination during discussions)
- Transportation (this will depend on the distance between households; used more in sparsely populated areas, at discretion in both moderately populated and densely populated areas).
- Venue (should be spacious, comfortable and neutral; usually at schools, churches, community centres, etc in rural areas)
- Sitting arrangement (should be the one that stimulates interaction between group members)
- Facilitating FGDs
- Timing (The longest FGD shouldn't go beyond two hours)
- Name tags (enables the facilitator to call on those who are shy to speak)
- Tape recording (especially tape recording is very important)
- Refreshments (depends on the context)

Facilitator Affect: Warm but Neutral

In order to avoid “leading” participants with any reaction to their comments, we suggest that reactions should be warm but value-neutral. Ways to be value-neutral are: information seeking (e.g. “tell me more about that...”), clarifying (e.g. “Can you explain what you mean?”) and acknowledging (“I hear what you are saying...”).

Ask Only One Question at a Time

Don't ask more than one question at a time, even if the questions go together. Participants usually cannot remember several questions at one time, and asking multiple questions makes it hard for them to know where to start.

Frequently Repeat Key Phrases from the Question

Participants tend to lose focus on the question after 2-3 other participants have responded to it. Repeating key phrases from the question at strategic times, or asking participants to link their response to key terms in the question will help participants stay focused.

Be Comfortable with Silence

It is also important that moderators are comfortable with silence and “pregnant pauses.” Some participants may participate more if they have more time to consider the question before they speak.

Use Probes When You Need More Information

When participants are not providing enough information, try the following probes:

Would you explain further?, Would you give me an example of what you mean?, Would you say more?, Is there anything else?, Please describe what you mean, I don't understand, Does anyone see it differently?, Has anyone had a different experience?, etc

Writing the FGD Report

- After conducting the focus group discussion, the key findings are described, analyzed and written up in a report.
- Develop a plan for data analysis consisting

- Analyze the content of the group discussion by
- Reviewing the notes from the focus group
- Listening again to the cassettes from the session (if tape recorded)
- Grouping research findings according to key themes
- Identifying the different positions that emerged under each key theme
- Summarizing each of the different positions and assess the extent to which each position was held by participants
- Pulling out verbatim phrases that represent each position.
- Synthesize the group discussion by:
 - reviewing the notes of each discussion made by the moderator
 - identifying the recurrent ideas that came out during the discussion
 - interpreting these recurrent ideas based upon other findings that emerged in the groups

FGD-Key themes to focus

- These depend on the topic under study. Probable ones include the following:
 - Issues in relation to the service – availability, access, usage & quality
 - Incidence & type of problems
 - **Pattern** of response to problems
 - Costs – hidden, legal, forced, willingness to pay for better services
 - Recap of problems and issues
 - Suggestions for service quality improvement
 - Post discussion analysis – relevant issues for the study

Case Study Method

The case study method has its greatest value in exploratory research where the objectives is to find hypotheses to be tested by more formal research methods. When data from a case study are classified and summarized, the study becomes statistical rather than case in nature. When this so, Statistical Methods should be used.

- Intensive study of a relatively small number of situations.
- Features which are common to all cases in the general group
- Features which are not common to all cases, but are common to certain sub-groups
- Features which are unique to a specific case

Conclusions are formulated from comparisons of these similarities and differences. Design of case studies will be based on the specific objectives of the study and is primarily a question of good judgment in selecting cases to be studied.

Advantages of case study

- Inferences are obtained from study of an entire situation, an entity, rather than from study of one or several selected aspects alone.
- Description of a real event or situation.

- More accurate data are obtained, longer intimate association, greater rapport, reduced reliance on formalized questions and answers.

Disadvantages of case study

- Difficult to describe the complete situations, develop formal method of observations.
- Lack of objectivity carries over into analysis of case data. Analysis is based on intuition of investigators.
- Investigators inclined to generalize. Because sample is usually very small, selected subjectively and tendency exists to select unusual cases, generalizations is dangerous.

Key Informant Interviews (KII)

- “Qualitative, in-depth, flexible interviews with persons who know what is going in the community, “experts” (knowledgeable) about a topic on which we want to get information.”
- Key informant interview is usually not about that person herself, but about the topic on which she has information.
- The purpose of Key Informant Interviews is to collect information from a wide range of people-including community leaders, professionals, or residents-who have first-hand knowledge about the community, and our research topic.
- To get general information about the local community
- These community experts, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solution.
- When to conduct KII
- To get more candid or in-depth answers. Focus Group dynamic may prohibit you from candidly discussing sensitive issues or getting the depth of information you need. Sometimes group dynamic can prevent some participants from voicing their opinions about sensitive topics
- Choosing Key Informants
- KI must have first- hand knowledge about community, its residents and issues or problems you are trying to investigate
- KI can be a wide range of people, agency representatives, community residents, community leaders, or community business owners.
ex., Religious leaders, government officials, young mothers, youth, minority population etc.
- Should have a diverse mix of key informants to ensure variety of perspectives

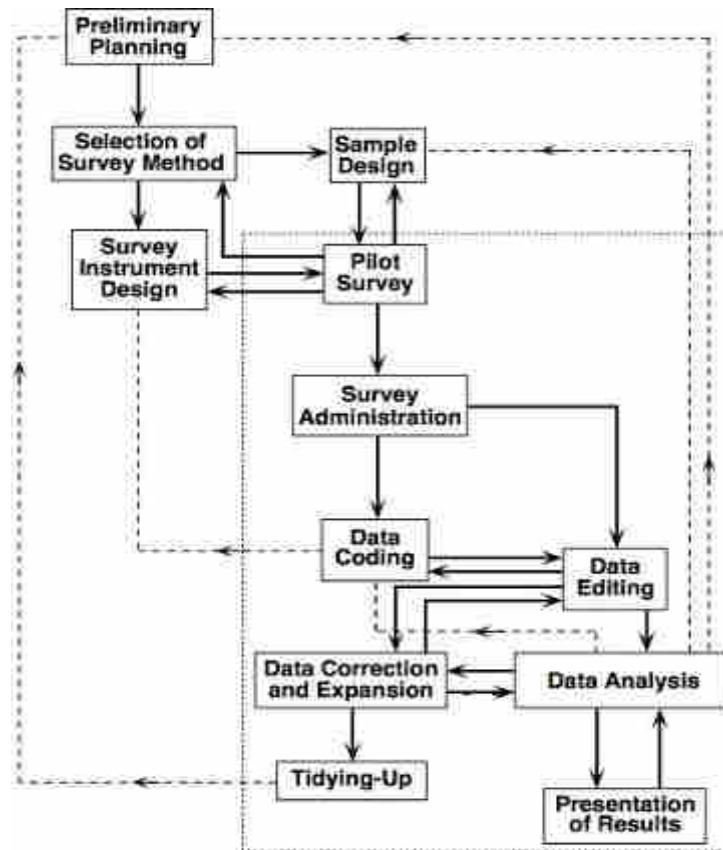
Identify Suitable Key Informants

- Choose suitable key informants according to the purpose of the interview. Key informants should be selected for their specialized knowledge and unique perspectives on a topic. To do this, first identify the groups and organizations from which key informants, then select a few people from each category after consulting with people familiar with the groups under consideration should be drawn. In addition, each informant may be asked to suggest other people who may be interviewed.
- The informant can be a politician, head of department, planner, community member, teacher, religious or secular leader, indigenous healer, traditional birth attendant, local service provider, children and young people or others from the affected community.

Processing of data editing, coding, classification and tabulation

After collecting data, the method of converting raw data into meaningful statement; includes data processing, data analysis, and data interpretation and presentation.

Data reduction or processing mainly involves various manipulations necessary for preparing the data for analysis. The process (of manipulation) could be manual or electronic. It involves editing, categorizing the open-ended questions, coding, computerization and preparation of tables and diagrams:



Editing data

Information gathered during data collection may lack uniformity. Example, Data collected through questionnaire and schedules may have answers which may not be ticked at proper places, or some questions may be left unanswered. Sometimes information may be given in a form which needs reconstruction in a category designed for analysis, e.g., converting daily/monthly income in annual income and so on. The researcher has to take a decision as to how to edit it. Editing also needs that data are relevant and appropriate and errors are modified. Occasionally, the investigator makes a mistake and records an impossible answer. “How much red chilies do you use in a month” The answer is written as “4 kilos”. Can a family of three members use four kilo chilies in a month? The correct answer could be “0.4 kilo”.

Care should be taken in editing (re-arranging) answers to open-ended questions. Example: Sometimes “don’t know” answer is edited as “no response”. This is wrong. “Don’t know” means that the respondent is not sure and is in a double mind about his reaction or considers the questions personal and does not

want to answer it. “No response” means that the respondent is not familiar with the situation/object/event/individual about which he is asked.

Coding of data

Coding is translating answers into numerical values or assigning numbers to the various categories of a variable to be used in data analysis. Coding is done by using a code book, code sheet, and a computer card. Coding is done on the basis of the instructions given in the codebook. The code book gives a numerical code for each variable. Now-a-days, codes are assigned before going to the field while constructing the questionnaire/schedule. Pose data collection; pre-coded items are fed to the computer for processing and analysis. For open-ended questions, however, post-coding is necessary. In such cases, all answers to open-ended questions are placed in categories and each category is assigned a code. Manual processing is employed when qualitative methods are used or when in quantitative studies, a small sample is used, or when the questionnaire/schedule has a large number of open-ended questions, or when accessibility to computers is difficult or inappropriate. However, coding is done in manual processing also.

Editing

Editing is the process of checking and adjusting responses in the completed questionnaires for omissions, legibility, and consistency and readying them for coding and storage.

Purpose of Editing

Purpose of Editing For consistency between and among responses. For completeness in responses to reduce effects of item non-response. To better utilize questions answered out of order. To facilitate the coding process.

Basic Principles of Editing

Checking of the no. of Schedules / Questionnaire) 2. Completeness (Completed in filling of questions) 3. Legibility. 4. To avoid Inconstancies in answers. 5. To Maintain Degree of Uniformity. 6. To Eliminate Irrelevant Responses.

Types of Editing

Types of Editing 1. Field Editing Preliminary editing by a field supervisor on the same day as the interview to catch technical omissions, check legibility of handwriting, and clarify responses that are logically or conceptually inconsistent. 2. Office editing performed by a central office staff; often done more rigorously than field editing.

Tabulation

Tabulation is the process of summarizing raw data and displaying the same in compact form (i.e., in the form of statistical table) for further analysis When mass data has been assembled, it becomes necessary for the researcher to arrange the same in some kind of concise logical order, which may be called tabulation.

Advantages of Tabulation

Advantages of Tabulation: 1. It simplifies complex data. 2. It facilitates comparison. 3. It facilitates computation. 4. It presents facts in minimum possible space. 5. Tabulated data are good for references and they make it easier to present the information in the form of graphs and diagrams.

Preparing a Table

Preparing a Table: Table number. Title of the table. Captions or column headings. Stubs or row designation. Body of the table. Foot notes. Sources of data.

Requirements of a Good Table:

Requirements of a Good Table: statistical enquiry. Easily understandable. Suit the size of the paper. Rows and columns in a table should be numbered. The arrangements of rows and columns should be in a logical the rows and columns are separated by lines.

Data editing guidelines (In research methodology):

- It refers to the notion that the data file actually contains the information that the researcher needs to provide the data integrity extends to the fact that the data. Any errors harm the integrity been edited and properly coded data.
- Editing is the process of checking and adjusting data for So, the editor's task is to checkvomissions, consistency, and legibility for errors and omissions on questionnaires or other data collection when the editor discovers a problem, he or she adjusts the datavforms. To make them more complete, consistent, or readable.
- Field supervisors often are responsible for conducting field editing data. Identify technical omissions such as a blank page on an interview form etc. Clarify and check legibility of handwriting for open-ended responses that are logically or conceptually inconsistent.
- For example, if an interviewer did not correctly follow skip. The supervisor may also notice that patterns, training may be indicated. An interviewer is not properly probing some open-ended responses. Check legibility of handwriting, and clarify responses that are logically or conceptually inconsistent.
- In-house editing rigorously investigates the In-House Editing The research supplier or research department results of data collection normally has a centralized office staff perform the editing and coding function
- Editing technology inconsistencies automatically. Thus, for electronic questionnaires, rules can be entered which prevent inconsistent responses from ever being .These rules should represent stored in the file used for data analysis. Some online survey the conservative judgment of a trained data analyst. Services can assist in providing this service. In fact, the rules can even be preprogrammed to prevent many inconsistent
- Once the field survey has been conducted and the completed interviews or questionnaires begin to flow into the survey office, it is time to begin the often tedious task of editing, coding and analysing the results. Although the physical component of this task begins now, it should be realised that the planning phase should have been completed much earlier in the survey process. It is too late to start designing the coding and analysis procedures once the completed questionnaires begin to arrive. Rather, these tasks should have been largely finalised when the design of the questionnaire and the sample was being considered. Indeed, attention given to these tasks at those earlier stages will greatly facilitate the smooth completion of these tasks now.

The task of transforming completed questionnaires into useable results is composed of several discrete tasks including initial editing of questionnaires, coding, data entry, computer editing, data correction, analysis, and interpretation of results and preparation of reports. In addition, to enable use of the data for secondary analysis at a later date, it will be necessary to arrange for satisfactory storage of the data. This chapter will concentrate on the coding and editing of data in preparation for analysis. Later chapters will examine the tasks involved in the latter stages of data analysis.

Software packages for Data Processing and Analysis

MS Excel; SPSS – Statistical Package for the Social Sciences; SAS – SAS Business Intelligence provides the information needed in required format; STATISTICA ; BMDP - Bio Medical Development Program; NVivo; LISEREL; EViews; MATLAB etc.

CHAPTER SIX RESEARCH DESIGN

Research design completely depends on the purpose of the study. It is the blueprint of conducting a research to maximize the possibility of obtaining valid answers of research questions or hypotheses. To find a valid and reliable answers of the research questions, a scientific plan is required. Research design contains a set of instructions that tells the researcher how to collect data and analyze in order to answer a specific research question. Research design varies due to research type.

Type of Research

Research type can be classified as follows:

Quantitative Research

- Exploratory Research
- Conclusive research

Descriptive Research

1. Case study;
2. Case series study;
3. Cross-sectional study;
4. Longitudinal study;
5. Prospective Study
6. Retrospective study.

Causal Research

1. Experimental Research
2. Quasi Experimental Research

Qualitative Research

- Ethnography
- Narrative
- Phenomenological

Differences between Qualitative and Quantitative researches

	Qualitative Research	Quantitative Research
Objective / purpose	<ul style="list-style-type: none"> • To gain an understanding of underlying reasons and motivations • To provide insights into the setting of a problem, generating ideas and/or hypotheses for later quantitative research • To uncover prevalent trends in thought and opinion 	<ul style="list-style-type: none"> • To quantify data and generalize results from a sample to the population of interest • To measure the incidence of various views and opinions in a chosen sample • Sometimes followed by qualitative research which is used to explore some findings further
Sample	<ul style="list-style-type: none"> • Usually a small number of non-representative cases • Respondents selected to fulfil a given quota. 	<ul style="list-style-type: none"> • Usually a large number of cases representing the population of interest. Randomly selected respondents.
Data	<ul style="list-style-type: none"> • Unstructured or semi-structured techniques 	<ul style="list-style-type: none"> • Structured techniques such as online

	Qualitative Research	Quantitative Research
collection	e.g. individual depth interviews or group discussions.	questionnaires, on-street or telephone interviews.
Data analysis	<ul style="list-style-type: none"> • Non-statistical. 	<ul style="list-style-type: none"> • Statistical data is usually in the form of tabulations (tabs). Findings are conclusive and usually descriptive in nature.
Outcome	<ul style="list-style-type: none"> • Exploratory and/or investigative. Findings are not conclusive and cannot be used to make generalizations about the population of interest. Develop an initial understanding and sound base for further decision making. 	<ul style="list-style-type: none"> • Findings are conclusive and can be used to make generalizations about the population of interest.

Exploratory Research - a type of research to determine the nature of the problem however not intended to provide conclusive evidence, only to help to have a better understanding of the problem.

Conclusive Research - a study to generate findings that are practically useful in reaching conclusions or decision-making.

Non-experimental Research - a study attempting to construct a picture of the phenomenon by exploring events, people, or situations and independent variables are not manipulated

Descriptive Research - a study to justify current practice, make judgments and/or to determine what others in similar situations are doing for examining characteristics of a single sample, identify phenomenon and identify variables

Case Study - a study to analyze specific issues within the boundaries of a specific environment, situation or organization. Case study can be explanatory, exploratory, or describing an event.

Case Series Study - a study that tracks subjects with a known exposure, such as subject which has received a similar treatment or examines previous records for exposure and outcome.

Cross-sectional Study - a study for examine the relationship between variables of interest as they exist in a defined population at a single point in time or over a short period of time

Longitudinal Study - a research method in which data is gathered for the same subjects repeatedly over a period of time.

Prospective Study - a study which considers a cohort of subjects and observes them over a long period.

Retrospective Study - a study that looks backwards and examines exposures to suspected risk

Experimental Research - a scientific investigation which has criteria of randomization, control environment for observations and data collection.

Quasi-experimental Research - an investigation which has lack of randomization and control group.

Ethnography Study - a study in which researcher engages himself or herself in the target participants' environment to understand the goals, cultures, challenges, motivations, and themes that emerge.

Narrative Study - an approach which weaves together a sequence of events, usually from just one or two individuals to form a cohesive story.

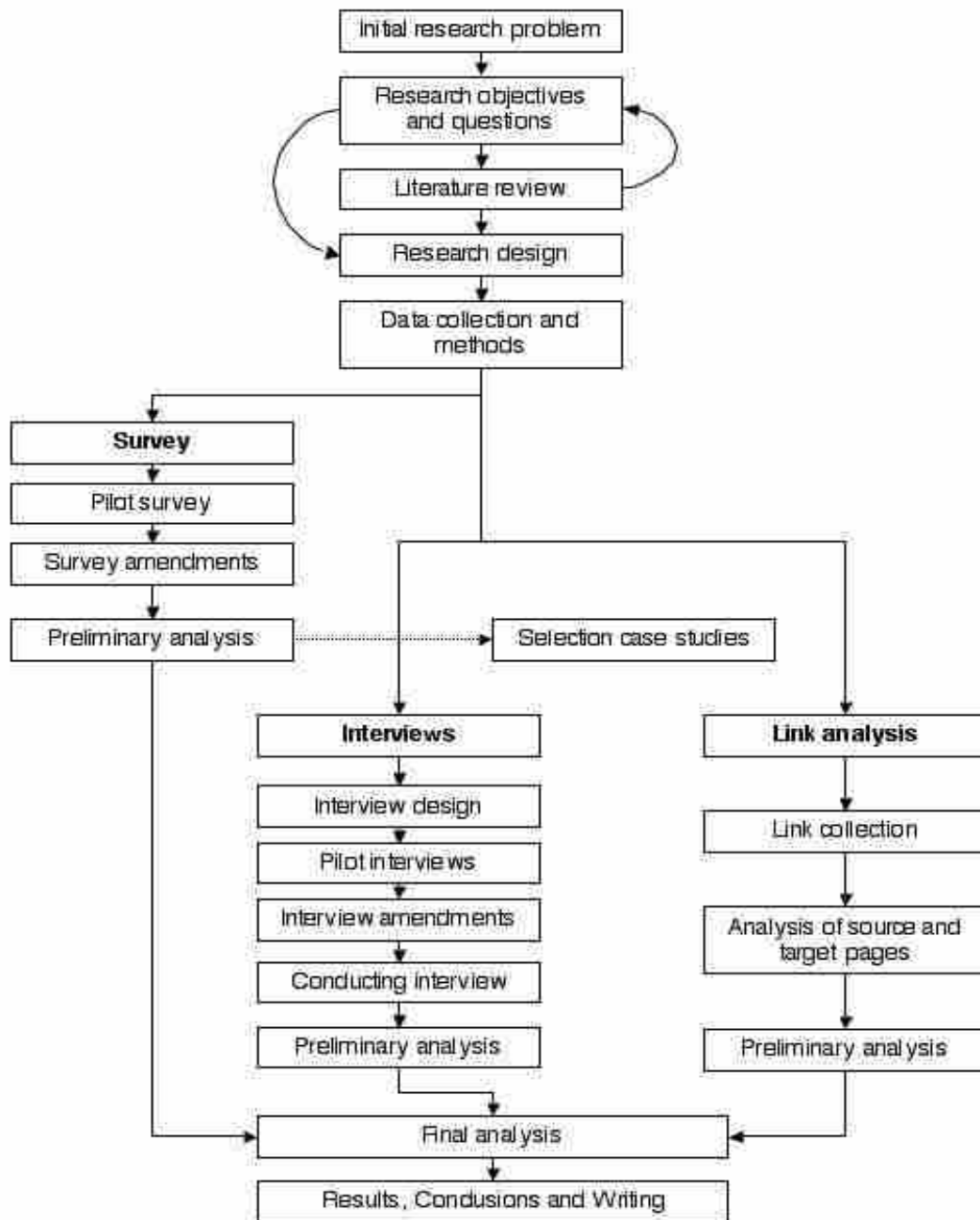
Phenomenological Study - a combination of methods which is used in conducting interviews, reading documents, watching videos, or visiting places and events.

Grounded Theory - while a phenomenological study looks to describe the essence of an activity or event, the grounded theory looks to provide an explanation or theory behind the events

Each type of study has *pros* and cons. To choose an appropriate research method, one must consider the objective of the research. Each type of research has unique procedure to acquire the required output. A general design of research is presented below.

Table: General steps for designing a research

	STEPS	Options
01	Observe a situation	To find a research gap
02	Set research questions or hypotheses	
03	Identify Variables to test the hypothesis or questions	1. Dependent variable 2. Independent variable 3. Mediator variable 4. Moderator variable
04	Specify and measure (can be qualitative or quantitative) indicators for the dependent variable(s).	Level of measurement of the variables
05	Find out sources of data	1. Primary Data 2. Secondary Data
06	Determine the methods to collect data from source	1. Secondary data review 2. Key informant interviews 3. Structured or Semi-structured interviews 4. Focus Group Discussions
07	Determine the overall research design strategy	1. Longitudinal 2. Cross Sectional
08	Determine the appropriate sampling population	Target population
09	Identify the critical sub-levels of analysis, from largest to smallest.	Sampling methods
10	Select appropriate statistical tools	Analysis
11	Compare the study with reference	Comparison and conclusion



Problems with research design

- Inappropriate for purpose and framework
- Poorly developed
- Poorly implemented
- Inadequate treatment/intervention, sample, measurement methods

CHAPTER SEVEN SAMPLING METHODS

Sampling refers to the selection of individuals, units, and/or settings to be studied. While quantitative studies strive for *random sampling*, qualitative studies often use *purposeful* or *criterion-based sampling*, that is, a sample that has the characteristics relevant to the research question(s). The difference in sampling strategies between quantitative and qualitative studies is due to the different goals of each research approach. Quantitative research seeks to infer from a sample to a population (for example, a relationship or a treatment effect). The goal of quantitative approach can be stated as, “empirical generalization to many”. Qualitative research, on the other hand, typically starts with a specific group, event, or process. The goal of qualitative research can be stated as “*in-depth understanding*.”

Common Quantitative Sampling Strategies

Name of Quantitative Sampling Method	Description
Simple Random Sampling	<ul style="list-style-type: none"> • All individuals in population have equal chance of being selected to be in sample. • Generalizability of results can be high
Stratified Random Sampling	<ul style="list-style-type: none"> • Randomly sample specific subgroups in the population to represent each subgroup in the sample on certain characteristics • Generalizability of results can be high
Systematic sampling	<ul style="list-style-type: none"> • Sample selected according to a random starting point and a fixed periodic interval
Cluster sampling	<ul style="list-style-type: none"> • Within cluster heterogeneous but between cluster homogenous
Multi-stage sampling	<ul style="list-style-type: none"> • Large clusters of population are divided into smaller clusters in several stages.

Common Qualitative Sampling Strategies

Name of Qualitative Sampling Method	Description
Extreme or Deviant Case Sampling	<ul style="list-style-type: none"> • Select sampling unit which has highly unusual manifestations of the phenomenon of interest.
Intensity Sampling	<ul style="list-style-type: none"> • Chooses information-rich cases that manifest the phenomenon intensely, but not extremely. The difference from extreme or deviant case sampling is that the cases selected are not as extreme.
Purposive sampling	<ul style="list-style-type: none"> • Units from a pre-specified group are purposively sampled.
Maximum Variation Sampling	<ul style="list-style-type: none"> • Selects a wide range of variation on dimensions of interest.
Homogeneous Sampling	<ul style="list-style-type: none"> • Brings together people of similar backgrounds and experiences.

Typical Case Sampling	<ul style="list-style-type: none"> Focuses on what is typical, normal, and/or average.
Snowball or Chain Sampling	<ul style="list-style-type: none"> Identifies cases of interest from people who know people who know what cases are information-rich, that is, who would be a good interview participant.
Theory-Based or Operational Construct or Theoretical Sampling	<ul style="list-style-type: none"> Identifies manifestations of a theoretical construct of interest so as to elaborate and examine the construct.
Opportunistic or Emergent Sampling	<ul style="list-style-type: none"> Follows new leads during fieldwork, takes advantage of the unexpected, and is flexible.
Confirming and Disconfirming Sampling	<ul style="list-style-type: none"> Seeks cases that are both “expected” and the “exception” to what is expected
Sampling Politically Important Cases	<ul style="list-style-type: none"> Seeks cases that will increase the usefulness and relevance of information gained based on the politics of the moment.
Combination or Mixed Purposeful Sampling	<ul style="list-style-type: none"> Combines two or more strategies listed above. It may be combine both qualitative and quantitative methods.
Convenience Sampling	<ul style="list-style-type: none"> Often used due to cost or impracticality of random sampling methods. Select participants because available and accessible
Volunteer Sampling	<ul style="list-style-type: none"> Selects participants who are willing to participate.

Sample Sizes

There are no hard and fast rules, however, there are at least two considerations:

1. What sample size will reach saturation or redundancy?
2. How large a sample is needed to represent the variation within target population?

Sample size is estimated based on the approach of the study or the data collection method used. For each category there are some related rules of thumb, represented in the tables below.

Sample statistic	Population size	Sample size
Mean	Known	$n = \{ z^2 * \sigma^2 * [N / (N - 1)] \} / \{ ME^2 + [z^2 * \sigma^2 / (N - 1)] \}$
Mean	Unknown	$n = (z^2 * \sigma^2) / ME^2$
Proportion	Known	$n = [(z^2 * p * q) + ME^2] / [ME^2 + z^2 * p * q / N]$
Proportion	Unknown	$n = [(z^2 * p * q) + ME^2] / (ME^2)$
Where, N is population, σ^2 is variance of the population, ME is margin of error, Z is critical standard score, p (q = 1- p) is the proportion		

Factors influencing Sample Size

The "right" sample size for a particular application depends on many factors, including the following:

- Cost considerations (e.g., maximum budget, desire to minimize cost).
- Administrative concerns (e.g., complexity of the design, research deadlines).

- Minimum acceptable level of precision.
- Confidence level.
- Variability within the population or subpopulation (e.g., stratum, cluster) of interest.
Sampling method.

Rules of Thumb Based on Approach:

Research Approach	Rule of Thumb
Biography/Case Study	Select one case or one person.
Phenomenology	Assess 10 people. If you reach saturation prior to assessing ten people you may use fewer.
Grounded theory	Assess 20-30 people, which typically is enough to reach saturation.

Rules of Thumb Based on Data Collection Method:

Data Collection Method	Rule of Thumb
Interviewing key informants	Interviewing approximately 5 people
In-depth interviews	Interviewing approximately 30 people
Focus groups	Number of focus groups based on “groupings” represented in the research question and average 5-10 people each group
Ethnographic surveys	A large and representative sample (purposeful or random based on purpose) with numbers similar to those in a quantitative study

Guidelines for Length of Interviews

Number of Interviews	Length of each Interview
10	1 – 2 hours
20	30 minutes – 1 hour
30	20 – 40 minutes

CHAPTER EIGHT MEASUREMENT AND SCALING

Measurement Scales

Measurement scales are used to categorize and/or quantify variables. The most widely used classification of measurement scales are:

- (a) **Nominal scale** - simply describes differences between things but cannot indicate any order
- (b) **Ordinal scale** - indicates possible outcome a variable in order, but there is no attempt to make the intervals
- (c) **Interval scale** - has an arbitrary zero, but it is not possible to determine an absolute zero or the unique origin.
- (d) **Ratio scale** - has an absolute or true zero.

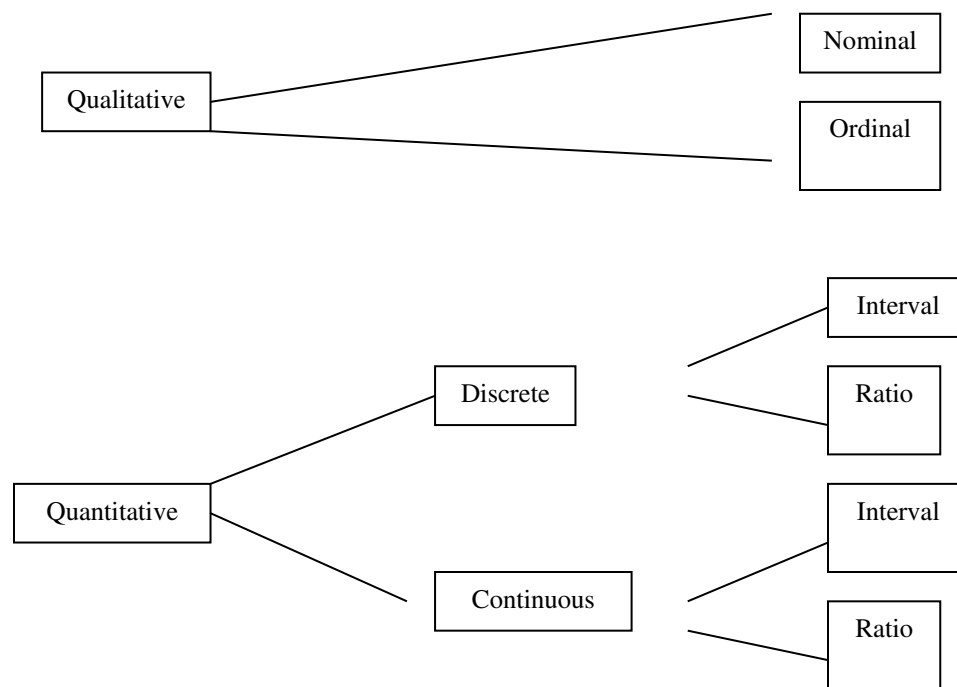


Figure: Level of Measurement

Sources of Error in Measurement

- (a) **Respondent** - reluctant to express strong negative feelings or may have very little knowledge but may not admit ignorance.
- (b) **Situation** - Any condition which places a strain on interview can have serious effects on the interviewer-respondent rapport.
- (c) **Measurer** - The interviewer behavior, style and looks may encourage or discourage certain replies from respondents.
- (d) **Instrument** - defective measuring instrument

Tests of Good Measurement

1. **Test of Validity** - indicates the degree of an instrument and measures what it is supposed to measure. Validity depends on (i) Content validity; (ii) Criterion-related validity and (iii) Construct validity.
2. **Test of Reliability** - provides consistent results. Reliable measuring instrument does contribute to validity, but a reliable instrument needs not be a valid instrument.
3. **Test of Practicality** - measuring instrument should be economical, convenient and interpretable.

Technique of Developing Measuring Tools

The technique of developing measurement tools involves a four-stage process, consisting of the following:

- (a) Concept development - arrives at an understanding of the major concepts. Concept development is more apparent in theoretical studies.
- (b) Specification of concept dimensions - specifies the dimensions of the concepts which is developed in the first stage.
- (c) Selection of indicators - develops appropriate indicators (questions, scales, or other devices) to measure respondent's knowledge, opinion, and expectation.
- (d) Formation of index - combining indicators into an index

Scaling

Scaling is the procedures of assigning numbers to various degrees of opinion, attitude and other concepts. This can be done in two ways viz., (i) making a judgement about some characteristics of an individual and then placing him directly on a scale that has been defined in terms of that characteristics and (ii) constructing questionnaires in such a way that the score of individual's responses assigns him a place on a scale. The number assigning procedures or the scaling procedures may be broadly classified on one or more of the following bases: (a) subject orientation; (b) response form; (c) degree of subjectivity; (d) scale properties; (e) number of dimensions and (f) scale construction techniques. We take up each of these separately.

Important Scaling Techniques

Rating Scales - involves qualitative description of a limited number of aspects of a thing or of traits of a person. When rating scales (or categorical scales) is used, an object is judged in absolute terms against some specified criteria (such as like-dislike).

Arbitrary Scales - developed on ad hoc basis and are designed largely through the researcher's own subjective selection of items.

Differential Scales (or Thurstone-type Scales) - a panel of judges who evaluate the items in terms of whether they are relevant to the topic area and unambiguous in implication.

Summated Scales (or Likert-type Scales) - developed by utilizing the item analysis approach wherein a particular item is evaluated on the basis of how well it discriminates between those persons whose total score is high and those whose score is low.

Cumulative scales - statements in it which form a cumulative series.

Factor Scales - developed through factor analysis or on the basis of inter-correlations of items which indicate that a common factor accounts for the relationships between items.

Multidimensional scaling - characterized as a set of procedures for portraying perceptual or affective dimensions of substantive interest.

CHAPTER NINE METHOD OF DATA COLLECTION

Data can be defined as the quantitative or qualitative values of a variable. Data is plural of datum which literally means to give or something given. Data is thought to be the lowest unit of information from which other measurements and analysis can be done. Data can be numbers, images, words, figures, facts or ideas. Data in itself cannot be understood and to get information from the data one must interpret it into meaningful information. There are various methods of interpreting data. Data sources are broadly classified into primary and secondary data.

Importance of Data and Data Collection

Data is one of the most important and vital aspects of any research studies. Researchers conducted in different fields of study can be different in methodology but every research is based on data which is analyzed and interpreted to get information. Data is the basic unit in statistical studies. Statistical information like census, population variables, health statistics, and road accidents records are all developed from data.

Data Sources

There are two sources of data collection: Primary and Secondary sources for collecting data.

Data Collection Techniques

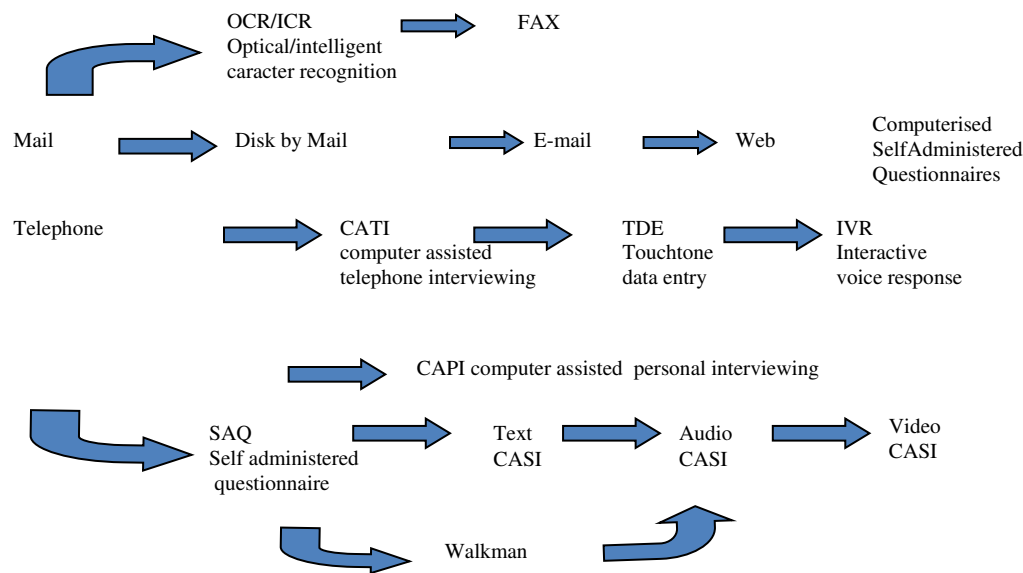
Primary data collection uses surveys, experiments or direct observations. Secondary data collection may be conducted by collecting information from a diverse source of documents or electronically stored information, census and market studies are examples of a common sources of secondary data. This is also referred to as "data mining".

Primary Data

Primary data means original data that has been collected specially for the purpose in mind. It means someone collected the data from the original source first hand. Data collected this way is called primary data. Primary data has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings; therefore its validity is greater than secondary data. Survey is most commonly used method in social sciences, management, marketing and psychology to some extents. Surveys can be conducted in different methods. Questionnaire is the most commonly used tool in survey. Questionnaires are a list of questions either an open-ended or close -ended for which the respondent gives answers to. Questionnaire survey can be conducted via telephone, mail, live in a public area, or in an institute, through electronic mail or through fax and other methods. Interview is a face-to-face conversation with the respondent. It is slow, expensive, and they take people away from their regular jobs, but they allow in-depth questioning and follow-up questions. Observations can be done while letting the observing person know that he is being observed or without letting him know. Observations can also be made in natural settings as well as in artificially created environment.

Secondary Data

Secondary data is the data that has been already collected by and readily available from other sources. When we use statistical method with primary data from another purpose for our purpose we refer to it as secondary data. It means that data of one purposes primary is to be used for another purposes. So, secondary data is the data that is being reused. Such data are more quickly obtainable than the primary data. These secondary data may be obtained from many sources, including literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes etc.



Published Printed Sources

There are varieties of published printed sources. Their credibility depends on many factors for example, for an author of a book, one needs to mention publishers' detail, and time and date of publications. New sources are preferred and old sources should be avoided as new technology and researches bring new facts into light. Books are available today on any topic that you want to research. The uses of books start before even you have selected the topic. After selection of topics books provide insight on how much work has already been done on the same topic and you can prepare your literature review. Books are secondary sources but most authentic ones in secondary sources are journals/periodicals journals and periodicals are becoming more important as far as data collection is concerned. The reason is that journals provide up-to-date information which at times books cannot and secondly, journals can give information on the very specific topic on which you are researching rather talking about more general topics. Magazines/Newspapers, are also effective but not very reliable. Newspaper on the other hand is more reliable and in some cases the information can only be obtained from newspapers as in the case of some political studies.

Published Electronic Sources

As internet is becoming more advanced, fast and reachable to the masses; it has been seen that much information that is not available in printed form is available on internet. In the past the credibility of internet was questionable but today it is not. The reason is that in the past journals and books were seldom published on internet but today almost every journal and book is available online. Some are free and for others you have to pay the price. E-journals are more commonly available than printed journals. Latest journals are difficult to retrieve without subscription but if your university has an e-library you can view any journal, print it and those that are not available you can make an order for them. Generally websites do not contain very reliable information so their content should be checked for the reliability before quoting from them.

CHAPTER TEN TEST OF HYPOTHESIS

Hypothesis: Statement of possible relationship between variables which follow logically (however sometimes unexpected) from theory. When we formulate a research then the hypothesis is concerned. Generally hypothesis is a proposition condition or principles related with logical consequences. In social research each investigator is to start with certain assumption or presumption which the subsequent study might prove and disprove. It is the hypothesis round which the study revolves and for which data is collected. Hypothesis is “a testable statement of potential relationship between two or more variables”. Hypothesis is a tentative answer to a question. Formulation of hypothesis in advance of the data gathering process is necessary for unbiased investigations. Hypothesis is a proposition which can be put to test to determine its validity. It may seem contrary to or in accordance with commonsense (Goode and Hatt).

- The hypothesis is a tentative justification, the validity of which remains to be tested. (G.A Lund Berg)
- When propositions are formulated or empirically tested called hypothesis (William Emory).
- So a hypothesis is a principle of proposition or assumption with logical and empirical reflection consequences to the facts.
- It is a less than generally held view and it is provisional formulation and tentative solution of problems.

Function of Hypothesis

Functions of hypothesis are:

- to test theories,
- to suggest theories,
- to describe social phenomenon,
- to test theories that must be empirically demonstrate either probable or not probable,
- to suggest theories- theories when tested either proved or disproved and in terms constitute further test of the originating theory and to describe social phenomenon
- to describe as complete and perfect knowledge has to acquired, should be very brief, clear, and timely. And should be elaborate to field research.

Types of Hypothesis: (Goode and Hatt)

- At the lowest level of obstruction it exposes existences of certain uniformity—empirical uniformities are common in social research.
- Relatively at the higher level of obstruction which are concerned with complex ideal types. It ends at testing.
- The highest levels obstruction is concerned with the relation analytic variables such as statement about laws changes etc.

Goal

Make statement(s) regarding unknown population parameter values based on sample data.

Source of Hypothesis

- Cultural environment
- Folk wisdom
- The history of science
- Findings of other studies
- Cases which are expectations to expected theories
- Personal experience
- Body of theory

Utility of Hypothesis

- Pin point to enquiry
- Give direction how to proceed
- Selecting facts
- Help for scientific conclusion

Elements of a Hypothesis test

Null hypothesis – It is a statement regarding the value(s) of unknown parameter(s) which typically implies no association between explanatory and response variables in our applications (will always contain an equality).

Alternative hypothesis - It is a statement that is contradictory to the null hypothesis (will always contain an inequality).

Test statistic - Quantity based on sample data and null hypothesis might be used to test between null and alternative hypotheses.

Rejection region - Values of the test statistic for which we reject the null in favor of the alternative hypothesis.

When we talk about hypothesis, we simply mean a mere assumption or some supposition to be proved or disproved. But for a researcher hypothesis is a formal question that he tends to resolve. Thus a hypothesis may be defined as a proposition or set of propositions set forth as an explanation for the accuracy of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts. Quite often a research hypothesis is a predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent variables.

For example, Consider statements like the following ones:

“Students who receive counseling will show a greater increase in creativity than students not receiving counseling or the automobile A is performing as well as automobile B.”

These are hypotheses capable of being objectively verified and tested. Thus, we may conclude that a hypothesis states what we are looking for and it is a proposition which can be put to a test to determine its validity.

Characteristics of a Good Hypothesis

A good hypothesis in brief-

- should be reasonable
- should be consistent with known facts / theories or some theoretical orientation.
- should be tested or empirically tested and found to be probably true or probably false.
- should have conceptual clarity.

- should be closest to things to this observable facts.
- should be specific and precise.
- should be relevant and available techniques.
- should be stated in the simplest as possible.

Hypothesis must possess the following characteristics:

- i) Hypothesis should be clear and precise. If the hypothesis is not clear and precise, the inferences drawn on its basis cannot be taken as reliable.
- ii) Hypothesis should state relationship between variables, if it happens to be a relational hypothesis.
- iii) Hypothesis should be stated as far as possible in most simple terms so that the same is easily understandable by all concerned. But one must remember that simplicity of hypothesis has nothing to do with its significance.
- iv) Hypothesis should be consistent with most known facts, i.e., it must be consistent with a substantial body of established facts. In other word, it should be one which judges accept as being the most likely.

Basic Concepts Concerning Testing of Hypothesis

Null hypothesis and Alternative Hypothesis: In the context of statistical analysis, we often talk about the null hypothesis and alternative hypothesis. If we are to compare method A with method B about its superiority and if we proceed on the assumption that both methods are equally good, then this assumption is termed as the null hypothesis. As against this, we may think that the method A is superior or the method B is inferior, we are then stating what is termed as alternative hypothesis. The null hypothesis is generally symbolized as H_0 and the alternative hypothesis is H_a .

We may consider three possible alternative hypotheses as follows:

Alternative Hypothesis- to be read as follows:

$H_a : \mu \neq \mu_{H_0}$. The alternative hypothesis is that the population mean is not equal to 100, i.e., it may be more or less than 100.

$H_a : \mu > \mu_{H_0}$. The alternative hypothesis is that the population mean is greater than 100.

$H_a : \mu < \mu_{H_0}$ The alternative hypothesis is that the population mean is less than 100.

Degrees of Freedom:

The degrees of freedom associated with a static is either the number of independent quantities involved which are free to vary or the effective number of independent observations from which the statistic may be built up. Although the concept might at first sight appear to be rather abstruse, it is quite easy in practice to find the degrees of freedom associated with any statistic or component of variation. Straight forward formulae are available for the purpose.

Procedure for Hypothesis Testing:

- i) State the null hypothesis
- ii) Choose the statistical test
- iii) Select the desired level of significance
- iv) Compute the calculated difference value
- v) Obtain the critical test value
- vi) Interpret the test

APPENDIX

Sample Questionnaire

Questionnaire on Medical Tourism

Health Tourism is defined as “*the organised travel outside one’s local environment for the maintenance, enhancement or restoration of the individual wellbeing in mind and body*”. A subset of this is medical tourism. **Medical Tourism** on the other hand is defined as “*the organised travel outside one’s natural healthcare jurisdiction for the enhancement or restoration of the individual’s health through medical intervention*” (Carrerra and Bridges, 2006, p.449).

Serial no:

Date:

A. Socio-demographic status of the respondent

- 1) **Name:**
- 2) **Age(years):**
- 3) **Sex:** a) Male b) Female
- 4) **Area of Residence:**
 - a) Rural b) Urban c) Sub urban
- 5) **Total family income:.....BDT**
- 6) **Marital status:**
 - a) Single b) Married c) Divorced d) Widow
- 7) **Education:**
 - a) Illiterate b) Primary c) Secondary d) SSC
 - e) HSC f) Under graduate g) Graduate h) Masters
 - i) Others (please specify):.....
- 8) **Occupation:**
 - a) Farmer b) Day labor c) Business d) Service f) Self employed
 - g) Industrialist h) Doctor i) Other (please specify):.....

B. India visit related data of the respondent

- 1) **For how much disease treatment are you going India?**
 - a) One Disease b) Two Diseases c)More than two diseases
- 2) **Diseases affected site of your body**
 - a) Eye b) Heart c) Bone d) Stomach e) Kidney
 - f) Lungs g) Liver h) Spleen i) Lower abdomen
 - j) Genital organ k) Oral Cavity/Dental l) Head/Brain
- 3) **Name of the destination in India**
 - a) Calcutta b) Chennai/Madras c) Hyderabad
 - d) Bangalore e) Delhi f) Mumbai

4) Staying period in India

- a) 1 week b) 2weeks c) 3 weeks
 d) 1 month e) 2 months f) More than 2 months

5) How many times are you go India in a year?

- a) 1 time b) 2 times c) 3 times d) More than 3 times

6) In the future will you visit India again for medical treatment?

- a) Yes b) No

7) Total expenditure for treatment:

Year	Cost of Treatment	Travel cost	Accommodation	Food and other expenditure

8) Why did you seeking India for medical treatment?

- a) Better doctors
 b) Better nursing and care
 c) Less cost
 d) Non availability of treatment in Bangladesh
 e) Modern treatment facilities
 f) Mental satisfaction

9) Where did you get the information from?

- a) Relatives b) Advertisement c) Middleman
 e) Web sites f) Neighbor

10) Experience of treatment India

- a) Bad b) Good
 c) Very good d) Excellent

If it was good please specify : _____

If bad please specify : _____

11) In which region/city of India treatment is good?

- a) Northern b)Western
 c) Southern d)Eastern

3. What are the obstacles that prevent the development of medical tourism in this destination? Please rate (1=smallest to 5=biggest) those applicable.

- Lack of facilities and attractions
1 2 3 4 5
- Lack of affordable accommodation
1 2 3 4 5
- Inadequate government support
1 2 3 4 5
- Lack of trained personnel for health tourism
1 2 3 4 5
- High costs
1 2 3 4 5
- Poor investment potential
1 2 3 4 5
- Lack of promotion
1 2 3 4 5
- Foreign language barriers
1 2 3 4 5
- No facilitating policies and regulations
1 2 3 4 5
- Lack of co-operation and co-ordination among key players
1 2 3 4 5
- Other 1 (please specify).....
1 2 3 4 5
- Other 2
1 2 3 4 5

4. Based on the above evaluation, please rate the POTENTIAL of this destination in developing medical tourism.

Very Little Normal Great Greatest
1 2 3 4 5

5. How the above obstacles/problems can be reduced/ or removed?

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)
- 11)

**Thanks for your Cooperation.
Developed by: Anita Medhekar, CQU, Australia.**

A survey of Green Business in Bangladesh

Instructions to the interviewer: When you meet a prospective respondent (Household, Business Firm, Government agency or non-governmental civil society entity), you should explain the objective of the survey first and then also explain the meaning of “Green Business/Green Products” to the respondents before conducting the survey. A green product can be defined as a product which is environmentally safe by itself or is produced using an environmentally safe or energy saving production, marketing, and distribution processes.

Set I: Consumer Side/Demand Side: Households:

Respondents' Details:

1. Name: _____
2. Gender: _____
3. Occupation: _____
4. Age group: _____
5. Family size: _____
6. Educational Background: _____
7. Locality: _____
8. Monthly Expenses: _____
9. Category of buyer: _____

Questions:

1. Are you aware of any “green product” available in Bangladesh?
 - a. Yes
 - b. No
2. Can you name any “green product(s)” that you heard of in recent years?
Name of Product(s): _____
3. Can you name any company who sells green products in Bangladesh?
Name of Company(ies): _____
4. Have you purchased any “green product(s)” in recent years and if so, can you name any of them?
Name of Product(s): _____
5. If you have purchased any green product in the past, how frequently you purchase them?
 - a. Frequently
 - b. Only Occasionally
6. If you are willing to pay a higher price for any green product, which of following higher price range will you be willing to pay for a green product?
 - a. 1% - 10% higher price
 - b. 11% – 20% higher price
 - c. 21% - 30% higher price
 - d. 31% -40% higher price
 - e. Above 40% higher price
7. Answer the following questions in a five point scale reflecting your degree of agreement or disagreement with the statement with “1” being “Strongly disagree” and “5” being “strongly agree”.

- 7a. Government is doing enough to encourage green business and green products in Bangladesh?
a: Strongly disagree
b: Somewhat disagree
c. Neither agree/nor disagree
d.: Somewhat agree
e: Strongly agree
- 7b. Government is doing enough to label and certify green products so that consumers can make informed decisions to buy green products.
a: Strongly disagree
b: Somewhat disagree
c. Neither agree/nor disagree
d.: Somewhat agree
e: Strongly agree
- 7c. Government is doing enough to investigate and enforce the accuracy and truthfulness of claims of green products by businesses.
a: Strongly disagree
b: Somewhat disagree
c. Neither agree/nor disagree
d.: Somewhat agree
e: Strongly agree
- 7d. I feel comfortable about the accuracy of labeling and claims of green products by businesses?
a: Strongly disagree
b: Somewhat disagree
c. Neither agree/nor disagree
d.: Somewhat agree
e: Strongly agree
- 7e. I will be willing to buy more green products if I could feel more comfortable about the truthfulness of the “green product” claims made by businesses.
a: Strongly disagree
b: Somewhat disagree
c. Neither agree/nor disagree
d.: Somewhat agree
e: Strongly agree

Set II: Business / Supply Side

Response Details:

1. Name of the company: _____
2. Respondent’s Title/Position in the company: _____
a. Owner
b. Manager
c. Supervisor
d. other (Specify): _____

3. Type of Business:
 - a. Agribusiness
 - b. Manufacturing business
 - c. Retail/Distribution business
 - d. Oil/Gas/Petroleum business
 - e. Others (specify) Handicrafts
4. Number of Employees: _____
5. Number of years in Business: _____
6. Domestic/Foreign Ownership status:
 - a. Domestic ownership
 - b. Foreign ownership
 - c. Joint domestic and foreign ownership
7. Are you aware of any “green product” available in the market in Bangladesh?
 - a. Yes
 - b. No
8. Do your business produce and sell any “green product” in the market in Bangladesh?
 - a. Yes
 - b. No
9. If your answer is “yes” to question 8 above, then give the number and name of some of your green products:

Number of Products: _____

Name of product(s): _____
10. If your answer is “No” to question 8 above, do you have any plan to produce and sell any “green product” in the future?
 - a. Yes
 - b. No
11. Answer the following questions in a five point scale reflecting your degree of agreement or disagreement with the statement with “1” being “Strongly disagree” and “5” being “strongly agree”.
 - 11a. Government is doing enough to encourage businesses to produce and sell green products in Bangladesh?
 - a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree
 - 11b. Government is doing enough to label and certify green products so that consumers can make informed decisions to buy green products.
 - a: Strongly disagree

- b: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

- 11c. Government is doing enough to investigate and enforce the accuracy and truthfulness of claims of green products by businesses.
- a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree
- 11d. Customers in Bangladesh would be willing to pay higher price for “green products” if available in the market.
- a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree
- 11e. Customers in Bangladesh are willing to buy more green products if their trust in green products can be strengthened.
- a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree
- 11f. My company does not have any knowledge or capability to produce any “green product”
- a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree

Set III: Non-Profit Organizations/NGO’s/Educational Institutions/Banks/Non-Bank financial Institutions

1. Name of the organization: _____
2. Respondent’s Title/Position in the organization: _____
 - a. Owner
 - b. Manager
 - c. Supervisor
 - d. other (Specify) _____
3. Type of Organization:
 - a. NGO

- b. Religious Institution
 - c. Government Agency
 - d. Educational Institution
 - e. Others (specify) _____
4. Number of Employees: _____
5. Number of years since established: _____
6. Domestic/Foreign Ownership status:
- a. Domestic ownership
 - b. Foreign ownership
 - c. Joint domestic and foreign ownership
7. Are you aware of any “green product” available in the market in Bangladesh?
- a. Yes
 - b. No
8. Do your organization encourage or promote directly or indirectly the production and consumption of any “green product” in Bangladesh?
- a. Yes
 - b. No
9. If your answer is “yes” to question 8 above, then specify with example how your organization promote or encourage directly or indirectly the production and consumption of green products in Bangladesh:
- a. Directly:

 - b. Indirectly:

10. Answer the following questions in a five point scale reflecting your degree of agreement or disagreement with the statement with “1” being “Strongly disagree” and “5” being “strongly agree”.
- 10a. Government is doing enough to encourage businesses to produce and sell green products in Bangladesh?
- a: Strongly disagree
 - b: Somewhat disagree
 - c. Neither agree/nor disagree
 - d.: Somewhat agree
 - e: Strongly agree
- 10b. Government is doing enough to label and certify green products so that consumers can make informed decisions to buy green products.
- a: Strongly disagree

- b: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

10c. Government is doing enough to investigate and enforce the accuracy and truthfulness of claims of green products by businesses.

- a: Strongly disagree
- b√: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

10d. Customers in Bangladesh would be willing to pay higher price for “green products” if available in the market.

- a: Strongly disagree
- b: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

10e. Customers in Bangladesh are willing to buy more green products if their trust in green products can be strengthened.

- a: Strongly disagree
- b: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

10f. My organization does not have any knowledge or capability to promote directly or indirectly any “green product”.

- a: Strongly disagree
- b: Somewhat disagree
- c. Neither agree/nor disagree
- d.: Somewhat agree
- e: Strongly agree

(Questionnaire developed by Muhammad Mahboob Ali, AnisulM.Islam and Anita Medhekar)

Sample Case Study

TEACHING NOTE

Case Studies on Corporate Governance and Corporate Social Responsibility

Victoria Wise and Muhammad Mahboob Ali¹

***Abstract:** Educators are incorporating case studies into the classroom in a response to employers' demand that employees are in possession of high level interpersonal, negotiating, management and communication skills. As an educational tool the case study has been used for many years in management education to achieve these outcomes. This suggests that instructors may positively influence student skills acquisition and development by integrating appropriate case materials and examples in management and other accounting disciplines. This teaching note examines corporate governance and links it to ethical business processes, which in turn refers to corporate social responsibility. Corporate governance is required for ensuring a sensible use of corporate resources. Multi-dimensional cultural factors can influence a society's corporate governance and corporate reporting processes. To examine corporate governance, three cases are discussed of which two are specific to Bangladesh, while one is related to an international company. It is observed that corporate governance has a multi flow-on impact on corporate social responsibility.*

***Keywords:** Case studies; Corporate governance; Corporate social responsibility; Ethical business practices; Student skills acquisition*

1 Introduction

Corporate governance depends on managerial performance as well as a consideration of social responsibility, the socio-cultural-environmental dimension of business procedure, and legal and ethical practices with a focus on stockholders, customers and other stakeholders of organizations. Understanding the implications of corporate governance is now gaining importance among policy makers, entrepreneurs, business personnel, stakeholders and related organizations. At the international level, globalization is providing momentum towards integrated business processes and a free economy. Under such conditions domestic firms have to compete with multinational firms. Corporate governance indicates the policies and procedures applied by organizations to attain certain sets of objectives, corporate missions and visions with regard to stockholders, employees, customers, suppliers and different regulatory agencies and the community at large. The role of corporate governance is to maximize stockholders' wealth, along with efforts for achieving the appropriate returns for other stakeholders. As such, corporate governance has implications for the corporate social responsibility of organizations.

1.1 Objectives and format

Three case studies have been undertaken in this teaching note with the following learning objectives. The first objective is to understand the meaning and nature of corporate governance. The second is to consider

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the linkage between theoretical perspectives of corporate governance with corporate social responsibility in practice, and to assess the need to improve corporate social responsibility of firms (with special reference to Bangladesh). Finally, the third objective is to make recommendations as to how corporate governance and corporate social responsibility can work better for both the firm and its stakeholders. By adopting the case study teaching and learning approach, the educational outcomes should be an enhancement of students' interpersonal, negotiating, management and communication skills.

The remainder of this paper proceeds as follows. In section two, an explanation of the research design is provided. A discussion of the case study instruction method is also provided in section two. The three selected cases are outlined in section three and a discussion of the corporate governance issues and the corporate social responsibility reporting practices is provided. Lastly, in section four a set of recommendations for improving corporate governance of organizations, specifically in Bangladesh which is the theatre of operations of two of the cases, is provided.

2 Research design

This teaching note links theoretical perspectives of corporate governance with observed practices of corporate social responsibility reporting. Three cases are provided as examples of corporate conscience and corporate social responsibility disclosure. These three cases can also be used as a starting point for the development of best practice benchmarking for corporate social responsibility reporting in Bangladesh. The three cases include two Bangladesh firms and one international firm operating in Bangladesh.

Ethical practices such as the protection of consumers, protection of creditors, establishment of rights of stockholders, application of regulations, and enforcement of law and order are important indicators of corporate governance in any country. Researchers often use categories to understand and analyse corporate social responsibility reporting. Hackston and Milne (1996) used six categories: (1) environment, (2) energy, (3) human resources, (4) product and safety, (5) community involvement and (6) other. We examine the corporate social responsibility reporting practices of the three cases for examples that fall within these categories.

2.1 Relevant theoretical implications and perspectives

Kendall and Kendall (1998) suggested that characteristics of good corporate governance incorporate: an ethical approach; culture; society; an organizational paradigm; balanced objectives that is, congruence of goals of all interested parties; each party plays their appropriate part and the roles of key players such as owners and directors are clear. Also, that a decision-making process is in place based on a model reflecting the above characteristics giving due weight to all stakeholders. Implicit in this view is that stakeholders are treated with equal concern, albeit some have greater influence than others, and that there must be accountability and transparency to all stakeholders.

According to the Bangladesh Enterprise Institute (2004), the primary and most important benefit from implementing the (Bangladesh) code of corporate governance lies in attaining and sustaining development goals. Strengthening corporate governance at the national level could lead to a process of revitalization of the Bangladesh economy. If the code can be fully implemented in public corporations, joint stock companies, state owned enterprises and non-governmental organizations, the reputation of Bangladesh as a destination for investment and aid would be greatly enhanced.

UNCTAD (2004) defined corporate social responsibility (CSR) as constituting actions whereby organizations integrate societal concerns into their business policies and operations, including environmental, economic and social concerns. Compliance with the law is the minimum standard to be observed by organizations. The scope of corporate social responsibility encompasses the direct impact of organization's actions as well as the spillover effects they may have on society. The extent to which enterprises can be held responsible for such externalities is still being debated.

Talukdar and Bakhtear (2007) observed that in the Bangladesh capital market, the banking industry is performing better than other industries. The banking sector comprised 54% of market capitalization and 57% of total turnover in the Dhaka Stock Exchange at December 2006. Yet observations of the reporting practices of banks in Bangladesh indicates a low incidence of corporate social responsibility reporting. If this is so, it has negative implications for the corporate governance of organizations in Bangladesh's banking sector.

Chowdhury (2006) considered environmental perspectives and suggested that companies today need to incorporate environmental responsibility into their future strategies and should refrain from misrepresentations. In the long run, the choice of not being "green" may have heavy consequences both environmentally and financially for companies. Chowdhury observed that corporate regulators are looking more closely at claims of companies with regards to "green marketing".

Kabir (2007) assessed the environmental and social performance of Lever Brothers Bangladesh limited (LBBL). LBBL is a multinational company, recently renamed as Unilever Bangladesh Ltd. Kabir suggested that to achieve business sustainability LBBL needs to employ sustainability tools as much as possible within its limited resources. This may require additional corporate resources in terms of time and money, however as a result LBBL would be likely to achieve long-term benefits and become a model of "greening" business in its own sector.

Friedman (1970) argued that a facet of the doctrine of corporate social responsibility is brought into sharp relief when the doctrine is used to justify wage restraint by trade unions. The conflict of interest is clear when union officials are asked to subordinate the interest of their members to some more general purpose. If the union officials try to enforce wage restraint, the consequence is likely to be wildcat strikes, rank-and-file revolts, and the emergence of strong competitors for their jobs.

2.2 Classroom implications and notes to the instructor

Teaching techniques designed to help students to organize their research independently, to remain focused, and to perform specific tasks individually, can be useful to all students. However to encourage the acquisition of higher level interpersonal, negotiating, management and communication skills the students should be organized into groups or teams and directed to undertake the case study analysis. This teaching and learning approach could involve the students in group dynamics such as consultation, negotiation, and the production of agreed agendas together with the compilation and agreement of action lists and meeting notes. The group-based approach can be facilitated by taking some simple steps as follows.

Step 1: Provide background information to the students about the case. Students would be required to:

- "specify the problem or issue within a particular regulatory and entity-specific structure;
- consider the external requirements that could be placed on an entity;
- consider the desires of the entity" (Fleet, Summers & Smith, 2006:79).

Step 2: Discuss the case study method in the classroom. Following the Harvard MBA case study format this would require the students to understand the need to:

- "analyse an organization in the context of multifaceted problems or issues
- provide decision recommendations
- suggest implementation plans" (Fleet, Summers & Smith, 2006: 79).

Step 3: Require the instructor to document the group formation process.

Instructors could encourage students to document their examination of various reports of organizations including the extent and nature (quantitative or qualitative; narration or pictorial etc.) of corporate social

responsibility reporting, the theoretical categories within which that information fits, and the implications of such reported information for the underlying strength and/or weakness of the corporate governance of the reporting organization.

3 The Cases

3.1 Case Study: 1 ACI Company of Bangladesh

(Source: <http://www.aci-bd.com/corporate1.html>). Disclosures are drawn directly from this website.

Background

ICI Plc. of UK had a pharmaceutical business in Bangladesh which in 1992 was divested and the name of the company changed to Advanced Chemical Industries (ACI) Limited. ACI was the first company in Bangladesh to obtain certification of ISO 9001 Quality Governance System (in 1995). The ACI group has consistently demonstrated its commitment towards its employees and the environment over the years. It has been recognized as the practitioner and promoter of socially responsible business behaviour. ACI has endorsed the *Principles of Global Compact* (August 18, 2003). The Global Compact is an initiative sponsored by the (then) United Nations Secretary-General, Koffi Annan. It is based on a very simple notion of corporate social responsibility, that:

whether or not required by law, corporations should enforce basic human rights and accepted labour and environmental standards in all their business activities to counterbalance possible negative effects of globalization.

The compact calls on companies to embrace the ten universal principles in the key areas of human rights, labour standards, the environment, and anti-corruption. These four important principles included in the universal set are expanded upon as follows:

Human Rights:

- To support and respect International Human Rights within the company's sphere of influence.
- To ensure that their corporations are not complicit with Human Rights violations.

Labour:

- To end discrimination in the workplace.
- Abolition of child labour.
- The right to collective bargaining and recognition of freedom of association.
- To eliminate the use of forced and compulsory labour.

Environment:

- To support a precautionary approach to environmental challenges.
- To undertake initiatives to promote greater environmental responsibility.
- To encourage the diffusion of environmentally friendly technology.

Anti-Corruption:

- To work against all forms of corruption, including extortion and bribery.

ACI pledges to keep all its employees, customers, shareholders and suppliers regularly informed about the compact and the company's initiatives to uphold the principles.

Societal Development through Educational Programs:

ACI's guiding principle in all its operations is to be a 'responsible corporate citizen'. Thus, social responsibility is a top priority for every individual at ACI. Our endeavors toward discharging our social responsibilities have become more focused since our adoption of the principles of the Global Compact.

Initiatives that have shown significant contribution to societal development are the Continued Medical Education (CME) for medical professionals and Children's Education programs.

A dedicated team of medical graduates makes up the Medical Services Department (MSD) in ACI, which carries out CME programs termed 'Clinical Meetings' all across Bangladesh. These are essentially non-advertised meets of medical professionals that serve as a training and knowledge-sharing forum, often conducted by experts on the subject. Our partners in development for these programs are doctors, medical associations and/or departments, and various study groups. The level of involvement of ACI in these programs may range from only sponsoring the entire program to providing all types of services and technical support to the presenter to even conducting the program by an MSD doctor. Support from MSD include research support for deliberations at the meet, literature and multimedia presentation for the program, updates on new technology and thoughts in medical fields, and even educational support to any participant in their area of interest.

The Bangladesh Today, a media unit of ACI, started a Children's Club two years ago. The Children's Club holds many cultural events and competitions all year round. The Children's Carnival is a major annual event that draws a huge number of participants. ACI has also undertaken an English Education program in Faridpur, one of the remotest districts of Bangladesh. This provides support to teach English Language to school going children.

Doctors in Bangladesh who are not living in the metropolitan cities have very limited access to the Internet or any other sources of information. In order to keep them updated on the developments in the medical practices regularly, the CME program has proven highly effective. During 2004 alone, the number of such meetings held was 342, participated in by approximately 18,000 (eighteen thousand) doctors. When compared to the 2003 figures of 100 meetings with 5000 participants, the impact of our efforts can be seen reflected in the tremendous rate of growth.

The Children's Club now has over 1000 members who are actively engaged in pursuits of creative learning. They are grooming themselves to be well-rounded individuals with skills in foreign languages, arts, crafts and music. ACI believes that by promoting education of children, we are contributing to societal development by shaping the minds of our future leaders.

Discussion

An analysis of the information provided by ACI in relation to its corporate conscience and corporate social responsibility shows that an historical synopsis of the entry of the firm to Bangladesh and the nature of its operations in that country is provided. Once the background to the firm's operations in the country is established, various projects and programs demonstrating the firm's commitment to ethical practices and social responsibility are provided. The projects and programs are not necessarily restricted to the industry in which the company operates. For example, ACI discloses that it supports cultural programs and the arts and education.

In terms of the six categories identified by Hackston and Milne (1996) the ACI's corporate social responsibility disclosures are focused around *community involvement* and *other*. The disclosures are essentially qualitative in nature although some numbers are provided to demonstrate the rate in growth of certain initiatives such as the CNE and Children's Club programmes. Potentially the corporate governance of this organization is strong rather than weak, although students should be encouraged to consider (1) whether the organization could be engaged in further activities; and (2) the absence of reporting of matters within the remaining four categories (environment, energy, human resources, product safety).

3.2 Case Study: 2 Ford Motor Company

(Source: <http://www.fordmotorcompany.co.za/corporatesocial/community.asp>). Disclosures are drawn directly from this website.

Background

SOS children's village:

SOS is a welfare organization that provides a home, mother and family to destitute children. The mother, paid by the SOS, provides 7-days, 24hrs care exactly like any parent would. Ford Motor Company of Southern Africa and Ford Credit contribute towards the living expenses of one of 15 houses at the Mamelodi SOS Village. The money is used to augment expenses of the ten children's school, medical, food, clothing and other costs. Several members of staff have made donations of valuables like cash and home implements, clothing and books.

MEDICOS special school:

MEDICOS, situated in Soshanguve, north of Pretoria, is a special day school for mentally handicapped children. Most of the children come from the surrounding areas of Soshanguve, Mabopane and Garankuwa. One of the major challenges faced by that community was that children often got lost coming to school or going back home, and some even got abused en route. To stop this problem, Ford Motor Company of Southern Africa provided transport in the form of a bus; the bus has also been serviced free of charge by Ford Motor Company of Southern Africa. Cash and donations of valuable items such as freezers are often made by the company and employees to this school.

FMCSA Employee Community Action Programme:

At the Ford Motor Company of Southern Africa, each employee is encouraged to donate 16 hours of Community Service in Tshwane and Port Elizabeth. Over the past two years FMCSA employees have involved themselves in community projects. Through involvement in these projects FMCSA intends to create a broader awareness and understanding of Ford as a caring Company which accepts its corporate citizenship responsibilities. This supports the Company's declared vision and values. It is planned to involve increasing numbers of employees in the projects; thus developing improved team spirit and a caring attitude amongst employees, true to the Company's vision. Furthermore, these activities provide the opportunity for employees to demonstrate one of the key leadership behaviors, i.e. community commitment.

A-Ford-Able Bike Programme:

Ford Motor Company, Japan and Ford Motor Company of Southern Africa (FMCSA) have joined forces to provide bicycles to underprivileged communities in South Africa. "A-Ford-Able Bikes" is a community service project being undertaken by Ford volunteer employees with the cooperation from the City of Hiroshima, Safmarine, Mazda, and the SOS Children's Villages operation in South Africa, and Nittsu. Volunteer employees from Ford Motor Company Hiroshima Operations gather together at the City of Hiroshima Bicycle impound lot in Nishi-kuNicho-me to select abandoned bikes provided by the City of Hiroshima, prepare them for shipment, and then load over a hundred bikes into a 20-foot shipping container which is currently sent to South Africa. The first two shipments of bicycles were given free of charge to orphans who live in the six SOS Children's Villages located around South Africa. The orphans use them to transport themselves to school and for other pressing needs, like having fun.

Mazda Wildlife Fund:

The conservation and preservation of the environment has become a major world-wide issue, dramatically changing the attitudes of consumers and the way large corporations do business. Against this background the Mazda Wildlife Fund was formed in April 1990, funded by the Ford Motor Company of Southern Africa (FMCSA) and its nationwide network of Mazda Dealers. The Fund has currently committed to an

amount of approximately R1.5 million per annum for investment in nature conservation. The Fund currently supports 32 projects with 34 vehicles, covering every aspect of conservation and the preservation of the environment. These are situated throughout Southern Africa and include educational projects, research projects and projects involved in the direct preservation of endangered species and habitats. To date over 100 projects have received support from the Fund.

HIV/AIDS Awareness:

Ford Motor Company has an active Aids awareness programme, with warnings about the risks of HIV infection regularly communicated to company staff in an informative, yet easy-to-understand and non-discriminatory manner. Confidential voluntary counselling and testing is also conducted on site. During 2002, the FMCSA was awarded the US Secretary of State's Award for Corporate Excellence for our HIV/AIDS programme. It is only through the dedication of FMCSA employees, peer group educators, the HIV/Aids Steering Committee and others that the Company was nominated for this prestigious award. Of the over 60 nominations received in 2001, Ford was selected as the winner in the multinational category.

Community upliftment projects:

Ford Motor Company prides itself in its community involvement, contributing not only to its employees and their families, but also to its immediate communities and the South African public at large.

Educational plant tours:

Informative guided tours through the manufacturing plant are regularly presented to school and student groups, groups from less privileged communities and groups of disabled or handicapped people. These visits are not only viewed as a leisure time activity for the groups concerned, they also play an important educational role at grass roots level, and stimulate the future career choices of visitors in their formative years.

Mamelodi College for Further Education & Training:

The college is a close associate of Ford Motor Company of Southern Africa; Ford Motor Company of Southern Africa is also represented on its governing body. Together with the college, Ford Motor Company of Southern Africa has developed a panel-beating and spray-painting facility at the college, and has also donated equipment to this facility. An automotive workshop has been developed at the college - Ford Motor Company of Southern Africa has donated mounted engines, gearboxes and rear axles and a brake training simulator for the workshop. Students from the college undergo experiential training at Ford Motor Company of Southern Africa. Five staff members of the college have been trained as Safety Representatives and the College has established a Safety, Health and Environment Committee. Mamelodi lecturers spend four evenings a week at Ford Motor Company of Southern Africa teaching our employees maths, science, industrial technology, technical drawing and communication subjects. Ex-employees undergo ABE training at the college. This is sponsored Ford Motor Company of Southern Africa. The College has been given the use of the old Education & Training facility which is on sponsored Ford Motor Company of Southern Africa premises. It is used for business study courses as well.

Rally-to-Read Project:

The Ford Motor Company of Southern Africa participates annually in the Rally-to Read activities in South Africa. Since 1998 this joint venture between the Financial Mail, McCarthy Motor Holdings and the Read Educational Trust has identified schools in rural areas in desperate need of books. Unfortunately, with education authorities struggling to match budgets to needs, these schools lose out because of their location. Being far removed from the major centers lamentably means being far from the top of the priority list. The program gives both companies and individuals an opportunity to make a difference. Every year the Rally-to-Read delivers box libraries containing English books to these schools

by means of 4x4 vehicles. Sponsors are invited to come along and see how their money is being spent. Read also instructs the Teachers in how to use the books and conducts on-site training and monitoring.

Discussions

An analysis of the information provided by the Ford Motor Company demonstrates the focus on providing details of the various projects and programs the firm supports. Again, these projects and programs are wide-ranging. They focus on educational, economic and medical support. Ford also includes environmental support within its portfolio of corporate social responsibility activities.

In terms of the theoretical framework provided by Hackston and Milne (1996) used for the purposes of corporate social responsibility analysis in this teaching note, Ford Motor Company's disclosures fit the categories of *environment*, *human resources*, (possibly) *product and safety* (Educational plant tours & Mamelodi College for Further Education and Training), *community involvement*, and *other*.

Students should be instructed to question whether the corporate social responsibility reporting should be supplemented with key performance indicators. Also benchmarking and comparison with other organizations operating in similar international jurisdictions and in similar industries should be researched by the students.

3.3 Case Study: 3 BGMEA, BKMEA to implement project to eliminate child labour

(Source: The Financial Express, March 19, 2006).

Background:

BGMEA and BKMEA with the support of the International Labour Organisation (ILO) and South Asian Enterprise Development Fund (SEDF) would implement a five-year programme to address the child labour, mid-governance development and productivity improvement issues in the garments and knitwear sectors, industry source said. Sources said a memorandum of understanding (MOU) would be signed next month among the four stakeholders in this connection, reports BDNEWS.

The Bangladesh Garments Manufacturers and Exporters Association (BGMEA), ILO and the United Nations Children's Emergency Fund (UNICEF) already implemented a three-year project from 1996 to phase out child labour progressively in the more than 2,500 factories.

Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) president Fazlul Hoq said, "We received the BGMEA's final proposal Thursday. The social compliance committee of BKMEA would critically review the project."

Sources at BKMEA said the five-year project will be implemented in two phases during 2006-2011. Elimination of child labour, fire security and mid-governance development issues would be addressed in the first phase in the three years. Workers' education and training, productivity improvement, and workers' and employees' responsibility would be addressed during the last two years in the second phase.

Sources at BGMEA said BGMEA and BKMEA would finance 10 to 15 per cent of the project while SEDF will finance rest of the cost of the project. ILO would be an implementing agency of the project.

BGMEA Vice President Shahadat Hossain Chowdhury Arun said child labour in the garment factories increased in last two years after completion of the earlier project and also due to lack of monitoring.

"Within a relatively short period after starting of the earlier project, we were able to bring down child labour in the Bangladeshi garment industry to 4.5 per cent from 42.8 per cent in the inspected factories, while at the same time the percentage of child labour of the total labour force declined to 0.26 per cent from 3.56 per cent" he said.

Referring to the project cost, BGMEA legal consultant Janifer K Jabber said the project cost would be finalised after final consultation with the ILO.

Sources at the BGMEA labour cell said generally the mid-level managers employ garment workers. “We saw many problems happened in the recent garment incidents due to the weaknesses in the mid-level governance” he said.

He said the new project is important not only for child labour and fire security but also for productivity improvement.

Discussion

It is clear from this newspaper report that the elimination of child labour is an important objective of the garment and knitwear industry in Bangladesh. We would expect to see organizations operating within this industry and organizations supporting this programme to be reporting appropriate social responsibility activities. For example, good corporate governance practices within organizations such as banks and other lenders to the garment and knitwear industries should be reporting their corporate social responsibility actions. However, currently banks in Bangladesh make very limited disclosures in this regard.

Utilising the Hackston and Milne (1996) framework for corporate social responsibility reporting, the student investigator would expect to find disclosures in the following categories: *environment, human resources, product and safety, community involvement, and other*. Students should be asked to consider the level and nature of corporate governance (strong or weak) within organizations associated with the garment and knitwear industries of Bangladesh as implied through the corporate social responsibility reporting of these organizations. Comparisons can be made with organizations in these industries and their supporting organizations, in other jurisdictions such as developed nations, developing nations, and underdeveloped nations.

4 Summary and Recommendations

4.1 Summary

From the analysis of the three cases included in this teaching note it can be observed that organizational behavior largely depends on the state of social welfare of the society within which it is operating. Although profit maximization is the main objective of a company’s operations, sustainability in the long-run depends also on attaining stakeholder support. This implies that a portion of profits should be utilized for the sake of sustainability and stakeholder support. This in turn is likely to legitimize the company’s operations and to create trust and enhance confidence in the company. Legal obligations as well as cultural and societal imperatives should be considered as an integral part of business at the global level. Transnational companies must consider the background, values and resources of the nations in which they operate. Further, if a nation’s infrastructure is not well developed then foreign direct investment in that nation should include strategies to add value to that infrastructure.

Corporate governance procedures, including corporate social responsibility, set a strong base to help organizations attract foreign and local investors. Corporate governance promotes transparency in transactions between investors and creditors, accountability, and promotes the organization and development of the capital market. The capital market of Bangladesh is still underdeveloped: it is in Rostow’s ‘pre take off’ stage of development. Tough rules and policies as well as the implementation of a code of corporate governance conduct is a prerequisite to the successful implementation of good corporate governance in organizations. Organizational leadership is required to take tough measures to install and operationalize corporate governance processes. If good corporate governance can be achieved then domestic as well foreign investors will be attracted which will ultimately create and enhance employment opportunities, a more equitable redistribution of wealth, and promote sustainable organizational development.

4.2 Recommendations

As a result of reviewing the corporate social responsibility disclosures of the three cases, a number of recommendations have been proposed. The aim in making these recommendations is to encourage good corporate governance principles and processes within organizations.

General

- The enforcement of proper corporate governance practices is likely to attract foreign investment and support the development of the capital market. Triple bottom line accounting is a practice that has the potential to assist ethical business decisions, which in turn address social obligations and leads to improvements in the quality of corporate governance.
- Good corporate governance should ensure fair treatment to all stakeholders. Dealings with the organization and disclosure processes should be transparent. Investors and lenders to the organization should be able to commit their capital confident of fair and equitable treatment.
- Good corporate governance occurs in a de-politicized and honest decision-making environment and establishes corporate social responsibility for the betterment of all stakeholders of the organization. Organizations must act firmly to eliminate corrupt practices.
- Corporate governance and social responsibility disclosures made by companies should be obligatory and they should follow international best practice.
- Bangladesh needs to promote a good corporate governance culture and values. Creation of wealth should be accompanied by proper attention to the welfare of its society. A regulatory framework must be enforced in the corporate sector. Methods of trading, symmetry of information flows, financial reporting, conduct of corporate members, systematic enforcement of laws and regulations, and a culture of compliance, are all matters that need to be covered under a good corporate governance framework in Bangladesh. Improved corporate culture and values can be achieved through better transparency and managerial accountability.
- Organizations in Bangladesh should make a larger contribution to the achievement of sustainable economic development. They should also introduce initiatives to support disadvantaged groups through programmes aimed at reducing the 'dependency' syndrome. Enabling disadvantaged groups by providing easier access to capital assists in the creation and redistribution of wealth.
- Organizations in Bangladesh should become more welfare orientated and work towards redistribution of the countries wealth to better include the poor people of the country. At least Pareto optimality should be achieved by organizations, which should also be the guiding principle to the earning of profit.

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Synopsis of PhD

Synopsis submitted to Bharathiar University for the award of the degree of Doctor of Philosophy in Management Studies by R.S. Tharini guided by Dr. N. Mohanraj

“Occupational Stress among IT Women Employees Working at Chennai”

INTRODUCTION

Modern life is full of demands, expectations, needs, wants, commitments, hassles, deadlines, frustration and cut through competition for survival. Every individual ought to face either any one or of one with another or with multiple at every instant of time. The degree of acceptance and accomplishment may vary. Most of the people live in a state of urgency or in anxiety or in haste. Nowadays it has become a way of life. Many of the people are not aware that their stress is being mounted without recognizing the signs and symptoms of stress. Unless these signs and symptoms of stress are taken care of, they will mount up to create harmful effects. Stress is a common human experience. It is very difficult to exactly define stress in empirical terms. But scientists say that stress is a force or event that impairs normal stability of functioning. Though stress is often present it usually goes unnoticed. Once it is mounted, being unnoticed, it will damage people's health and will detract from their quality of life. Stress is the reflective experience between the demands and resources available with the individual.

In addition to the demands and resources the attitude of the individual also plays a vital role. Though stress is a universal phenomenon, the experiences of an stressful individual are also universal. Being the sources and resources common, the intensity and reflection of each individual vary with one another. Even within the individual the intensity of the stress varies from instant to instant in response to his or her mental disposition. Further stress refers to a situation that causes discomfort and distress and may lead further to mental problems such as anxiety, depression....

An international survey with 13 countries from 11000 corporates has warned on appreciable level of increase at the stress level at the work places over the period of two years. 57% of the Indian workers experienced a slightly lower rise on the level of stress than their international counterparts; whereas in other 86% reported an increase in stress. The lowest increase in stress was felt in Netherlands i.e. 47%.

A study by Indian Council for Research on International Economic Relations found that though India boosted corporate profits, there was a rise in the level of increase in stress among work force. The survey further adds that 45% of the Indian workers are stressed by the increased focus on profitability during the period of reconstruction. In order to maintain excellent customer service, there was increasing workplace stress as reported by 33% of respondents and it was a major stress causing factor.

With this background and out of personal experience as a software engineer, the researcher intended to seek the following research questions

RESEARCH QUESTIONS:

1. What is stress? How does it manifest. What are the physiological, sociological, psychological neurological causes/determinants of stress?
2. What is occupational stress? What are the manifestations of the occupational stress?
3. How do women at software sector face occupational stress? How far the various dimensions of occupational stress affect women.
4. Do women differ in their level of occupational stress in terms of demographic and other variables on various dimensions of occupational stress?

5. Could we identify the predictive efficiency of various Dimensions on occupational stress?
6. What strategies could be designed to minimize the occupational stress of women working at software sector?

Following Research Objectives give direction for the research

RESEARCH OBJECTIVES

1. To find out the causes, factors, determinants and dimensions of occupational stress experienced by the women in the software sector.
2. To identify the level of occupational stress experienced by the women with respect to various dimensions of the occupational stress.
3. To explore how far the various dimension of occupational stress associate/interrelate to gether to determine the level of occupational stress of women.
4. To find out the significant association if any between Education Qualification, Years of Experience, Marital Status, Family Structure, Occupation Choice, Duty Hours, Transport Facility, Availability of Rest Room, Domestic Work Assistance and Occupation Stress of women.
5. To identify the predictive efficiency of Role Performance, Role Ambiguity, Role Conflict, At office, At Home, Role Commitment, Utilizing Potential, Self-concept, Intrinsic Impoverishment, Working Conditions, Financial aspects and Gender Sensitization on identifying the level of stress by using multivariate analysis.
6. To suggest recommendations for combating occupational stress among women software personal working in IT sector.

ASSUMPTIONS

It is assumed that the women in the software sector experience a lot of stress both at home and at office. It is also assumed that both technical and functional role, role conflicts, self-concepts play a vital role in determining and sustaining stress. In addition, various other demographic factors unique or in unison, manifest stress both at office and at home. It is also assumed that like a snow ball movement, many, factors/ dimension enhance the momentum and gravity of the stress levels. Once the levels of the stress are identified, concrete suggestive framework could be formulated to alleviate stress to a certain extent.

Following Research Hypotheses were formulated.

HYPOTHESIS

1. Women respondents working with IT sector experience higher level of occupational stress.
2. Women working with IT sector experience higher level of occupational stress in various dimensions like role performance, role ambiguity, role conflict, at office, at home, role commitment , utilizing potential, self-concept, intrinsic impoverishment, working conditions, financial aspects and gender sensitization.
3. Women respondents in IT sector face different levels of occupational stress on various dimension of occupational stress with respect to their educational qualification, years of experience, marital status, type of family structure, occupational choices, duty hours, transport facility, availability of rest rooms, domestic work assistance.
4. There exist significant correlation between various dimensions of occupational stress experienced by women working in IT sector.
5. There exist significant association between various dimensions of occupational stress experienced by women working in IT sector.
6. Women differ significantly in their level of occupational stress with respect to every dimension of occupational stress.
7. Different dimensions of occupational stress have different levels of predictive efficiency of ascertaining occupational stress among women working in IT sector.

METHOD OF RESEARCH

Research methods like case study, case method, causal comparative method, experimental method, explorative method, longitudinal method and various other research methods could be used in the research study. In this context the researcher intended to employ survey method. Occupational stress is the manifestation of both internal and external factors. Hence it was decided that survey method could be feasible to collect a cross sectional data from a relatively large number of cases at a particular time frame. Thus survey method properly fits into the total research scheme.

Though the survey method could face certain inaccuracies and due to sampling errors and sampling fluctuation it could be possible leaving a margin of statistical errors. Further there is scope for generalization of research findings. Since a variety of respondent could be contacted for data collection. It gives a possibility for applying parametric statistics meeting the normality of population. Hence survey method was chosen for their research.

SAMPLING PROCEDURES

The researcher identified 92 software companies at DLF Chennai and randomly selected 50% of software companies for data collection. Among the randomly selected 46 companies a sample of 5 respondents each who are working as software engineers were selected randomly and hence the sample size constituted was 230.

CONSTRUCTION AND VALIDATION OF RESEARCH TOOL

The investigator attempted to develop a tool to measure the occupational stress among women workers in the corporate sector. First it was decided to develop a questionnaire on eliciting information regards their role performance, role ambiguity, role conflict, reflection of role conflict at home, reflection of role conflict at office, role commitment, utilizing potential, self-concept, intrinsic impoverishment, working conditions, financial aspects and finally on gender sensitization.

Statements on these issues were collected from personal stress. Stress of colleagues, exhaustion on the part of women, Review of related studies and from other related research tools. Further the researcher perused on the concept of stress, source of stress, determinant of stress, factors construed with stress. In addition the investigator referred various primary and secondary sources on identification of occupational stress among women working in the corporate sector. In addition the investigator referred the psychological and neuro sociological and physical aspect of stress. In this basis various items for the tools were developed.

All these statements were grouped under the above cited headings for the purpose of classification.

When the investigator contacted the woman employees at the corporate sector they were not able to answer and explain in detailed writing. Due to practical situation the investigator thought of converting all the questions with statement form to be expressed with highest scale type. Hence the tool was developed as a 5 point highest scale to elicit the responses from women in the corporate sector.

The investigator personal experiences, colleague difficulties, Review of Related studies and other expert also revealed the need for association of the other variable like E.Q, years of experience, marital status, type of family structure, occupational choice, duty hours, transport facility, availability of rest room and domestic work assistance with occupational stress. The developed tool was scrutinized by guide and other experts in the area of occupational stress. Many statements were reworded, some statements were added and some statements were deleted.

Thus the content validity of the tool was established. The final version of the tool contained 59 statements. There were six statements under role performance, 4 statements under role ambiguity, four statement under role conflict, 7 common statement under each division at office and at home respectively, 3 statements under role commitment, 4 statements underutilizing potential, 7 statements under self-concepts, 4 under intrinsic impoverishment, 4 under working conditions, 2 under financial aspects, 7 under gender sensitization followed by open statement on the respondent recommendation of joining I.T. job asa career for women.Respondents were expected to put the appropriate level of scoresin the relevant boxeslike never, almostnever, sometimes, often and very often. Thereliability of

the tool was established by cranbach alphatechnique by the administration of the research tool. Thus the content validity and reliability of the tool was established.

DATA COLLECTION

The investigator first obtained permission from the H.R to contact the sample respondents. Most of them were working in different shifts. At first the investigated attempted to contact them through email. The respondents was not willing to share with their responses through email. They wanted the investigator to come in person. The investigator underwent lot of difficulties in collecting data. Since it was very difficult to collect data at the required places. Based on the convenience of the respondents the data were collected in person. After much persuasion with due stress the data were collected from the respondents. The investigator had ensured the confidentiality of the data from the respondents.

SCHEME OF DATA ANALYSIS

The data from the I.T. women respondents were collected and a scheme of data analysis was designed.

All data were classified into two parts. A) Demographic and other particulars of respondents. B) Respondents perception of the occupational stress on various dimensions. All data under column A were tabulated as frequencies as per nominal scale. They were expressed in absolute numbers and in percentages. Data with respect to (B) were measured under 5 point scales, Mean and S.D. for item wise, category wise were calculated. After the tabulation of data, three kinds of analysis were done.

DESCRIPTIVE ANALYSIS

For the entire sample,

1. Mean and S.D for each item.
2. Mean and S.D for each category of demographic variable
3. Mean and S.D for different dimension of occupation stress were calculated.

RELATIONAL ANALYSIS

Chi-square analysis was attempted to identify the significant association between occupational stress and educational qualification, years of experience, marital status, type of family structure, occupational choice, duty hours, transport facility, availability of rest room and domestic work assistance taken individually. Further Pearson product moment correlation was found out between the various dimensions of occupational stress.

MULTIVARIATE ANALYSIS:

Multivariate analysis like multiple regression analyses were done to identify the predictive power of the various dimension of the occupational stress.

FINDINGS

1. Women working in IT sector experience occupational stress at higher level.
2. Women experience higher level of occupational stress due to office demands, role performance, role ambiguity, role conflict, problem at office, and at home, role commitment , utilizing potential, self-concept, intrinsic impoverishment, working conditions, financial aspects and gender sensitization.
3. Women respondents face different levels of occupational stress on various dimension of occupational stress with respect to their educational qualification, years of experience, marital status, type of family structure, occupational choices, duty hours, transport facility, availability of rest rooms, domestic work assistance.
4. There exists significant correlation among the various dimension of occupational stress except gender sensitization and with some other dimensions.

5. There is significant correlation between gender sensitization of women with their problems associated to “at office” , “role commitment”, ”working condition” and “intrinsic impoverishment” dimension.
6. There is significant association between different dimensions of occupational stress experienced by women.
7. Stepwise multiple regression analysis reveals the predictive efficiency of the following dimension in the order of their standardized beta coefficient values on identifying the level of occupational stress, At home (.184), self-concept (.181), Role performance (.136) , utilizing potential (.106), Role ambiguity (.099), Working condition (.096), Role conflict (.091), Intrinsic impoverishment (.083), role commitment (.078) and financial aspects (.061).

CONCLUSION

Research findings reveal interesting scenario on the current status of occupational stress among the women employees. The descriptive analysis reveals that in almost all dimensions of occupational stress, the respondents’ exhibit a high level of stress i.e. they often feel stressed. Though they all exhibit a high level of stress in all dimension the level of stress varies upon other demographic particulars and on other conditions. The relational analysis indicates almost all dimensions are significantly inter correlated except on gender sensitization. Being the women employees they could have given more importance to other dimensions than other dimensions. Multivariate analysis i.e. multiple regression analysis reveals the predictive power of the dimensions on predicting occupational stress. Among all dimensions, the dimension “At home” has the highest beta coefficient followed by “self-concept” followed by other dimension ‘At office’, Gender sensitization and role performance. The holistic picture reveals their lack of concentration at home followed by poor health and poor condition cause stress at both places. Further they are undermined since their academic expertise is not considered. In addition, they are not provided with flexibility, in their office work. Again it is compounded by the excessive workload with insufficient staff. These issues make them with no satisfaction leads to loss of peace and health both at home and office.

RECOMMENDATION

In IT sector occupational roles are well utilized in proportion with generation of Revenue. In the IT sector revenues are considered quarterly basis and their ratings are also done accordingly. But mental health of the employees are to be nurtured for their sustainability. The perks are considered only in terms of material benefits not by their psychological “well-being” concept. After some years of work, most of the staff loose health peace and becomes burn out. Hence this is the urgent need of the hour for the corporate bodies to consider ‘psychological well-being’ rather than economic well-being.

CHAPTER SCHEME

This thesis has been designed with the following chapters.

- Chapter I - Introduction
- Chapter II - Review of Literature
- Chapter III- Research Methodology
- Chapter IV - Data Analysis
- Chapter V - Findings, Suggestions and Conclusion.

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Statistical Analysis

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- ANOVA
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- Repeated Measures ANOVA
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- Power Analysis
- Linear Regression
- Logistic Regression
- Correlation
- Mann-Whitney test
- Kruskal-Wallis test
- Wilcoxon Signed-Ranks test
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- Structural Equation Modeling (SEM)

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