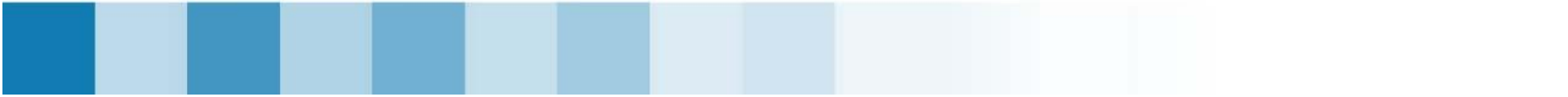# Research Methodology

Writing Strategies and Ethical Issues

Surafel Lemma Abebe (Ph. D.)

Outline

- Writing the proposal
- Ethical issues

Writing the proposal

- Research proposal
  - lays out
    - the problem for the research
    - describes exactly how the research will be conducted
    - outlines in precise detail the resources the researcher will use to achieve the desired result
  - Used as a means of communication to get approval for the research
  - Is about the future
  - Demonstrates whether the authors possess the ability to think clearly without confusion
  - Should not be written hastily
  - Could be used
    - to get funding for a project
    - to approve a thesis or dissertation from a university faculty committee
  - Other names for a proposal
    - Prospectus, plan, outline, statement, draft

Writing the proposal

- Research proposal…
  - Requires subject knowledge and insight into the problem that is going to be investigated, so as to give logic and structure to the research envisaged
  - indicates that *a specific course of action will be followed*

Writing the proposal…

- Characteristics of a proposal
  - A proposal is a straightforward document
    - A proposal should not be cluttered with extraneous and irrelevant material
      - Example
        - How one becomes interested in my topic excursions
    - Autobiographical excursions suggest that you cannot separate essentials from irrelevancies
    - Whatever does not contribute directly to the delineation of the problem and its solution must be eliminated

Writing the proposal…

- Characteristics of a proposal…
  - A proposal is not a literary production
    - Proposal describes a future research project with an economy of words and precision of expression
    - The language should be clear, sharp and precise
    - Proposal provides a chance to show with what clarity and detail the researcher can
      - state a problem,
      - delineate the collection of relevant data, and
      - explain how those data will be interpreted and brought to bear on the research problem

Writing the proposal…

- Characteristics of a proposal…
  - A proposal is clearly organized
    - Proposals are written in conventional prose style, and thoughts are expressed in simple paragraph form
    - In professional writing, headings and subheadings are the single most commonly used strategy to express the writer's overall organizational scheme
    - Different institutions may have a particular organizational scheme they want to follow

Writing the proposal…

- Components in a research proposal
  - The organization of the contents of a proposal may vary somewhat with the nature of the research proposed
  - The basic components of a research proposal are the same in many fields
    - However, how they are phrased and staged may vary by discipline

Writing the proposal…

- Components in a research proposal…
  - Central arguments that frame most proposals
    1. What do readers need, to better understand your topic?
    2. What do readers know little about in terms of your topic?
    3. What do you propose to study?
    4. What is the setting and who are the people that you will study?
    5. What methods do you plan to use to provide data?
    6. How will you analyze the data?
    7. How will you validate your findings?
    8. What ethical issues will your study present?
    9. What do preliminary results show about the practicability and value of the proposed study?

Writing the proposal…

- Components in a research proposal…
  1. Title page
  2. Summary/Abstract
  3. Introduction/Background
  4. Statement of the problem
  5. Literature review
  6. Hypotheses /Questions
  7. Conceptual framework
  8. Objective/Aim of the study
  9. Research methods, materials and procedures
  10. Work plan
  11. Budget
  12. References
  13. Appendices/Annexes

Writing the proposal…

- Title page
  - A title ought to be well studied, and to give, so far as its limits permit, *a definite and concise indication* of what is to come.
  - The title of your research proposal *should state your topic exactly in the smallest possible number of words*.
  - Put your name, the name of your department/faculty/college, the name of your advisor (s) and date of delivery under the title.
  - *All words in the title* should be chosen with great care, and association with one another must be carefully managed.

Writing the proposal…

- Title page…
  - The title page identifies the proposal and provides the endorsement of appropriate body (advisor).
  - *A good title is defined as the fewest possible words that adequately describe the contents of the study.*
  - Title is a label: it is not a sentence.
  - Titles should almost **never contain abbreviations**.
  - The title page **has no page number** and it is not counted in any page numbering.
  - *First impressions are strong impressions: make your title an attention grabber.*

Writing the proposal…

- Summary/Abstract

    "The abstract is a mini version of the proposal."

    – The abstract is a **one page brief summary** of the thesis proposal.

    – It needs to show **a reasonably informed reader**

    - why a particular topic is important to address and

    - how you will do it

    – To that end, it needs to show

    - how your work **fits into what is already known** about the topic and

    - what **new contribution** your work will make

Writing the proposal…

- Summary/Abstract…

  - In the abstract

    - ***specify the question*** that your research will answer,

    - establish why it is ***a significant question***;

    - show ***how you are going to answer*** the question.

  - Do not put information in the abstract that is not in the main text of your research proposal.

  - Do not put ***references, figures,*** or ***tables*** in the abstract.

Writing the proposal…

- Introduction/Background
  - The introduction is part of the proposal that provides readers with the **background information** for the research proposal.
  - Its purpose is to establish **a framework** for the research, so that readers can understand how it is related to other researches.
  - Be sure to include **a hook** at the beginning of the introduction.
  - A hook
    - is a statement of something sufficiently interesting to motivate your reader to read the rest of the proposal,
    - is an **important/interesting scientific problem** that your study either solves or addresses.

Writing the proposal…

- Introduction/Background…
  - The introduction should cite those who
    - had the idea or ideas first, and
    - have done the most recent and relevant work.
  - You should then go on to explain why more work is necessary (**your work, of course.**)

Writing the proposal…

- Introduction/Background…
  - The introduction also should address the following points:
    - Should be focused **on the research question(s)**.
    - All cited works should be **directly relevant** to the goals of the research.
    - Explain the scope of your work,
      - what will and what will not be included.
    - A **verbal "roadmap"** or a verbal **"Table of contents"** guiding the reader to what lies ahead.

Writing the proposal…

- Statement of the problem

    "Statement of the problem encapsulates the question you are trying to answer."

    – Most research proposals, whether designed for master's thesis or doctoral dissertations, may be considered as **responses to a problem**.

    – A problem might be defined as the issue that exists in

    - the **literature**,

    - **theory**, or

    - **practice**

    that leads to a need for the study.

    – The researcher should think on what caused the need to do the research (problem identification).

Writing the proposal…

- **Statement of the problem…**
  - The question that he/she should ask him/herself is:
    - *Are there questions about this problem to which answers have not been found up to the present*?
  - The research problem should be stated in such a way that
    - it would lead to **analytical thinking** on the part of the researcher
    - with the aim of possibly concluding solutions to the stated problem.

Writing the proposal…

- **Statement of the problem…**
  - It is important in a proposal that the **problem stand out**—that the reader can easily recognize it.

  - Effective problem statements answer the question
    - *"Why does this research need to be conducted."*
  - If a researcher is *unable* to answer this question clearly and succinctly, then the statement of the problem will come off as *ambiguous* and *diffuse*.
  - The most frequent dilemma among beginner researchers is their *seemingly aimless search for a problem* significant enough to pursue and discrete enough to handle.

Writing the proposal…

- Statement of the problem…
  - A well-articulated statement of the problem
    - establishes the foundation for everything to follow in the proposal and
    - will *render less problematic* most of
      - the conceptual,
      - rhetorical and
      - methodological obstacles

    typically encountered during the process of proposal development.

Writing the proposal…

- Statement of the problem…
  - This means that, in subsequent sections of the proposal, there should be no surprises, such as
    - questions,
    - variables or
    - data sources

    that come out of nowhere

  - If it can't be found in the problem statement section, at least at the implicit level, then
    - it either does not belong in the study or
    - the problem statement needs to be re-written.

Writing the proposal…

- ## Literature review
  The literature review asks how similar and related questions have been answered before."

  – To conduct research regarding a topic, by implication, means that

    ➢ the researcher has obtained sound knowledge with regard to the research topic.

  – It is therefore imperative that the researcher

    ➢ clearly indicates what theoretical knowledge he possesses about the prospective research at the time of the submission of the research proposal

Writing the proposal…

- Literature review…
  - Literature review is
    - **not a compilation of every work** written about a topic.
    - **not** simply a *list of sources reviewed separately* for their own merit.
  - *A literature review is a description of the literature relevant to a particular field or topic.*
  - It gives
    - an overview of *what has been said*,
    - who the *key writers* are,
    - what are the *prevailing theories and hypotheses*,
    - what *questions are being asked*, and
    - what *methods and methodologies* are appropriate and useful.
  - As such,
    - it is not in itself primary research, but rather it reports on other's findings.

Writing the proposal…

- Literature review…
  - How to organize a literature review
    - There are a number of ways of organizing a literature review.
    - Here is one suggestion:

    A. **Introduction:**
      - define the topic, together with your reason for selecting the topic.
      - general overview and organization of the literature reviewed
      - You could also point out the following and relate them to your objective and organization of the literature review
        » overall trends,
        » gaps,
        » particular themes that emerge,
        » *etc.*

Writing the proposal…

- Literature review…
  - How to organize a literature review…

    B. **Body:**
    - this is where you discuss your sources.
    - Here are some ways in which you could organize your discussion:
      - ➤ *chronologically*:
        - for e.g., if writers' views have tended to change over time, there is little point in doing the review by order of publication unless this shows a clear trend;
      - ➤ *thematically*: take particular themes in the literature;
      - ➤ *methodologically*:
        - here, the focus is on the methods of the researcher,
        - for example, qualitative versus quantitative approaches.

Writing the proposal…

- ## Literature review…

    - ### How to organize a literature review…

        C. Conclusion:

        - summarize the major contributions,

        - evaluating the ***current position***, and

        - pointing out

            - ➢ **limitations** in ***methodology***,

            - ➢ ***gaps*** in the research,

            - ➢ ***contradictions***, and

            - ➢ areas for ***further study***.

Writing the proposal…

- ## Literature review…

  - ## Questions to ask

    - What is the specific research question that my literature review helps to define?

    - What type of literature review am I conducting?

    - What is the *scope* of my literature review?

      - ➢ What *types of publications* am I using?

      - ➢ What *discipline* am I working in?

    - 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?

Writing the proposal…

- Literature review…
  - Questions to ask…
    - Have I *critically analyzed* 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?
    - Have I cited and discussed *studies contrary* to my perspective?
    - Will the **reader** find my literature review *relevant, appropriate, and useful*?

Writing the proposal…

- Questions and/or hypotheses
  - Hypotheses and questions
    - are linked to the **speculative proposition** of the problem statement,
    - can be **inferred from the overall conceptual framework of a study**, and
    - are of **critical importance to data analysis** and interpretation.
  - In research studies,
    - **the term hypotheses implies a derivation, within a hypothetic-deductive theoretical system, of a particular assertion or prediction.**
  - The hypothesis is subject to test,
    - i.e., to confirmation or rejection on **empirical grounds**.

Writing the proposal…

- Questions and/or hypotheses…
  - The term **question**
    - implies an interrogative statement that can be **answered by data**,
    - which is **logically related to the same conceptual framework**, but
    - which does **not necessarily stem from that framework through logical deduction**.
  - **Questions** are most often used in **qualitative inquiry**, although their use in *quantitative inquiry is becoming more prominent*.
  - **Hypotheses**
    - are relevant to **theoretical research** and
    - are typically used only in **quantitative inquiry**.
    - Hypotheses can only be **formulated** *after the researcher has gained enough knowledge regarding the nature, extent and intensity of the problem*

Writing the proposal…

- Conceptual framework
  - Every research activity is **conceptualized** and will be carried out within some contextual framework.
  - This contextual framework is
    - in part **conceptual**,
    - in part **valuational**, and
    - in part **practical** (or operational), and
    - all of these factors must typically be considered.
  - *A conceptual framework is described as*
    - *a set of broad ideas & principles taken from relevant fields of enquiry and*
    - *used to structure a subsequent presentation.*

Writing the proposal…

- Objective/Aim of the study
  - The objectives of a research delineate the **ends** or aim which the inquirer seeks to bring about as a result of completing the research undertaken.
  - An objective may be thought of as either
    - a **solution to a problem** or
    - a **step along the way** toward achieving a solution;
      - an end state to be achieved in relation to the problem.
  - The objectives of a research project summarize what is to be achieved by the study.

Writing the proposal…

- Objective/Aim of the study…
  - Objectives should be closely related to the *statement of the problem*.

  - Objectives should be
    - ➢ *simple* (not complex),

    - ➢ *specific* (not vague),

    - ➢ *stated in advance* (not after the research is done), and

    - ➢ *stated using "action verbs"* that are *specific enough* to be measured.

  - [SMART: **S**pecific **M**easurable **A**chievable **R**ealistic & **T**ime-bounded]

Writing the proposal…

- Objective/Aim of the study…
  - Commonly, research objectives are classified into
    - **general objectives and**
    - **specific objectives.**
  - The general and specific objectives
    - are logically connected to each other and
    - the specific objectives are commonly considered as smaller portions of the general objectives.
  - It is important to ascertain that the **_general objective_** is closely related to the **_statement of the problem_**.

Writing the proposal...

- Methods, materials and procedures

  "Methods/procedures show how you will achieve the objectives, answer the questions."

  – The methods or procedures section is really ***the heart*** of the research proposal.

  – You must decide exactly ***how you are going to achieve*** your stated objectives:

    - *i.e.,* ***what new data you need in*** order to shed light on the problem you have selected and

    - ***how you are going to collect and process*** this data.

  – The activities (in methods)

    - should be described with as much detail as possible, and

    - the continuity between them should be apparent.

Writing the proposal…

- Methods, materials and procedures…
  - Indicate the **methodological** steps you will take
    - to **answer** every question,
    - to **test every hypothesis** illustrated in the Questions/Hypotheses section or
    - address the **objectives** you set

Writing the proposal…

- Methods, materials and procedures…
  - **What belongs in the "methods" section of a research proposal?**
    - ➤ Information to allow the reader to assess the *believability* of your approach.
    - ➤ Information needed by another researcher *to replicate* your experiment.
    - ➤ Description of your *materials, procedure, theory*.
    - ➤ *Calculations*, technique, procedure, equipment, and calibration plots.
    - ➤ *Limitations, assumptions, and range of validity.*
    - ➤ Description of your *analytical methods*, including reference to any specialized statistical software.

Writing the proposal…

- Work plan

  "A work plan informs the reader how long it will take to achieve the objectives/answer the questions."

  – Work plan is a schedule, chart or graph that summarizes
    - the different components of a research proposal and
    - how they will be implemented in a coherent way within a specific time-span.

  – It may include:
    - The **tasks** to be performed;
    - **When and where** the tasks will be performed;
    - **Who** will perform the tasks and the time each person will spend on them;
    - It describes the plan of **assessing the ongoing progress** toward achieving the research objectives;
    - The plan specifies **how each project activity is to be measured** in terms of completion, the time line for its completion;

Writing the proposal…

- Work plan…
  - A good work time plan enables both the investigators and the advisors
    - to monitor project progress and
    - provide timely feedback for research modification or adjustments.

  The GANTT Chart
  - A GANTT chart is a planning tool that depicts graphically the order in which various tasks must be completed and the duration of each activity.
  - The GANTT chart indicates:
    - **What** tasks to be performed;
    - **Who** is responsible for each task; and
    - **When** each task is expected to take.
    - The length of each task is shown by a bar that extends over the number of days, weeks or months the task is expected to take.

Writing the proposal…

- ## Budget and funding

  "The Budget section will show how much it will cost to answer the question."

  - Most often than not, you will require to secure funds from *a funding organization* to cover the cost of conducting a research project.

  - It is also important to remember the funding agency will invariably also *read through* the whole proposal (not just the budget requirement).

  - Therefore, it is critical that

    - the *entire proposal document is well thought out and written* to effectively communicate the aim of the research and

    - how you plan to achieve it.

Writing the proposal…

- Budget and funding…

  - Budget items need to be explicitly stated

    - Cost for every budget item should be *quantitatively* shown

    - There might be a need for *budget justification* of certain costs whose requirement is *not obvious*

  - Typically, a proposal budget reflects

    - direct and

    - indirect costs.

Writing the proposal…

- ## Budget and funding…

  Direct costs:

  - Personnel: Salaries and wages of all participants of the study

    - ➢ Principal investigator;

    - ➢ supervisor;

    - ➢ data collector;

    - ➢ drivers;

    - ➢ guards;

    - ➢ data entry clerks,

    - ➢ data analysis,

    - ➢ report writing, etc

Writing the proposal…

- Budget and funding…
  Direct costs: ….

  – Consumable supplies:

    - office supplies (stationeries),

    - chemicals, and

    - educational materials

  – Equipments:

    - computers,

    - properties which are expensive

  – Travel:

    - cost of project-related travel

Writing the proposal…

- Budget and funding…
  Direct costs: ….
  - Communications:
    - postage, telephone, telegram, fax, e-mail charges associated with a project
  - Publication:
    - the cost incurred of **preparing and publishing** the results of the research.
    - It includes:
      - technical reports,
      - manuscripts, illustrations, graphics, photography, slides, and overheads
  - Other direct costs:
    - costs of all items that do not fit into any of the above direct costs

Writing the proposal…

- Budget and funding…

Indirect costs:

– Those costs incurred in ***support and management*** of the proposed activities that can not be readily determined by ***direct measurement***.

– Examples include:

- Overhead costs for institutions or associations

- General administrative cost

- Operational and maintenance

- Depreciation and use allowance

Writing the proposal…

- Budget and funding…
  Budget justification

  – It is not sufficient to present a budget without explanation.

  – The budget justification follows the budget as an explanatory note

    - justifying briefly, in the context of the proposal, why the various items in the budget are required.

  – Make sure you give clear explanations concerning

    - why items that may seem *questionable* or that are particularly costly are needed and

    - discuss how *complicated expenses* have been calculated.

  – If a strong budget justification is presented, it is less likely that essential items will be cut during proposal review.

Writing the proposal…

- **Budget and funding…**

  <u>Obtaining funding for research projects</u>

  – To conduct research, it is usually necessary to obtain funding for the research project.

  – Such funding may be available from

    - local,

    - national or

    - international agencies.

  – In addition to preparing a good research proposal, the following strategies are useful for researchers to increase the chances of securing adequate funds:

Writing the proposal…

- Budget and funding…
  - Obtaining funds for researches

    A. Familiarize yourself with the policies and priorities of funding agencies.

    - Such policies and priorities may be:

    - **Implicit**,
      - *i.e. known to officials in the agency and*
      - *to other local* researchers who have previously been funded by that agency.
      - Obtain the names of such persons and make direct contact with them.

    - **Explicit,**
      - *i.e. available from policy documents issued by the agency.*
      - *The funding policies of many agencies may emphasize:*
        » a **priority** given to research aimed at strengthening *a particular program*
        » institution **building** (*i.e. building the capacity of an institution to do research)*
        » targeted to *a specific thematic area* of research (for e.g. health, family planning, *etc.)*

Writing the proposal…

- **Budget and funding…**
  - Obtaining funds for researches…

    B. Identify the *procedures*, deadlines and formats that are relevant to each agency.

    C. Obtain written *approval and support* from relevant local and national authorities and submit together with your proposal.

    D. If you are a beginning researcher, associate yourself with an established researcher/advisor.
    - Host agencies scrutinize the **'credibility'** of the researcher to whom funds are allocated.
    - Such credibility is based on *previous projects* that were successfully completed.

    E. Build up your own *list of successfully completed projects* (i.e. your own reports, publications, *etc.)*

Writing the proposal…

- References

  - You must give references to all the information that you obtain from books, papers in journals, and other sources.

  - References may be made in the main text using

    - index numbers in brackets (Vancouver style) or

    - authors name (Harvard style).

  - You will also need to place a list of references, numbered as in the main text (or alphabetically ordered), at the end of your research proposal.

Writing the proposal…

- ## References…

    - The ***exact format*** for depicting references within the body of the text and as well as the end of the proposal varies from one discipline to another.

    - It is best that you ***consult with someone who is familiar*** with the format in your particular area of research.

    - It also demonstrates to those interested in your proposal ***how well versed you are*** on the particular area of research.

    - As a general guideline, there are certain items that must be included from each source reference.

Writing the proposal…

- ## References…
  - **For a journal paper give:**
    - the names of the authors,
    - the year of publication,
    - the title of the paper,
    - the title of the journal,
    - the volume number of the journal,
    - the first and last page numbers of the paper.
  - **For a book give:**
    - the author,
    - the year of publication,
    - the title, and the edition number if there is one,
    - the name of the publisher,
    - the page numbers for your reference.

Writing the proposal…

- References…
  - **For an internet reference give:**
    - the author of the web page,
    - the title of the item on the web page,
    - the date the item was posted on the web page
    - the date the item was accessed from the web page
    - the complete and exact URL.

  - Particularly with references obtained from websites, it is important to establish the *reputability and reliability of the website* you are making reference to.

  - Every reference in your main text must appear in the list at the end of your proposal,
  - and every reference in the list *must have been mentioned* in your main text.

Writing the proposal…

- Appendices/Annexes

  – Include in the appendices of your proposal any additional information you think might be helpful to a proposal reviewer.

  – For example, include:

    - Questionnaire & other collection forms

    - Dummy tables

    - Biographical data on the principal investigator

    - The consent form (if any)

Writing ideas

- Writing as thinking
  - Problem
    - Inexperienced writers prefer to discuss their proposed study rather than write about it
  - Recommendations
    - *Early in the process of research, write ideas down rather thank talk about them*
      - Advisers react better when they read the ideas on paper than when they hear and discuss a research topic with a student or colleague
      - When a researcher renders ideas on paper, a reader can visualize the final product, actually see how it looks
      - Before designing a proposal, draft a one-to-two-page overview of your project and have your adviser approve the direction of your proposed study
      - The draft may include
        - » the research problem being addressed, the purpose of the study, the central questions being asked, the source of data, and the significance of the project for different audiences

Writing ideas

- Writing as thinking…
  - Recommendations…
    - *Work through several drafts of a proposal rather than trying to polish the first draft*
      - Writing styles
        - » Bricklayer
          - Makes every paragraph just right before going on to the next paragraph
        - » "Let-it-all-hang-out-on-the-first-draft"
          - Writes an entire first draft not caring how sloppy it looks or how badly it is written
        - » Iterative process of writing, reviewing, and rewriting
          - In between of the above two styles

Writing ideas

- **Writing as thinking…**
  - – Recommendations…
    - *Do not edit your proposal at the early-draft stage*
      - – Consider Franklin's (1986) three-stage model
        1. Develop an outline – it could be a sentence or word outline or a visual map
        2. Write out a draft and then shift and sort ideas, moving around entire paragraphs in the manuscript
        3. Finally, edit and polish each sentence

Writing ideas

- ## The habit of writing
  - Establish the discipline or habit of writing in a regular and continuous way on your proposal
  - A start-and-stop process of writing often disrupts the flow of work
  - Continual work on the proposal is writing something each day or at least being engaged daily in the processes of thinking, collecting information, and reviewing that goes into manuscript and proposal production
  - Select a time of day to work that is best for you
    - Use discipline to write at this time each day
    - Choose a place free of distractions

Writing ideas

- ## The habit of writing…
  - Ideas about establishing good writing habits
    - With the aid of the priority principle, make writing a daily activity, regardless of mood, regardless of readiness to write
    - If you feel you do not have time for regular writing, begin by charting your daily activities for a week or two in half hour blocks
      - Its likely you will find a time to write
    - Write while you are fresh
    - Avoid writing in binges
    - Write in small, regular amounts
    - Schedule writing tasks so that you plan to work on specific, manageable units of writing in each session

Writing ideas

- ## The habit of writing…
  - Ideas about establishing good writing habits…
    - Keep daily charts. Graph at least three things: (a) time spent writing, (b) page equivalents finished, and (c) percentage of planned task completed
    - Plan beyond daily goals
    - Share your writing with supportive, constructive friends until you feel ready to go public
    - Try to work on two or three writing projects concurrently so that you do not become overloaded with any one project
  - It is also important to acknowledge that writing moves along slowly and that a writer must ease into writing
    - The writer needs warm-up exercises for both the mind and the fingers

Writing ideas

- Readability of the manuscript
  - Use consistent terms throughout the proposal
  - Consider how narrative thoughts of different types guide a reader
    - Umbrella thoughts-the general or core ideas one is trying to get across
    - Big thoughts in writing-specific ideas or images that fall within the realm of umbrella thoughts and serve to reinforce, clarify, or elaborate upon the umbrella thoughts
    - Little thoughts-ideas or images whose chief function is to reinforce big thoughts
    - Attention or interest thoughts-ideas whose purposes are to keep the reader on track, organize ideas, and keep an individual's attention
    - Use organizing paragraphs
      - Example, beginning and end of literature reviews
      - Indicate the most salient points readers need to remember in a summary

Writing ideas

- **Readability of the manuscript...**
  - Use coherence to add to the readability of the manuscript
    - Coherence in writing means that the ideas tie together and logically flow from one sentence to another and from one paragraph to another
    - Example
      - Repetition of the same variable names in the title, the purpose statement, the research questions, and the review of the literature headings in a quantitative project

Ethical issues

- Researchers need to protect their research participants:

  - develop a trust with them

  - promote the integrity of research

  - guard against misconduct and impropriety that might reflect on their organizations or institutions: and cope with new, challenging problems

- Ethical issues in research problem

  - During the identification of the research problem, it is important to identify a problem that will benefit individuals being studied, one that will be meaningful for others besides the researcher

Ethical issues

- **Ethical issues in purpose and questions**
  - Proposal developers need to convey the purpose of the study that will be described to the participants
  - Deception occurs when participants understand one purpose but the researcher has a different purpose in mind

- **Ethical issues in data collection**
  - Researchers need to respect the participants and the sites for research
  - Do not put participants at risk, and respect vulnerable populations
  - Researchers need to have their research plans reviewed by the Institutional Review Board

Ethical issues

- Ethical issues in data analysis and interpretation
    - When the researcher analyzes and interprets both quantitative and qualitative data, issues emerge that call for good ethical decisions
        - How will the study protect the anonymity of individuals, roles, and incidents in the project?
        - Data, once analyzed, need to be kept for a reasonable period of time (e.g., Sieber, 1998, recommends 5-10 years)
        - The question of who owns the data once it is collected and analyzed also can be an issue that splits research teams and divides individuals against each other
        - In the interpretation of data, researchers need to provide an accurate account of the information

Ethical issues

- Ethical issues in writing and disseminating the research…
  - Discuss how the research will not use language or words that are biased against persons because of gender, sexual orientation, racial or ethnic group, disability, or age
    - Use language that is sensitive to labels
      - e.g., rather than "400 Hispanics", indicate "400 Mexicans, Spaniards, and Puerto Ricans"
    - Acknowledge participants in a study
      - e.g., rather than "subject," use the word "participant," and rather than "woman doctor" use "doctor" or "physician"
  - Other ethical issues in writing the research will involve the potential of suppressing, falsifying, or inventing findings to meet a researcher's or an audience's needs

Ethical issues

- Ethical issues in writing and disseminating the research…

  - In planning a study, it is important to anticipate the repercussions of conducting the research on certain audiences and not to misuse the results to the advantage of one group or another

  - An important issue in writing a scholarly manuscript is to not exploit the labor of colleagues and to provide authorship to individuals who substantially contribute to publications

  - It is important to release the details of the research with the study design so that readers can determine for themselves the credibility of the study