

# DOWNLOAD PDF APPROACH TO THE RESEARCH QUESTIONS POSED IN THE CONCEPTUAL PORTION OF THE

## Chapter 1 : Basic Concepts of Research Methodology | Saeed Anwar - [blog.quintoapp.com](http://blog.quintoapp.com)

*A research problem defines clinical research and a hypothesis defines basic research. 3. A hypothesis attempts to answer the question posed by the research problem.*

Overview[ edit ] Specifying the research question is one of the first methodological steps the investigator has to take when undertaking research. The research question must be accurately and clearly defined. Choosing a research question is the central element of both quantitative and qualitative research and in some cases it may precede construction of the conceptual framework of study. In all cases, it makes the theoretical assumptions in the framework more explicit, most of all it indicates what the researcher wants to know most and first. The student or researcher then carries out the research necessary to answer the research question, whether this involves reading secondary sources over a few days for an undergraduate term paper or carrying out primary research over years for a major project. When the research is complete and the researcher knows the probable answer to the research question, writing up can begin as distinct from writing notes, which is a process that goes on through a research project. In term papers, the answer to the question is normally given in summary in the introduction in the form of a thesis statement. Types and purpose[ edit ] The research question serves two purposes: It determines where and what kind of research the writer will be looking for. It identifies the specific objectives the study or paper will address. Therefore, the writer must first identify the type of study qualitative, quantitative, or mixed before the research question is developed. Therefore, when crafting a research question for a qualitative study, the writer will need to ask a why or how question about the topic. How did the company successfully market its new product? The sources needed for qualitative research typically include print and internet texts written words , audio and visual media. Therefore, when crafting a research question for a quantitative study, the writer will need to ask a where, or when question about the topic. Where should the company market its new product? Alternatively, a script for a quantitative null hypothesis might be as follows: Quantitative studies also fall into two categories: A correlational study is non-experimental, requiring the writer to research relationships without manipulating or randomly selecting the subjects of the research. The research question for a correlational study may look like this: What is the relationship between long distance commuters and eating disorders? An experimental study is experimental in that it requires the writer to manipulate and randomly select the subjects of the research. The research question for an experimental study may look like this: Does the consumption of fast food lead to eating disorders? Therefore, the writer will need to craft a research question for each study required for the assignment. A typical study may be expected to have between 1 and 6 research questions. Problematique[ edit ] "Problematique" is a term that functions analogously to the research problem or question used typically when addressing global systemic problems. These situations receive different designations from other authors. West Churchman , Rittel and Weber, and Argyris [3] call these situations wicked problems. Russell Ackoff simply called them "messes."

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## Chapter 2 : Research question - Wikipedia

*Particular research designs and methods are suited for specific kinds of investigations and questions, but can rarely illuminate all the questions and issues in a line of inquiry. Therefore, very different methodological approaches must often be used in various parts of a series of related studies.*

However, going into greater detail concerning these issues would be beyond the scope of this paper. However, depending on the depth and range of the extant literature, the initial focus of the case study may be quite focused or broad and open-ended. Therefore and because the case study strategy is ideally suited to exploration of issues in depth and following leads into new areas of new constructions of theory, the theoretical framework at the beginning may not be the same one that survives to the end HARTLEY, , p. Besides, theory development does not only facilitate the data collection phase of the ensuing case study, the appropriately developed theory also is the level at which the generalization of the case study results will occur. This role of theory has been characterized by YIN a as "analytic generalization" and has been contrasted with a different way of generalizing results, known as "statistical generalization" pp. The four conditions or tests are cf. Construct validity; external validity; reliability. However, these issues will be addressed again in Section 4. Use of multiple sources of evidence; creation of a case study database; maintaining a chain of evidence. This will help to refine the data collection plans with respect to both the content of the data and the procedures to be followed. As another fundamental characteristics he puts forth that "you do not start out with a priori theoretical notions" ibid. Besides, a careful description of the data and the development of categories in which to place behaviors or process have proven to be important steps in the process of analyzing the data. The data may then be organized around certain topics, key themes or central questions, and finally the data need to be examined to see how far they fit or fail to fit the expected categories ibid. According to YIN a, pp. Relying on theoretical propositions; thinking about rival explanations; developing a case description. This step is called reporting, with numerous forms of reports being available, and the typical case study report being a lengthy narrative YIN, , p. Content Analysis This section provides a brief introduction to qualitative content analysis as a text analysis method for qualitative social research. At the end of this section, quality criteria and validation issues relevant for qualitative content analysis will be highlighted see Section 4. However, there does not seem to exist a homogenous understanding of this method at present, but originally the term "referred only to those methods that concentrate on directly and clearly quantifiable aspects of text content, and as a rule on absolute and relative frequencies of words per text or surface unit" TITSCHER et al. Later, the concept was extended to include all those procedures which operate with categories, but which seek at least to quantify these categories by means of a frequency survey of classifications ibid. It is "essentially a coding operation," with coding being "the process of transforming raw data into a standardized form" BABBIE, , p. They contend that "coding forces the researcher to make judgments about the meanings of contiguous blocks" and that coding is "the heart and soul" of whole text analysis ibid. According to them, classical content analysis "comprises techniques for reducing texts to a unit-by-variable matrix and analyzing that matrix quantitatively to test hypotheses" and the researcher can produce a matrix by applying a set of codes to a set of qualitative data e. More will be said on the topic of coding in Sections 4. In fact, the theoretical basis of the first moves towards analyses of contents was Harold D. But even before that, different approaches to analysis and comparison of texts in hermeneutic contexts e. Bible interpretations , early newspaper analysis, graphological procedures and even Freudian dream analysis can be seen as early precursors of content analysis MAYRING, a, [6]. According to GILLHAM , the "essence of content analysis is identifying substantive statementsâ€”statements that really say something" p. The simplest type of evaluation consequently consists of counting the numbers of occurrences per category assuming there is a relationship between frequency of content and meaning. Besides, different indices which correlate two separate measurements and contingencies, more complex procedures can also be used for analysis TITSCHER et al. He contended that the quantitative

orientation neglected the particular quality of texts and that it was important to reconstruct contexts. MAYRING a, [6] even speaks of "a superficial analysis without respecting latent contents and contexts, working with simplifying and distorting quantification. The context of text components; latent structures of sense; distinctive individual cases; things that do not appear in the text. In fact, qualitative content analysis claims to synthesize two contradictory methodological principles: Being a little bit more specific he defines qualitative content analysis in the following way: There is an emphasis on allowing categories to emerge out of data and on recognizing the significance for understanding the meaning of the context in which an item being analyzed and the categories derived from it appeared" BRYMAN, , p. Thus, a clear and concise definition of qualitative research can hardly be found. Therefore, qualitative methods are often used when the field of research is yet not well understood or unknown and aim at generating new hypotheses and theories, while quantitative methods are frequently used for testing hypotheses and evaluating theories cf. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" p. Its development Section 4. However, not only the manifest content of the material is analyzed, but also so-called latent content as well as formal aspects of the material MAYRING, b, pp. Central to it is a category system which is developed right on the material employing a theory-guided procedure. Categories are understood as the more or less operational definitions of variables. Fitting the material into a model of communication: It should be determined on what part of the communication inferences shall be made, to aspects of the communicator his experiences, opinions, feelings , to the situation of the text production, to the socio-cultural background, to the text itself or to the effect of the message. The material is to be analyzed step by step, following rules of procedure, devising the material into content analytical units. Categories in the center of analysis: The aspects of text interpretation, following the research questions, are put into categories, which were carefully founded and revised within the process of analysis feedback loops. Subject-reference instead of technique: This implies that the procedures of content analysis cannot be fixed but have to be adapted depending on the subject and its context. Verification of the specific instruments through pilot studies: Due to the subject-reference, fully standardized methods are abstained from. That is why the procedures need to be tested in a pilot study. Inter-subjective verifiability is a case in point here. Technical fuzziness of qualitatively oriented research needs to be balanced by theoretical stringency. This means that the state-of-the-field of the respective research subject as well as subjects closely related are required to be taken into account and integrated into the analysis. Inclusion of quantitative steps of analysis: Quantitative analyses are especially important when trying to generalize results. As a matter of fact, this notion of triangulation to argue in favor of an integration of qualitative and quantitative methods is not limited to content analysis but has been raised by many researchers cf. Quality criteria of reliability and validity see also Section 4. The procedure has the pretension to be inter-subjectively comprehensible, to compare the results with other studies in the sense of triangulation and to carry out checks for reliability. As a matter of fact, it is this kind of systematics what distinguishes content analysis from more interpretive, hermeneutic processing of text material MAYRING, , p. Consequently, MAYRING has developed a sequential model of qualitative content analysis and puts forward three distinct analytical procedures which may be carried out either independently or in combination, depending on the particular research question MAYRING, , p. For this the text is paraphrased, generalized or abstracted and reduced. As a first step a lexico-grammatical definition is attempted, then the material for explication is determined, and this is followed by a narrow context analysis, and a broad context analysis. Finally an "explicatory paraphrase" is made of the particular portion of text and the explication is examined with reference to the total context. Here the text can be structured according to content, form and scaling. The first stage is the determination of the units of analysis, after which the dimensions of the structuring are

established on some theoretical basis and the features of the system of categories are fixed. Subsequently definitions are formulated and key examples, with rules for coding in separate categories, are agreed upon. In the course of a first appraisal of the material the data locations are marked, and in a second scrutiny these are processed and extracted. If necessary the system of categories is re-examined and revised, which necessitates a reappraisal of the material. As a final stage the results are processed. However, the basic difference between classical content analysis and structuring within qualitative content analysis is the development and use of the coding agenda 7. Thus, the material is reduced and a new basis of information separate from the original text comes into existence *ibid.* Therefore they argue in favor of a theory-based category system, which is more open and can be changed during extraction when relevant information turns up but does not fit into the category system. Both the dimensions of existing categories can be modified and new categories can be designed. It is actually a package of techniques from which the analyst can choose and then adapts to his research question 8. Basic proceeding of qualitative content analysis Source: Determination of the material; analysis of the situation in which the text originated; the formal characterization of the material; determination of the direction of the analysis; theoretically informed differentiation of questions to be answered; selection of the analytical techniques summary, explication, structuring ; definition of the unit of analysis; analysis of the material summary, explication, structuring ; interpretation [59] Among the procedures of qualitative content analysis MAYRING a, [8] hallmarks the following two approaches as central to developing a category system and finding the appropriate text components as a result: But within the framework of qualitative approaches it is essential to develop the aspects of interpretation“the categories“as closely as possible to the material, and to formulate them in terms of the material. The steps of inductive category development are displayed in Figure 2. MAYRING, a, [11] [61] The main idea of the procedure is to formulate a criterion of definition, derived from the theoretical background and the research question, which determines the aspects of the textual material taken into account. Following this criterion the material is worked through and categories are deduced tentatively and step by step. Within a feedback loop the categories are revised, eventually reduced to main categories and checked in respect to their reliability MAYRING, a, [12]. Or, put the other way round: The qualitative step of analysis consists of a methodologically controlled assignment of the category to a passage of text MAYRING, a, [13]. Figure 3 shows the steps of deductive category application. MAYRING, a, [14] [64] According to MAYRING a, [15]; , [15] the main idea here is to give explicit definitions, examples and coding rules for each deductive category, determining exactly under what circumstances a text passage can be coded with a category. Finally, those category definitions are put together within a coding agenda. It is widely accepted that measurement or the methods of measurement should be as objective, reliable and valid as possible *cf.* In fact, the research strategy that is regularly pursued in content analysis is governed by these traditional criteria of validity and reliability, where the latter is a precondition for the former but not vice versa TITSCHER et al. Since arguments concerning the content are judged to be more important than methodical issues in qualitative analysis, validity takes priority over reliability MAYRING, , p. Two specific problems of content analysis that are often discussed in this context are problems of inference and problems of reliability TITSCHER et al. Problems of inference relate to the possibility of drawing conclusions, on the one hand, about the whole text on the basis of the text sample and, on the other hand, about the underlying theoretical constructs such as motives, attitudes, norms, etc. As a result, inference in content analysis confines itself only to specific features of external and internal validity.

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## Chapter 3 : Formulating a researchable question: A critical step for facilitating good clinical research

*Step-by-step guide to critiquing research. Part 1: quantitative research questions are posed to stimulate the reviewer to consider research question, the.*

Research methodology related questions Attribution of intervention effects Researchers sometimes attribute positive effects to the intervention or treatment, but negative or non-effects to factors. To what degree is this happening in your area of interest? Discuss using two examples of intervention research. Also, do you see this as a particularly critical problem in his area of interest? It is natural for researchers to want to see positive effects. But, is there something inherent about the topic, methods, politics, or something else about this research that make it especially prone to this problem? Specifically, such research requires: Which principles seem to you particularly important or compelling and why? Which principles seem problematic or challenging and why? Supporting your critique with relevant literature is desirable though not essential. However, be sure to at least illustrate your point with examples, real or hypothetical. The role of theoretical perspectives Focusing on a research topic of interest to you, explain why there can be many different and sometimes even contradictory theoretical perspectives. Validity Validity is an important consideration in all research. Methodologists have discussed many categorizations and typologies of validity that include internal, external, content, criterion, construct, interpretive, theoretical, evaluative, and so on. In this question, you will show your understanding of validity by critiquing two studies in terms of their validity. Pick two empirical studies in your area of interest. These studies should focus on similar, not necessarily identical, issues. They should not be by the same author or related authors. These studies should not use the same methods - e. Give a formal APA citation of each article. Use no more than one page to describe each study. Critique each study only in terms of its validity. For each critique point: Define what you mean by validity for that particular point. Provide a citation for each definition of validity you refer to. Be clear about how your critique point is related to validity. A critique point can be positive or negative. For a positive critique point explain convincingly why this particular aspect of the study is strong in terms of its validity. Explain how it might easily have been weaker. For each negative point, be clear about why it is weak in terms of its validity. Suggest specific ways the author could address your concern. Write no more than four critique points for each study. This section should be six to eight pages. Researchers who use qualitative methods sometimes argue that quantitative studies are rigid, lack authenticity, and overlook rich variation. To address these problems, many conclude that a mixed methods approach is best, but is it really that simple? Can the core criticisms be avoided simply by using both qualitative and quantitative approaches? Why or why not? What are some of the challenges that might come up for a researcher who wants to combine methods? Wherever possible, illustrate your main points with examples of successful or unsuccessful mixed methods studies from the existing literature. Remember to demonstrate your knowledge of the literature through thoughtful connections to scholarship. Also, use headings and sub-headings to make it clear how your response is addressing each part of the question. How research informs theory When doctoral students learn about empirical research, they are told that a study should emerge from a basis constituted of relevant studies and theory. Furthermore, the results, discussion, and implications of a study should connect back into the basis from which it emerged. The process of research informing theory “theory defined broadly as the current understanding of a phenomenon” is important, yet often not done well. In your response, select two or three empirical studies in your area of interest. Studying the impact of student and school factors on learning Learning in school is impacted by many factors, both within and outside the student. What are the crucial factors related to student thinking i. What are the crucial factors related to context i. Most importantly, how can we conceptualize the interactions among these factors in a way that makes studying school learning tractable? In your response, identify three student factors and three school factors. Then sketch out a conceptual framework using ideas in the research literature that encompasses interactions within this system. Quantitative and qualitative methods Psychologists obtain

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information about student learning using various methodologies that can be loosely grouped into qualitative versus quantitative approaches. In your response, first define these two approaches and give examples of each.

i. What methods are typically considered quantitative? Many researchers work from only one perspective or the other—why do you think this is the case? Where do you see yourself falling on this continuum and why? How does Sample Size Matter? In your inquiry courses, you have heard that good research can have a sample size of 1, 10, or participants. Suppose you had the participants, qualitative and quantitative skills, personnel, time, and any other resources necessary to conduct high quality research with any of these three sample sizes. As you look ahead to your dissertation, which would you choose for your particular line of inquiry? In your response, share your thought processes in a way that educates readers who are considering the issue of sample size. Is it just a matter of scale—that is, doing the same thing, but with more people? Are there other considerations? These examples can be actual examples taken from research or your own experience, or they may be hypothetical.

The work of a conceptual framework Consider a learning phenomenon of interest to you. Choose two different conceptual frameworks that contemporary scholars might use to frame research about this phenomenon. Keep in mind that a conceptual framework is not necessarily a broad psychological theory such as constructivism or behaviorism. Rather, a conceptual framework is a way of seeing the parts and their relationships in the phenomenon. Among other things, your response should address: What exactly are the two conceptual frameworks? Describe each, taking care to be explicit about how each is, indeed, a conceptual framework. How does each direct attention to some things and not others? How does each framework support certain kinds of inquiry and not others? This part of the question should take approximately 6 pages. Consider your own research interest, perhaps your practicum or dissertation. Argue why this conceptual framework is a better choice than other possible frameworks. The key here is to make this a tight, logical, evidence-supported argument. It is not sufficient to describe the framework and its purported virtues, and to assume that the reader will agree with you. This part of the question should take approximately 4 pages

The nature of educational research The field of educational research is roiled with controversy of the most fundamental sort. Most of these controversies concern the value and effectiveness of educational research. Some of the issues include: Elaborate the details of the controversy, the different perspectives on the issue, and possible resolutions. Support your discussion by drawing on the literature on methodology and citing specific examples from research studies. Describe your specific area of planned research, and provide details about how the methodological and field-direction issues you just discussed will impact what you do. Again, be very specific with respect to possible research projects and how these concerns would impact how you would proceed.

Standards of quality for research methodology All research should be held to standards of quality, but these standards differ somewhat depending upon the research methodology used. Select three different research methods used in your area of interest. Point to particular studies that have used these methods. For each, begin by explain what the method is and the kinds of questions it is well suited to answering. Describe some characteristics of quality research for each method. Conclude by discussing similarities and differences among these characteristics of quality research.

Controversies about the value and effectiveness of educational research The field of educational research is roiled with controversy of the most fundamental sort. Should educational research be a science, perhaps on the model of medical research? Why is educational research so often held in low regard? Which methods, quantitative or qualitative, are better for educational questions? Why has educational research had such limited or debatable impact on improving educational practice? In your response, clearly address the following. Describe what you feel to be the three most important points of current methodological controversy in your specific area of research. Follow your analysis with a discussion of how these debates about methodology and the direction of the field impact your thinking about how to proceed in your particular line of research.

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### Chapter 4 : CiteSeerX " CHAPTER 2 Elements of the Conceptual Framework and Sample Survey Design

*A literature review surveys books, scholarly articles, and any other sources relevant to a particular issue, area of research, or theory, and by so doing, provides a description, summary, and critical evaluation of these works in relation to the research problem being investigated. Literature.*

Once can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. It is actually a voyage of discovery. A broad definition of research is given by Martyn Shuttleworth "In the broadest sense of the word, the definition of research includes any gathering of data, information and facts for the advancement of knowledge. It consists of three steps: Pose a question, collect data to answer the question, and present an answer to the question. Objectives of Research The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Though each research study has its own specific purpose, we may think of research objectives as falling into a number of following broad groupings: To gain familiarity with a phenomenon or to achieve new insights into it studies with this object in view are termed as exploratory or formulative research studies ; To portray accurately the characteristics of a particular individual, situation or a group studies with this object in view are known as descriptive research studies ; Md. Saeed Anwar, Khulna University, Khulna, Bangladesh Basic Concepts of Research Methodology To determine the frequency with which something occurs or with which it is associated with something else studies with this object in view are known as diagnostic research studies ; To test a hypothesis of a causal relationship between variables such studies are known as hypothesis-testing research studies. Characteristics of Good Research Good research is systematic: Good research is logical Good research is empirical Good research is replicable Social Research Social research refers to research conducted by social scientists, which follows by the systematic plan. Quantitative designs approach social phenomena through quantifiable evidence, and often rely on statistical analysis of many cases or across intentionally designed treatments in an experiment to create valid and reliable general claims. Qualitative designs emphasize understanding of social phenomena through direct observation, communication with participants, or analysis of texts, and may stress contextual and subjective accuracy over generality. Social research is the scientific study of society. The scope of social research can be small or large, ranging from the self or a single individual to spanning an entire race or country. Social research determines the relationship between one or more variables. Young which is as follows: Objectives of Social Research Social Research is a scientific approach of adding to the knowledge about society and social phenomena. Knowledge to be meaningful should have a definite purpose and direction. The growth of knowledge is closely linked to the methods and approaches used in research investigation. Hence the social science research must be guided by certain laid down objectives enumerated below: Social science helps us to obtain and add to the knowledge of social phenomena. This is one of the most important objectives of social research. Scientific Study of Social Life: Social research is an attempt to acquire knowledge about the social phenomena. Man being the part of a society, social research studies human being as an individual, human behavior and collects data about various aspects of the social life of man and formulates law in this regards. The ultimate objective of the social science study is often and always to enhance the welfare of humanity. No scientific research makes only for the sake of study. The welfare of humanity is the most common objective in social science research. Young, social research aims to clarify facts. The classification of facts plays important role in any scientific research. Social control and Prediction: In social research we generally study of the social phenomena, events and the factors that govern and guide them. Subject which is overdone should not be normally chosen, for it will be a difficult task to throw any new light in such a case; 2. Controversial subject should not become the choice of an average researcher; 3. Too narrow or too vague problems should be avoided; 4. The research focus i. Statement of the Problem This statement signifies the need for defining a

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research problem. The problem to be investigated must be defined unambiguously for that will help to discriminate relevant data from the irrelevant ones. A proper definition of research problem will enable the researcher to be on the track whereas an ill-defined problem may create hurdles. Defining a research problem properly and clearly is a crucial part of a research study and must in no case be accomplished hurriedly. However, in practice this a frequently overlooked which causes a lot of problems later on. Hence, the research problem should be defined in a systematic manner, giving due weightage to all relating points. Saeed Anwar, Khulna University, Khulna, Bangladesh Basic Concepts of Research Methodology technique for the purpose involves the undertaking of the following steps generally one after the other: Statement of the problem in a general way; Understanding the nature of the problem; Surveying the available literature Developing the ideas through discussions; and Rephrasing the research problem into a working proposition Literature Review A literature review is a text written by someone to consider the critical points of current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. It provides an overview and a critical evaluation of a body of literature relating to a research topic or a research problem. It analyzes a body of literature in order to classify it by themes or categories, rather than simply discussing individual works one after another. Characteristics of Good Literature Review It is organized around issues, themes, factors, or variables that are related directly to the thesis or research question. It indicates the theoretical framework that the researcher is working with. It places the formation of research questions in their historical and disciplinary context. It identifies the most important authors engaged in similar work. It offers an explanation of how the researcher can contribute toward the existing body of scholarship by pursuing their own thesis or research question Objective of the Study Md. These objectives should be closely related to the research problem. The general objective of a study states what researchers expect to achieve by the study in general terms. It is possible and advisable to break down a general objective into smaller, logically connected parts. These are normally referred to as specific objectives. Specific objectives should systematically address the various research questions. They should specify what you will do in your study, where and for what purpose. Hypothesis of the Study Hypothesis is a tentative conjecture explaining an observation, phenomenon, or scientific problem that can be tested by further observation, investigation, or experimentation. Hypotheses are testable explanations of a problem, phenomenon, or observation. Both quantitative and qualitative research involve formulating a hypothesis to address the research problem. Hypotheses that suggest a causal relationship involve at least one independent variable and at least one dependent variable; in other words, one variable which is presumed to affect the other. Type of Hypothesis 1. The null hypothesis states that there is no association between the predictor and outcome variables in the population. The null hypothesis is the formal basis for testing statistical significance. The null hypothesis states that there is association between the predictor and outcome variables in the population. The alternative hypothesis cannot be tested directly; it is accepted by exclusion if the test of statistical significance rejects the null hypothesis. One and Two-tailed Hypotheses A one-tailed or one-sided hypothesis specifies the direction of the association between the predictor and outcome variables. A two-tailed hypothesis states only that an association exists; it does not specify the direction. Saeed Anwar, Khulna University, Khulna, Bangladesh Basic Concepts of Research Methodology Characteristics of Hypothesis A hypothesis should state the expected pattern, relationship or difference between two or more variables; A hypothesis should be testable; A hypothesis should offer a tentative explanation based on theories or previous research; A hypothesis should be concise and lucid. Variables of the Study Variable is observation that can take different values. It is a measurable characteristic that varies. It may change from group to group, person to person, or even within one person over time. A variable is an object, event, idea, feeling, time period, or any other type of category you are trying to measure. There are two types of variables-independent and dependent. An independent variable is exactly what it sounds like. Just like an independent variable, a dependent variable is exactly what it sounds like. It is something that depends on other factors. Conceptual Framework Conceptual Framework is a written or visual presentation that explains either graphically, or in narrative form, the main things to be studied “the key

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factors, concepts or variables and the presumed relationship among them. The main objective in forming a conceptual framework is to help the researcher give direction to the research. The conceptual framework identifies the research tools and methods that may be used to carry out the research effectively. Saeed Anwar, Khulna University, Khulna, Bangladesh Basic Concepts of Research Methodology Theoretical Framework The objective of forming a theoretical framework is to define a broad framework within which a researcher may work. The theoretical framework enhances overall clarity of the research. It also helps the researcher get through the research faster as he has to look only for information within the theoretical framework, and not follow up any other information he finds on the topic. This is founded on the theoretical framework, which lies on a much broader scale of resolution. The theoretical framework dwells on time tested theories that embody the findings of numerous investigations on how phenomena occur. The theoretical framework provides a general representation of relationships between things in a given phenomenon. The conceptual framework, on the other hand, embodies the specific direction by which the research will have to be undertaken. Statistically speaking, the conceptual framework describes the relationship between specific variables identified in the study. It also outlines the input, process and output of the whole investigation. The conceptual framework is also called the research paradigm. The theoretical framework looks at time-tested theories in relation to any research topic. The theoretical framework looks at the general relationship of things in a phenomenon, while conceptual framework puts forth the methods to study the relationship between the specific variables identified in the research topic. Conceptual framework gives a direction to the research that is missing in theoretical framework by helping decide on tools and methods that may be employed in the research. It includes; research design, Study population, sample and sample size, methods of data collection, methods of data analysis and anticipation of the study. Research methodology refers to a philosophy of research process. It includes the assumptions and values that serve a rationale for research and the standards or criteria the researcher uses for collecting and interpreting data and reaching at conclusions Martin and Amin,

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## Chapter 5 : Research methodology related questions - EPET Comps Resources

*approach, Varela and his collaborators (Lutz et al., ) trained participants to report on their experience in the immediate seconds just prior to the delivery of a stim-.*

**Importance of a Good Discussion** The discussion section is often considered the most important part of your research paper because this is where you: If appropriate, the discussion section is also where you state how the findings from your study revealed new gaps in the literature that had not been previously exposed or adequately described, and Engage the reader in thinking critically about issues based upon an evidence-based interpretation of findings; it is not governed strictly by objective reporting of information. **San Francisco Edit, Structure and Writing Style** These are the general rules you should adopt when composing your discussion of the results: Do not be verbose or repetitive Be concise and make your points clearly Avoid using jargon Follow a logical stream of thought; in general, interpret and discuss the significance of your findings in the same sequence you described them in your results section [a notable exception is to begin by highlighting an unexpected result or finding] Use the present verb tense, especially for established facts; however, refer to specific works or prior studies in the past tense If needed, use subheadings to help organize your discussion or to categorize your interpretations into themes **II. The Content** The content of the discussion section of your paper most often includes: If appropriate, note any unusual or unanticipated patterns or trends that emerged from your results and explain their meaning in relation to the research problem. **References to previous research:** This can include re-visiting key sources already cited in your literature review section, or, save them to cite later in the discussion section if they are more important to compare with your results instead of being a part of the general literature review of research used to provide context and background information. Note that you can make this decision to highlight specific studies after you have begun writing the discussion section. For example, describing lessons learned, proposing recommendations that can help improve a situation, or highlighting best practices. This can be framed as new research questions that emerged as a result of your analysis. **Organization and Structure** Keep the following sequential points in mind as you organize and write the discussion section of your paper: Think of your discussion as an inverted pyramid. Organize the discussion from the general to the specific, linking your findings to the literature, then to theory, then to practice [if appropriate]. Use the same key terms, narrative style, and verb tense [present] that you used when when describing the research problem in your introduction. Begin by briefly re-stating the research problem you were investigating and answer all of the research questions underpinning the problem that you posed in the introduction. Describe the patterns, principles, and relationships shown by each major findings and place them in proper perspective. The sequence of this information is important; first state the answer, then the relevant results, then cite the work of others. If appropriate, refer the reader to a figure or table to help enhance the interpretation of the data [either within the text or as an appendix]. This part of the discussion should begin with a description of any unanticipated findings, followed by a brief interpretation as to why you believe it appeared and, if necessary, its possible significance in relation to the overall study. If more than one unexpected finding emerged during the study, describe each of them in the order they appeared as you gathered or analyzed the data. As noted, the exception to discussing findings in the same order you described them in the results section would be to begin by highlighting the implications of a particularly unexpected or significant finding that emerged from the study, followed by a discussion of the remaining findings. Before concluding the discussion, identify potential limitations and weaknesses if you do not plan to do so in the conclusion of the paper. Comment on their relative importance in relation to your overall interpretation of the results and, if necessary, note how they may affect the validity of your findings. Avoid using an apologetic tone; however, be honest and self-critical [e. The discussion section should end with a concise summary of the principal implications of the findings regardless of significance. Give a brief explanation about why you believe the findings and conclusions of your study are important and how they support broader knowledge or

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understanding of the research problem. This can be followed by any recommendations for further research. However, do not offer recommendations which could have been easily addressed within the study. This would demonstrate to the reader that you have inadequately examined and interpreted the data. Overall Objectives The objectives of your discussion section should include the following: You should write a direct, declarative, and succinct proclamation of the study results, usually in one paragraph. Explain the Meaning of the Findings and Why They are Important Consider the likelihood that no one has thought as long and hard about your study as you have. Systematically explain the underlying meaning of your findings and state why you believe they are significant. If applicable, begin this part of the section by repeating what you consider to be your most significant or unanticipated finding first, then systematically review each finding. Otherwise, follow the general order you reported the findings in the results section. Relate the Findings to Similar Studies No study in the social sciences is so novel or possesses such a restricted focus that it has absolutely no relation to previously published research. The discussion section should relate your results to those found in other studies, particularly if questions raised from prior studies served as the motivation for your research. This is important because comparing and contrasting the findings of other studies helps to support the overall importance of your results and it highlights how and in what ways your study differs from other research about the topic. Note that any significant or unanticipated finding is often because there was no prior research to indicate the finding could occur. If there is prior research to indicate this, you need to explain why it was significant or unanticipated. Consider Alternative Explanations of the Findings It is important to remember that the purpose of research in the social sciences is to discover and not to prove. When writing the discussion section, you should carefully consider all possible explanations for the study results, rather than just those that fit your hypothesis or prior assumptions and biases. This is especially important when describing the discovery of significant or unanticipated findings. Note any unanswered questions or issues your study did not address and describe the generalizability of your results to other situations. If a limitation is applicable to the method chosen to gather information, then describe in detail the problems you encountered and why. Make Suggestions for Further Research You may choose to conclude the discussion section by making suggestions for further research [this can be done in the overall conclusion of your paper]. Although your study may offer important insights about the research problem, this is where you can address other questions related to the problem that remain unanswered or highlight previously hidden questions that were revealed as a result of conducting your research. You should frame your suggestions by linking the need for further research to the limitations of your study [e. Besides the literature review section, the preponderance of references to sources is usually found in the discussion section. A few historical references may be helpful for perspective, but most of the references should be relatively recent and included to aid in the interpretation of your results or used to link to similar studies. Problems to Avoid Do not waste time restating your results. Should you need to remind the reader of a finding to be discussed, use "bridge sentences" that relate the result to the interpretation. An example would be: Recommendations for further research can be included in either the discussion or conclusion of your paper, but do not repeat your recommendations in the both sections. Think about the overall narrative flow of your paper to determine where best to locate this information. However, if your findings raise a lot of new questions or issues, consider including suggestions for further research in the discussion section. Do not introduce new results in the discussion section. Be wary of mistaking the reiteration of a specific finding for an interpretation because it may confuse the reader. The description of findings [results] and the interpretation of their significance [discussion] should be distinct sections of your paper. If you choose to combine the results section and the discussion section into a single narrative, you must be clear in how you report the information discovered and your own interpretation of each finding. Use of the first person is generally acceptable. Using first person can help emphasize a point or illustrate a contrasting finding. However, keep in mind that too much use of the first person can actually distract the reader from the main points [i. Department of English Writing Guide. George Mason University; Discussion. Bates College; Hess, Dean R. University College Writing Centre. University of Toronto; Sauaia, A. Writing in Psychology course

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syllabus. University of Florida; Yellin, Linda L. Allyn and Bacon, Interpretation is a subjective exercise. As such, you should always approach the selection and interpretation of your findings introspectively and to think critically about the possibility of judgmental biases unintentionally entering into discussions about the significance of your work. With this in mind, be careful that you do not read more into the findings than can be supported by the evidence you have gathered. Remember that the data are the data: One of the most common mistakes that you can make when discussing the results of your study is to present a superficial interpretation of the findings that more or less re-states the results section of your paper. Obviously, you must refer to your results when discussing them, but focus on the interpretation of those results and their significance in relation to the research problem, not the data itself. The discussion section should remain focused on the findings of your study. For example, if the purpose of your research was to measure the impact of foreign aid on increasing access to education among the poor in Bangladesh, it would not be appropriate to speculate about how your findings might apply to populations in other countries without drawing from existing studies to support your claim or if analysis of other countries was not a part of your original research design. If you feel compelled to speculate, do so in the form of describing possible implications or explaining possible impacts. Be certain that you clearly identify your comments as speculation or as a suggestion for where further research is needed.

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## Chapter 6 : Writing Good Qualitative Research Questions | Mass Communication Theory

*3 Presenting Methodology and Research Approach OVERVIEW Chapter 3 of the dissertation presents the research design and the specific procedures used in conducting your study.*

Displaying data Designing and Analyzing Multimethod data It is fairly common in healthcare research to find study designs that merge qualitative and quantitative data. Below we provide several resources that discuss how to conduct studies that use multiple methods. Here, we overview a few key points. Miller and Crabtree highlight 4 broad approaches: Concurrent design - two independent studies are conducted on the same study population and the results are converged. For example, interventions might be enhanced if the researchers concurrently conduct an interpretive study to examine the process of implementing the intervention or improvement. Nested design - qualitative and quantitative methods can be integrated into a single research study. For example, qualitative studies can be used to understand and operationalize key variables at the same time outcomes are evaluated. Combination design - case study design that combines multiple methods in order to understand the complexity of a setting. For example, a researcher may combine field methods sequentially with survey techniques, interviewing and record or chart review. Some authors have noted that study designs that link qualitative and quantitative methods for purposes of confirmation or convergence of methods can be problematic. Note that the concurrent design described by Miller and Crabtree above does not seek convergence among qualitative and quantitative data sources, but complementarity. When analyzing qualitative and quantitative data, consider approaches for translating qualitative data into a quantitative form e. This will allow analysts to look across datasets and may foster more creative analyses. Qualitative and Quantitative and Mixed-Method Approaches. Advances in Mixed Methods Evaluation: An Expanded Sourcebook 2nd Edition. Handbook of Qualitative Research pp. Applications to health research. Combining qualitative and quantitative methods in a single large scale evaluation. On the geometry of qualitative research. Approaches to integrating qualitative and quantitative methods.