



University of Global Village (UGV)

Department of English

Course Outline

Course Outline

Serial no	Name of the content	Content details
1	Course Code	Eng-418
2	Course Title	Research Methodology
3	Course Type	Theory
4	Academic Session	Winter-2025
5	Course Teacher	Md. Ziaul Haque
6	Pre-requisite	N/A
7	Credit value	3
8	Contact hours	42 Hours
9	Total marks	150

Course Summary:

This course is designed to provide students with an understanding of the various research methodologies and techniques used in their field of study. It will cover topics such as research design, data collection, data analysis, and writing a research proposal. The course will also include guidance on how to plan, conduct and present a dissertation. The course will equip students with the skills and knowledge necessary to complete a research project and write a dissertation. It will also provide an understanding of the ethical and practical considerations of conducting research.

Course Learning Outcomes: at the end of the course, the student will be able to-

CLO 1	Demonstrate the fundamentals of Research Methodology and Dissertation.	Remember
CLO 2	Understand how to develop literature and theoretical frameworks that are appropriate for their research topic and goals.	Understand
CLO 3	Apply critical thinking to solve the problem through research.	Apply
CLO 4	Analyze the appropriateness of different research methodologies for their specific research topic and goals.	Analyze
CLO 5	Evaluate the relevance and usefulness of different theoretical perspectives and how to apply them in their research.	Evaluate
CLO 6	Develop the skills necessary to conduct and present a research project and dissertation.	Create

1. Topics to be covered/ Content of the course-

Time Frame	Topics	Teaching Strategies	Assessment Strategy	Alignment to CLO
Week 1	Research Methodology: Definition, Characteristics. purpose, Importance	Lecture, Students' feedback	Oral Question-answer	PLO 1
Week 2	Classification of Research	Group Discussion, Open Peer Work.	Individual short presentation	PLO2
Week 3	Research Objective: Purpose of the research	Lecture, Group discussion	Assignment and presentation	PLO3
Week 4	Research Problem: Identifying problems	PPT, Showing Diagram.	Quiz Test	PLO2
Week 5	Research Question and its classification	Lecture, Pair work	Oral Presentation	PLO 4
Week 6	Research Hypothesis	Lecture, Students will create a model or diagram	Asked to explain in class	PLO4
Week 7	Research Framework and Abstract Writing	Lecture, Students will analyze sentences according to the syntactic process	Quiz test: MCQ	
Week 8	Research Data: Types and procedures of data collection	Lecture, Students' feedback	Oral Question-answer	PLO5
Week 9	Variable: Defining and types of variable	Group Discussion, Open Peer Work.	Individual short presentation	PLO6
Week 10	Sampling: Defining and types of sampling	Lecture, Group discussion	Assignment and presentation	PLO 3
Week 11	Literature Review: Defining, types and its important	PPT, Showing Diagram.	Quiz Test	PLO5
Week 12		Lecture, Pair work	Oral Presentation	PLO4
Week 13	Plagiarism: Different types	Lecture, Students will create a model or diagram	Asked to explain in class	PLO6
Week 14	Bibliography, Reference	Lecture, Students will analyze sentences according to the syntactic process	Quiz test	PLO6

ASSESSMENT

ASSESSMENT PATTERN

Total Marks Per Credit 50 Marks	
3 Credits Course	150 Marks
2 Credits Course	100 Marks
CIE	60%
SEE	40%

Assignment:

The topic or case studies will be given as assignments during the class which they have to prepare at home and will submit on or before the due date. No late submission of assignments will be accepted. Students will have to do a presentation on the given topic.

Quizzes:

One Quiz Test will be taken during the semester, this test will be taken after midterm. No makeup quiz test will be taken. Students are strongly recommended not to miss that test.

Viva-Voce:

At the end of the semester, the students must appear before a board of faculty from their course, who will assess them on topics they have covered. The department may invite external faculty to assess the students.

CIE- Continuous Internal Evaluation (90 Marks-60%)

Bloom's Category Marks (Out of 90)	Test (105)	Assignment (15)	Quizzes(15)	External Participation in Curricular/Co-Curricular Activities (20)
Remember	10		5	Attendance : 10 Viva-Voce : 10
Understand	10	5	5	
Apply	5	5		
Analyze	10			
Evaluate	5			
Create	5			

SEE- Semester End Examination (60 Marks-40%)

Bloom's Category	Tests
Remember	15
Understand	5
Apply	10

Analyze	10
Evaluate	5
Create	10

Evaluation:

Grades will be calculated as per the university grading structure and individual students will be evaluated based on the following criteria with respective weights.

1. Quizzes	10%
2. Group Assignments	10%
3. Class Participation	10%
4. Term Examination	70%

Learning Materials

Textbook & Learning Resources:

Research Methodology- C L Kothari and Content provided by the teacher

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-1

What is Research: Definition, Methods, Types & Examples



What is Research?

Definition: Research is defined as careful consideration of study regarding a particular concern or problem using scientific methods. According to the American sociologist Earl Robert Babbie, "Research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. It involves inductive and deductive methods."

Inductive research methods analyze an observed event, while deductive methods verify the observed event. Inductive approaches are associated with [qualitative research](#), and deductive methods are more commonly associated with quantitative analysis.

Research is conducted with a purpose to:

- Identify potential and new customers
- Understand existing customers
- Set pragmatic goals
- Develop productive market strategies
- Address business challenges
- Put together a business expansion plan
- Identify new business opportunities

What are the characteristics of research?

1. Good research follows a systematic approach to capture accurate data. Researchers need to practice ethics and a code of conduct while making observations or drawing conclusions.
2. The analysis is based on logical reasoning and involves both inductive and deductive methods.
3. Real-time data and knowledge are derived from actual observations in natural settings.
4. There is an in-depth analysis of all data collected so that there are no anomalies associated with it.
5. It creates a path for generating new questions. Existing data helps create more research opportunities.
6. It is analytical and uses all the available data so that there is no ambiguity in inference.
7. Accuracy is one of the most critical aspects of research. The information must be accurate and correct. For example, laboratories provide a controlled environment to collect data. Accuracy is measured in the instruments used, the calibrations of instruments or tools, and the experiment's final result.

What is the purpose of research?

There are three main purposes:

1. **Exploratory:** As the name suggests, researchers conduct [exploratory studies](#) to explore a group of questions. The answers and analytics may not offer a conclusion to the perceived problem. It is undertaken to handle new problem areas that haven't been explored before. This exploratory process lays the foundation for more conclusive data collection and analysis.
2. **Descriptive:** It focuses on expanding knowledge on current issues through a process of data collection. [Descriptive research](#) describe the behavior of a sample population. Only one variable is required to conduct the study. The three primary purposes of descriptive studies are describing, explaining, and validating the findings. For example, a study conducted to know if top-level management leaders in the 21st century possess the moral right to receive a considerable sum of money from the company profit.

8 tips for conducting accurate research

1. Identify the main trends and issues, opportunities, and problems you observe. Write a sentence describing each one.
2. Keep track of the frequency with which each of the main findings appears.
3. Make a list of your findings from the most common to the least common.
4. Evaluate a list of the strengths, weaknesses, opportunities, and threats that have been identified in a [SWOT analysis](#).
5. Prepare conclusions and recommendations about your study.
6. Act on your strategies
7. Look for gaps in the information, and consider doing additional inquiry if necessary
8. Plan to review the results and consider efficient methods to analyze and dissect results for interpretation.

Review your goals before making any conclusions about your research. Keep in mind how the process you have completed and the data you have gathered help answer your questions. Ask yourself if what your analysis revealed facilitates the identification of your conclusions and recommendations.

10 Reasons Why Research is Important

No matter what career field you're in or how high up you are, there's always [more to learn](#). The same applies to your personal life. No matter how many experiences you have or how diverse your social circle, there are things you don't know. Research unlocks the unknowns, lets you explore the world from different perspectives, and fuels a deeper understanding. In some areas, research is an essential part of success. In others, it may not be absolutely necessary, but it has many benefits. Here are ten reasons why research is important:

#1. Research expands your knowledge base

The most obvious reason to do research is that you'll learn more. There's always more to learn about a topic, even if you are already well-versed in it. If you aren't, research allows you to build on any personal experience you have with the subject. The process of research opens up new [opportunities for learning](#) and growth.

x#2. Research gives you the latest information

Research encourages you to find the [most recent information available](#). In certain fields, especially scientific ones, there's always new information and discoveries being made. Staying updated prevents you from falling behind and giving info that's inaccurate or doesn't paint the whole picture. With the latest info, you'll be better equipped to talk about a subject and build on ideas.



#3. Research helps you know what you're up against

In business, you'll have competition. [Researching your competitors](#) and what they're up to helps you formulate your plans and strategies. You can figure out what sets you apart. In other types of research, like medicine, your research might identify diseases, classify symptoms, and come up with ways to tackle them. Even if your "enemy" isn't an actual person or competitor, there's always some kind of antagonist force or problem that research can help you deal with.

#4. Research builds your credibility

People will take what you have to say more seriously when they can tell you're informed. Doing research gives you a solid foundation on which you can build your ideas and opinions. You can [speak with confidence](#) about what you know is accurate. When you've done the research, it's much harder for someone to poke holes in what you're saying. Your research should be focused on the best sources. If your "research" consists of opinions from non-experts, you won't be very credible. When your research is good, though, people are more likely to pay attention.



#5. Research helps you narrow your scope

When you're circling a topic for the first time, you might not be exactly sure where to start. Most of the time, the amount of work ahead of you is overwhelming. Whether you're [writing a paper](#) or formulating a business plan, it's important to narrow the scope at some point. Research helps you identify the most unique and/or important themes. You can choose the themes that fit best with the project and its goals.

#6. Research teaches you better discernment

Doing a lot of research helps you sift through low-quality and high-quality information. The more research you do on a topic, the better you'll get at

discerning what's accurate and what's not. You'll also get better at discerning the gray areas where information may be technically correct but used to draw questionable conclusions.



#7. Research introduces you to new ideas

You may already have opinions and ideas about a topic when you start researching. The more you research, the more viewpoints you'll come across. This encourages you to entertain new ideas and perhaps take a closer look at yours. You might change your mind about something or, at least, figure out how to position your ideas as the best ones.



#8. Research helps with problem-solving

Whether it's a personal or professional problem, it helps to look outside yourself for help. Depending on what the issue is, your research can focus on what others have done before. You might just need more information, so you can make an informed plan of attack and an informed decision. When you know you've collected good information, you'll feel much more confident in your solution.

#9. Research helps you reach people

Research is used to help raise awareness of issues like climate change, racial discrimination, gender inequality, and more. Without hard facts, it's very difficult to prove that climate change is getting worse or that gender inequality isn't progressing as quickly as it should. The public needs to know what the facts are, so they have a clear idea of what "getting worse" or "not progressing" actually means. Research also entails going beyond the raw data and sharing real-life stories that have a more personal impact on people.



#10. Research encourages curiosity

Having curiosity and a love of learning take you far in life. Research opens you up to different opinions and new ideas. It also builds discerning and analytical skills. The research process rewards curiosity. When you're committed to learning, you're always in a place of growth. Curiosity is also good for your health. Studies show curiosity is associated with higher levels of positivity, better satisfaction with life, and lower anxiety.

Integrating Research in Language and Literature

A very important discussion among the researchers in language and literature poses a challenge and tries to answer the question – “How to develop innovative research practices to overcome the challenges of language research?” Integration of research in the language is mainly developed on ethical, epistemological and pedagogical issues. These parameters are best answered when the researchers explore their practices as co-researchers. The primary question that arises is what exactly does research mean? Who can lead, conduct, analyse, innovate, enact, or practice research? A practitioner, a teacher, a teacher educator, and a researcher in language cannot shed one identity to take another but integrate all to emerge as a dynamic being. The notion of research and the way it gets integrated into teaching-learning can become an important topic to be considered by a language researcher. The changing paradigms of research have led to new doubts as to whether all research activities are ontological and epistemological. Each decision seeks to focus and complete attention. Any research should be technically convincing, systematic and innovative. Recent studies have shown that a large number of teachers consider research irrelevant. The critical question one has to ask is to decide how rigorous the research is, how impactful is the research and how original are the ideas. In the domain of language and literature, critical questions like what the research agenda is, who conducts research, who generates the reports, what are the benefits of the research and how it matters for further research become very important. There is an urgent need to respond to the growing awareness of the large gap between research guidelines governing qualitative research and challenges in fieldwork during data collection. A large number of researchers in the field of language and literature face difficulties in accessing the right topic, and worries while dealing with sensitive information and many more. Being more creative in identifying research topics is very important. It is essential to know how important and valuable information relevant to the research focus can be obtained. The researcher should be able to present both theoretical and practical aspects. Lack of empirical research can be due to pragmatic reasons such as time and access due to work pressure. This, according to relevance, document analysis, focus group discussions and interviews become very important. Most of the researchers in languages aspire

for more opportunities to engage with supervision and develop academic writing skills. But due to varied reasons, the researchers have expressed dissatisfaction in this regard. There is a need for a strong base in theory and practical information for those researchers navigating the complex world of language research. There is a need for the integration of research, writing and teaching processes. Originality, clarity, and connectors of featured information should be the focus of research culture. Comprehensive research in new domains like applied linguistics establishes a positive correlation between both speaking and writing skills and enhances language proficiency. Language research requires the involvement of both the researcher and the researched. The research projects aimed at exploring the impact of different subjects should be able to analyse the glaring difficulties and devise methods to overcome them. The specific challenges faced by language teachers in their research journey should guide them to sustain their commitment throughout the project and provide them with the strength to handle the physical and emotional strain. The potential language researcher should embark on this demanding but rewarding endeavour. Specific challenges in language and literature Research: - A basic question that arises in the mind of a researcher is what are the issues that affect the research and teaching in the present context and how have the researchers identified strategies to overcome them. Interdisciplinarity has been instrumental in effecting changes in both fields and establishing the relationship between languages and the connection between literature and language. Nowadays research on language and literature has challenging concerns in the form of either specific queries or responses to those queries. The new systems of enquiry have enhanced the interest of researchers. Scholars are keen to address the questions and seek satisfactory solutions. It becomes appropriate to discuss the changes in research in the field of language and literature in the recent past. It may not be an overestimation to say that cross-cultural interaction has proven to be beneficial. The primary concern would be to take advantage of the technological innovations in cultural and political settings and whether they have impacted positively. The biggest challenge is to foster the development of new research topics and cope with the challenges posed by them. Hearing ecologies going beyond the normal need to be created and nurtured. The availability of basic resources sometimes remains underfunded. The general component of literature broadens the level of understanding and creates cultural awareness and values which enhance skills like independent thinking and creativity. Literary appreciation helps researchers to develop critical sensitivity. It is important for researchers to facilitate the

attainment of their research objectives through diverse themes like social vices, technology, history, gender, multicultural issues, politics, and governance. As the world continues to adjust and cope with the new normal brought in by COVID-19 digital literacy, creativity, innovation, and soft skills have become the essential components of good research. A high level of efficiency is required to develop the necessary research skills. Research in language and literature goes beyond reading a piece of literary work. Knowing the subject matter within the text is insufficient. Asking more questions, making relevant clarifications and active interactions is not optional but a pre-requisite for all researchers in the domain. Literary appreciation should be enhanced by close and purposive reading and giving attention to intricate details. Researchers should engage in discussions which enhance their research focus. Researchers should be encouraged to actively engage in activities which contribute to gaining deeper insights and adopting different approaches. The socio-political and historical contexts of each text should be thoroughly explored. Literature should be used as a model for development and growth which becomes relevant in daily life. The NEP 2020 has emphasized literature and identified it as a tool to create cultural awareness. It promotes art and culture, fosters nationalism, and explores new insights. Engagement in different aspects of language use and practice helps a researcher in discourses and the development of analytical skills. Research not only provides higher degrees but also brings about the connection between experiences of the fictional world and individual experiences. Fundamentally we should understand that all literary works, irrespective of the genre, are about life experiences perceived by scribes at different places, during different times. Researchers in literature can understand human nature better than others and present the truth about human conditions. Literature coupled with good language skills enables a researcher to face the challenges of life. Several studies have been carried out to improve the quality of research in literature and language. The studies have found that there is a lack of trust in socio-cultural and gender issues. If the teaching fraternity did not consider this domain irrelevant there could be an improvement in the quality of research in language and literature

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-2

Types of Research

Research is about using established methods to investigate a problem or question in detail with the aim of generating new knowledge about it.

It is a vital tool for scientific advancement because it allows researchers to prove or refute hypotheses based on clearly defined parameters, environments and assumptions. Due to this, it enables us to confidently contribute to knowledge as it allows research to be verified and replicated.

Knowing the types of research and what each of them focuses on will allow you to better plan your project, utilises the most appropriate methodologies and techniques and better communicate your findings to other researchers and supervisors.

Classification of Types of Research

There are various types of research that are classified according to their objective, depth of study, analysed data, time required to study the phenomenon and other factors. It's important to note that a research project will not be limited to one type of research, but will likely use several.

According to its Purpose

Theoretical Research

Theoretical research, also referred to as pure or basic research, focuses on generating knowledge, regardless of its practical application. Here, data collection is used to

generate new general concepts for a better understanding of a particular field or to answer a theoretical research question.

Results of this kind are usually oriented towards the formulation of theories and are usually based on documentary analysis, the development of mathematical formulas and the reflection of high-level researchers.

For example, a philosophical dissertation, since the aim is to generate new approaches from existing data without considering how its findings can be applied or implemented in practice.

Applied Research

Here, the goal is to find strategies that can be used to address a specific research problem. Applied research draws on theory to generate practical scientific knowledge, and its use is very common in STEM fields such as engineering, computer science and medicine.

According to your Depth of Scope

Exploratory Research

Exploratory research is used for the preliminary investigation of a subject that is not yet well understood or sufficiently researched. It serves to establish a frame of reference and a hypothesis from which an in-depth study can be developed that will enable conclusive results to be generated.

Because exploratory research is based on the study of little-studied phenomena, it relies less on theory and more on the collection of data to identify patterns that explain these phenomena.

For example, an investigation of the role social media in the perception of self-image.

Descriptive Research

The primary objective of descriptive research is to define the characteristics of a particular phenomenon without necessarily investigating the causes that produce it.

In this type of research, the researcher must take particular care not to intervene in the observed object or phenomenon, as its behaviour may change if an external factor is involved.

For example, investigating how the public census of influential government officials differs between urban and non-urban areas.

Explanatory Research

Explanatory research is the most common type of research method and is responsible for establishing cause-and-effect relationships that allow generalisations to be extended to similar realities. It is closely related to descriptive research, although it provides additional information about the observed object and its interactions with the environment.

For example, investigating the brittle behaviour of a specific material when under compressive load.

Correlational Research

According to the Type of Data Used

Qualitative Research

Qualitative methods are often used in the social sciences to collect, compare and interpret information, has a linguistic-semiotic basis and is used in techniques such as discourse analysis, interviews, surveys, records and participant observations.

In order to use statistical methods to validate their results, the observations collected must be evaluated numerically. Qualitative research, however, tends to be subjective, since not all data can be fully controlled. Therefore, this type of research design is better suited to extracting meaning from an event or phenomenon (the 'why') than its cause (the 'how').

For example, examining the effects of sleep deprivation on mood.

Quantitative Research

Quantitative research study delves into a phenomena through quantitative data collection and using mathematical, statistical and computer-aided tools to measure them. This allows generalised conclusions to be projected over time.

For example, conducting a computer simulation on vehicle strike impacts to collect quantitative data.

According to the Degree of Manipulation of Variables

Experimental Research

It is about designing or replicating a phenomenon whose variables are manipulated under strictly controlled conditions in order to identify or discover its effect on another independent variable or object. The phenomenon to be studied is measured through study and control groups, and according to the guidelines of the scientific method.

For example, randomised controlled trial studies for measuring the effectiveness of new pharmaceutical drugs on human subjects.

Non-Experimental Research

Also known as an observational study, it focuses on the analysis of a phenomenon in its natural context. As such, the researcher does not intervene directly, but limits their involvement to measuring the variables required for the study. Due to its observational nature, it is often used in descriptive research.

For example, a study on the effects of the use of certain chemical substances in a particular population group can be considered a non-experimental study.

According to the Type of Inference

Deductive Investigation

In this type of research, reality is explained by general laws that point to certain conclusions; conclusions are expected to be part of the premise of the research problem and considered correct if the premise is valid and the inductive method is applied correctly.

Inductive Research

In this type of research, knowledge is generated from an observation to achieve a generalisation. It is based on the collection of specific data to develop new theories.

Hypothetical-Deductive Investigation

It is based on observing reality to make a hypothesis, then use deduction to obtain a conclusion and finally verify or reject it through experience.

According to the Time in Which it is Carried Out

Longitudinal Study (also referred to as Diachronic Research)

It is the monitoring of the same event, individual or group over a defined period of time. It aims to track changes in a number of variables and see how they evolve over time. It is often used in [medical, psychological and social areas](#).

For example, a cohort study that analyses changes in a particular indigenous population over a period of 15 years.

Cross-Sectional Study (also referred to as Synchronous Research)

Cross-sectional research design is used to observe phenomena, an individual or a group of research subjects at a given time.

According to The Sources of Information

Primary Research

This fundamental research type is defined by the fact that the data is collected directly from the source, that is, it consists of primary, first-hand information.

Secondary research

Unlike primary research, secondary research is developed with information from secondary sources, which are generally based on scientific literature and other documents compiled by another researcher.

According to How the Data is Obtained

Documentary (cabinet)

Documentary research, or secondary sources, is based on a systematic review of existing sources of information on a particular subject. This type of scientific research is commonly used when undertaking literature reviews or producing a case study.

Field

Field research study involves the direct collection of information at the location where the observed phenomenon occurs.

From Laboratory

Laboratory research is carried out in a controlled environment in order to isolate a dependent variable and establish its relationship with other variables through scientific methods.

Mixed-Method: Documentary, Field and/or Laboratory

Mixed research methodologies combine results from both secondary (documentary) sources and primary sources through field or laboratory research.

Classification of Types of Research

There are various types of research that are classified according to their objective, depth of study, analysed data, time required to study the phenomenon and other factors. It's important to note that a research project will not be limited to one type of research, but will likely use several.

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Applied Research

Here, the goal is to find strategies that can be used to address a specific research problem. Applied research draws on theory to generate practical scientific knowledge, and its use is very common in STEM fields such as engineering, computer science and medicine.

This type of research is subdivided into two types:

1. **Technological applied research:** looks towards improving efficiency in a particular productive sector through the improvement of processes or machinery related to said productive processes.
2. **Scientific applied research:** has predictive purposes. Through this type of research design, we can measure certain variables to predict behaviours useful to the goods and services sector, such as consumption patterns and viability of commercial projects.

For example, market research, because by examining consumption patterns, strategies can be developed for the development of new products and marketing campaigns, etc.

Note: Applied research is usually based on knowledge or results obtained through theoretical research.

In fact, it is common for research projects to first establish the theoretical framework both to define the field of study and to identify possible theories that could be tested or applied to solve the specific problem posed in the project.

According to your Depth of Scope

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For example, investigating the brittle behaviour of a specific material when under compressive load.

Correlational Research

The purpose of this type of scientific research is to identify the relationship between two or more variables. A correlational study aims to determine whether a variable changes, how much the other elements of the observed system change.

According to the Type of Data Used

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For example, a study on the effects of the use of certain chemical substances in a particular population group can be considered a non-experimental study.

Quasi-Experimental Research

It controls only some variables of the phenomenon under investigation and is therefore not entirely experimental. In this case, the study and the focus group cannot be randomly selected, but are **chosen from existing groups or populations**. This is to ensure the collected data is relevant and that the knowledge, perspectives and opinions of the population can be incorporated into the study.

For example, assessing the effectiveness of an intervention measure in reducing the spread of antibiotic-resistant bacteria.

According to the Type of Inference

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Types of research methods and example

Research methods are broadly classified as **Qualitative** and **Quantitative**.

Both methods have distinctive properties and data collection methods.

Qualitative methods

Qualitative research is a method that collects data using conversational methods, usually open-ended questions. The responses collected are essentially non-numerical. This method helps a researcher understand what participants think and why they think in a particular way.

Types of qualitative methods include:

1. One-to-one Interview
2. Focus Groups
3. Ethnographic studies
4. Text Analysis
5. Case Study

Quantitative methods

[Quantitative](#) methods deal with numbers and measurable [forms](#). It uses a systematic way of investigating events or data. It answers questions to justify relationships with measurable variables to either explain, predict, or control a phenomenon.

Types of quantitative methods include:

1. [Survey research](#)
2. [Descriptive research](#)
3. [Correlational research](#)

Remember, research is only valuable and useful when it is valid, accurate, and reliable. Incorrect results can lead to customer churn and a decrease in sales.

It is essential to ensure that your data is:

- Valid – founded, logical, rigorous, and impartial.
- Accurate – free of errors and including required details.
- Reliable – other people who investigate in the same way can produce similar results.
- Timely – current and collected within an appropriate time frame.
- Complete – includes all the data you need to support your business decisions.

Gather research insights

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-3

Selecting Research Area

Selecting a research area is the very first step in writing your dissertation. It is important for you to choose a research area that is interesting to you professionally, as well as, personally. Experienced researchers note that “a topic in which you are only vaguely interested at the start is likely to become a topic in which you have no interest and with which you will fail to produce your best work”[1]. Ideally, your research area should relate to your future career path and have a potential to contribute to the achievement of your career objectives.

Your dissertation supervisor, colleagues, family members and others can only make suggestions about your dissertation topic. But it is You who should make the final decision.

The importance of selecting a relevant research area that is appropriate for dissertation is often underestimated by many students. This decision cannot be made in haste. Ideally, you should start considering different options at the beginning of the term. However, even when there are only few weeks left before the deadline and you have not chosen a particular topic yet, there is no need to panic.

There are few areas in business studies that can offer interesting topics due to their relevance to business and dynamic nature. The following is the list of research areas and topics that can prove to be insightful in terms of assisting you to choose your own dissertation topic.

Globalization can be a relevant topic for many business and economics dissertations. Forces of globalization are nowadays greater than ever before and dissertations can address the implications of these forces on various aspects of business.

Following are few examples of research areas in globalization:

- A study of implications of COVID-19 pandemic on economic globalization
- Impacts of globalization on marketing strategies of beverage manufacturing companies: a case study of The Coca-Cola Company
- Effects of labour migration within EU on the formation of multicultural teams in UK organizations
- A study into advantages and disadvantages of various entry strategies to Chinese market
- A critical analysis of the effects of globalization on US-based businesses

Corporate Social Responsibility (CSR) is also one of the most popular topics at present and it is likely to remain so for the foreseeable future. CSR refers to additional responsibilities of business organizations towards society apart from profit maximization. There is a high level of controversy involved in CSR. This is because businesses can be socially responsible only at the expense of their primary objective of profit maximization.

Perspective researches in the area of CSR may include the following:

- The impacts of CSR programs and initiatives on brand image: a case study of McDonald's India
- A critical analysis of argument of mandatory CSR for private sector organizations in Australia

- A study into contradictions between CSR programs and initiatives and business practices: a case study of Philip Morris Philippines
- A critical analysis into the role of CSR as an effective marketing tool
- A study into the role of workplace ethics for improving brand image

Social Media and viral marketing relate to increasing numbers of various social networking sites such as Facebook, Twitter, Instagram, YouTube etc. Increasing levels of popularity of social media among various age groups create tremendous potential for businesses in terms of attracting new customers.

The following can be listed as potential studies in the area of social media:

- A critical analysis of the use of social media as a marketing strategy: a case study of Burger King Malaysia
- An assessment of the role of Instagram as an effective platform for viral marketing campaigns
- A study into the sustainability of TikTok as a marketing tool in the future
- An investigation into the new ways of customer relationship management in mobile marketing environment: a case study of catering industry in South Africa
- A study into integration of Twitter social networking website within integrated marketing communication strategy: a case study of Microsoft Corporation

Culture and cultural differences in organizations offer many research opportunities as well. Increasing importance of culture is directly related to intensifying forces of globalization in a way that globalization forces are fuelling the formation of cross-cultural teams in organizations.

Perspective researches in the area of culture and cultural differences in organizations may include the following:

- The impact of cross-cultural differences on organizational communication: a case study of BP plc
- A study into skills and competencies needed to manage multicultural teams in Singapore
- The role of cross-cultural differences on perception of marketing communication messages in the global marketplace: a case study of Apple Inc.
- Effects of organizational culture on achieving its aims and objectives: a case study of Virgin Atlantic
- A critical analysis into the emergence of global culture and its implications in local automobile manufacturers in Germany

Leadership and leadership in organizations has been a popular topic among researchers for many decades by now. However, the importance of this topic may be greater now than ever before. This is because rapid technological developments, forces of globalization and a set of other factors have caused markets to become highly competitive. Accordingly, leadership is important in order to enhance competitive advantages of organizations in many ways.

The following studies can be conducted in the area of leadership:

- Born or bred: revisiting The Great Man theory of leadership in the 21st century

- A study of effectiveness of servant leadership style in public sector organizations in Hong Kong
- Creativity as the main trait for modern leaders: a critical analysis
- A study into the importance of role models in contributing to long-term growth of private sector organizations: a case study of Tata Group, India
- A critical analysis of leadership skills and competencies for E-Commerce organizations

COVID-19 pandemic and its macro and micro-economic implications can also make for a good dissertation topic. Pandemic-related crisis has been like nothing the world has seen before and it is changing international business immensely and perhaps, irreversibly as well.

The following are few examples for pandemic crisis-related topics:

- A study into potential implications of COVID-19 pandemic into foreign direct investment in China
- A critical assessment of effects of COVID-19 pandemic into sharing economy: a case study of AirBnb.
- The role of COVID-19 pandemic in causing shifts in working patterns: a critical analysis

Moreover, dissertations can be written in a wide range of additional areas such as customer services, supply-chain management, consumer behaviour, human resources management, catering and hospitality, strategic management etc. depending on your professional and personal interests.

How to select the right research topic?

Choosing the right research topic is one of the most important decisions a student should make during his/her academic career. Writing an academic paper necessitates a certain set of skills and inclinations. The most difficult component of a good master's program is finding the right approach and dedication to produce a contemporary relevant piece of research.

How to choose your research topic?

You can usually build your study topic in one of two ways:

- Make a unique study subject suggestion. This is the most prevalent option in the humanities, business, and law fields of study.

- A supervisor will give you a selection of available study topics. This option isn't always available, but in science and engineering, it's the most prevalent.

Early on, talk to a possible supervisor about your ideas. They'll be guide you with the best possibilities as well as offer advice.

How to come up with a unique and good research topic?

Here are some tips to guide you, if you want to suggest an original topic:

- Find a subject that interests you by reading a variety of materials.
- Become completely immersed in journal articles and theses related to your field.
- Concentrate on a single research question. Be detailed, unique, and realistic about what you can accomplish.
- Make an effort to be adaptable. Some of your initial ideas are likely to be challenged as your investigation progresses. If necessary, you may need to modify your question.
- Make sure you are up-to-date on the latest advances in your industry. This will guarantee that your proposal is feasible and has not already been implemented.
- Talk to a friend about research ideas. She or he may be able to help you narrow down your topic by bringing up topics that you hadn't considered.
- Consider the following questions: why, who, what, where, and when:
 - **WHY** did you choose the topic? What interests you about it? Do you have any opinion about the issues involved?
 - **WHO** are the sources of information on this topic? Who might publish information about it? Who is affected by the topic? Do you

know of organizations or institutions that are connected with the topic?

- **WHAT** are the most important questions about this topic? Is there a debate regarding the topic? Is there a wide range of subjects and viewpoints to consider?
- **WHERE** does your topic matter most: at the local, national or international level? Is the topic affecting any specific locations?
- **WHEN** is/was your topic important? Is this a current issue or one from the past? Do you wish to compare your subject to different eras?

Selecting a Topic

The ability to develop a good research topic is an important skill. An instructor may assign you a specific topic, but most often instructors require you to select your own topic of interest. When deciding on a topic, there are a few things that you will need to do:

- Brainstorm for ideas.
- Choose a topic that will enable you to read and understand the articles and books you find.
- Ensure that the topic is manageable and that material is available.
- Make a list of key words.
- Be flexible. You may have to broaden or narrow your topic to fit your assignment or the sources you find.

Selecting a good topic may not be easy. It must be narrow and focused enough to be interesting, yet broad enough to find adequate information. Before selecting your final topic, make sure you know what your final project should look like. Each class or instructor will likely require a different format or style of research project.

Brainstorming for a Topic

Choose a topic that interests you. Use the following questions to help generate topic ideas.

- Do you have a strong opinion on a current social or political controversy?
- Did you read or see a news story recently that has piqued your interest or made you angry or anxious?
- Do you have a personal issue, problem, or interest that you would like to know more about?
- Is there an aspect of a class that you are interested in learning more about?

Write down any key words or concepts that may be of interest to you. These terms can be helpful in your searching and used to form a more focused research topic.

Be aware of overused ideas when deciding a topic. You may wish to avoid topics such as abortion, gun control, teen pregnancy, or suicide unless you feel you have a unique approach to the topic. Ask the instructor for ideas if you feel you are stuck or need additional guidance.

What is a Research Objective?

A research objective is defined as a clear and concise statement of the specific goals and aims of a research study. It outlines what the researcher intends to accomplish and what they hope to learn or discover through their research. Research objectives are crucial for guiding the [research process](#) and ensuring that the study stays focused and on track.

Key characteristics of research objectives include:

- **Clarity:** Research objectives should be clearly defined and easy to understand. One should ensure there is no space for ambiguity or misinterpretation.
- **Specificity:** Objectives should be specific and narrowly focused on the aspects of the [research](#) topic that the study intends to investigate. They should answer the question of “what” or “which” rather than “how” or “why.”
- **Measurability:** Research objectives should be formulated in a way that allows for measurement and evaluation. This means that there should be a way to determine whether the objectives have been achieved or not.
- **Relevance:** Objectives should be relevant to the research topic and align with the overall research question or hypothesis. They should address important aspects of the subject matter.
- **Realistic:** Objectives should be attainable within the constraints of the study, including time, resources, and feasibility.
- **Time-bound:** Research objectives may have associated timelines or deadlines to indicate when the [research](#) aims should be accomplished.

Research objectives help researchers stay focused on the purpose of their study and guide the development of [research methods](#), data collection, and analysis. They also serve as a basis for evaluating the success of the research once it's completed. In the context of a research

project, research objectives typically follow the formulation of a research question or hypothesis and serve as a roadmap for conducting the study.

How do I write a research objective?

Before you write your objective, you need a [problem statement](#), which you can source from your support team and the frequent customer issues they encounter, [negative customer reviews](#), or feedback from social media. From there, your objective might look like, “Do people find value in this new product idea?” or “How do our competitors describe their offerings compared to us?”

Many UX researchers agree that the more specific the objectives, the easier it is to write tasks and questions. Subsequently, it'll also be easier to extract answers later on in the analysis. In addition, your objective doesn't have to spark one angle alone; it could have the potential to inspire multiple test directions. For instance, take this research objective, “I want to understand and resolve the barriers customers face when looking for answers about products and services on our website.”

From this one objective, potential study angles could be:

- **Content quality:** Learn whether the FAQ questions anticipate users' needs and if the answers are sufficiently detailed and directive.
- **FAQ accessibility:** Can customers easily find the FAQ section? What access points should we consider?
- **FAQ concept test:** Is the design approach we're considering for the proposed redesign understandable? What can we do to optimize it?

As you can see, the above objective can be branched out to address content, usability, and design. For further inspiration, collaborate with the product's stakeholders. You can start the conversation at a high level by determining what features or processes they want test participants to review, like a navigation menu or website messaging.

And before you put a stamp of approval on a research objective, ask for feedback from your team. Two researchers could write very different test plans when an objective is unclear or misaligned. For example, one researcher may hone in on design while another focuses on usability. Meanwhile, another may keep their objective more broad while another writes on that's more detailed. And while the findings from either case would be insightful, they might not match up with what the team actually needs to learn. So to summarize, start the process with a problem statement, loop in stakeholders early if applicable, and ensure your team is aligned on your objective(s).

When should I write a research objective—and how should they be prioritized?

Writing and [refining your research objective](#) should come after you have a clear problem statement and before you [decide on a research method](#) and test plan to execute your study.

After you've written a rough draft of your research objective, the ink might not even be dry when stakeholders could get involved by offering you an abundance of objectives. To figure out what to tackle first, ask your stakeholders to prioritize their needs. This step could happen via email or in a meeting, but another method could be to list out all of the possible objectives in a Google form and have everyone rearrange the list into their ideal order.

And if stakeholders haven't handed you a list of objectives and you're on your own for brainstorming and prioritizing, opt for the objective that's tied to a KPI—from increasing website conversions to driving more daily active users in your SaaS product. This will help you size up the relevance and impact your research has on the metrics your business is measuring. The added benefit here is when you're asked about the impact of that research, you can tie back your ROI calculations to tangible and relatable objectives that you know the business is tracking.

How many research objectives do I need?

The type of research you do will depend on [the stage of product development](#) you're in. Each stage of development has different research objectives—and different questions that need to be answered. And once you've decided on a problem statement, you could either have one or multiple research objectives that tie back to that statement. Typically, this means that you'll want to select one to three objectives; the less you have, the more manageable your test (and timeline) will be.

For more, [the UserTesting template library](#) is a great place to start for common questions that you need answers to or inspiration for your research objective.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-4

How to Define a Research Problem | Ideas & Examples

A research problem is a specific issue, difficulty, contradiction, or gap in knowledge that you will aim to address in your research. You might look for practical problems aimed at contributing to change, or theoretical problems aimed at expanding knowledge.

Bear in mind that some research will do both of these things, but usually the research problem focuses on one or the other. The type of research problem you choose depends on your broad [topic](#) of interest and the [type of research](#) you want to do.

This article helps you identify and refine a research problem. When writing your [research proposal](#) or [introduction](#), you will have to formulate it as a [problem statement](#) and/or [research questions](#).

Why is the research problem important?

Your topic is interesting and you have lots to say about it, but this isn't a strong enough basis for academic research. Without a well-defined research problem, you are likely to end up with an unfocused and unmanageable project.

You might end up repeating what other people have already said, trying to say too much, or doing research without a clear purpose and justification. You need a problem in order to do research that contributes new and relevant insights.

Whether you're planning your thesis, starting a [research paper](#) or writing a [research proposal](#), the research problem is the first step towards knowing exactly what you'll do and why.

Step 1: Identify a broad problem area

As you discuss and read about your topic, look for under-explored aspects and areas of concern, conflict or controversy. Your goal is to find a gap that your research project can fill.

Practical research problems

If you are doing practical research, you can identify a problem by reading reports, following up on previous research, and talking to people who work in the relevant field or organization. You might look for:

- Issues with performance or efficiency in an organization
- Processes that could be improved in an institution
- Areas of concern among practitioners in a field
- Difficulties faced by specific groups of people in society

If your research is connected to a job or internship, you will need to find a research problem that has practical relevance for the organization.

Voter turnout in region X has been decreasing, in contrast to the rest of the country.
Department A of Company B has a high staff turnover rate, affecting productivity and team cohesion.

Non-profit organization Y faces a funding gap that means some of its programs will have to be cut.

Theoretical research problems

Theoretical research focuses on expanding knowledge and understanding rather than directly contributing to change. You can identify a research problem by reading recent research, theory and debates on your topic to find a gap in what is currently known about it. You might look for:

- A phenomenon or context that has not been closely studied
- A contradiction between two or more perspectives
- A situation or relationship that is not well understood
- A troubling question that has yet to be resolved

Theoretical problems often have practical consequences, but they are not focused on solving an immediate issue in a specific place (though you might take a [case study](#) approach to the research).

Examples of theoretical research problems

The effects of long-term Vitamin D deficiency on cardiovascular health are not well understood.

The relationship between gender, race and income inequality has yet to be closely studied in the context of the millennial gig economy.

Historians of Scottish nationalism disagree about the role of the British Empire in the development of Scotland's national identity.

What is the Statement of the Problem in Research?

A statement of problem refers to the critical issue that your research seeks to address. In other words, it captures the existing knowledge gap that your study aims to bridge using reliable results or outcomes. A problem statement can be as little as a few sentences or go all the way to several paragraphs—what matters is it communicates the central focus of your study.

As your study bridges this gap, it also leaves room for future investigations. The implication is that your problem statement should not be too broad; instead, it should address one specific issue and contribute to the knowledge pool for further research.

Use for Free: [Research Form Templates](#)

What are the Features of a Good Problem Statement?

A good problem statement captures the core purpose of your study in simple, clear, and direct terms. Some other tell-tale signs of a well-written research statement of problem include:

1. A good problem statement is concrete and concise. It doesn't capture ideas vaguely or ambiguously.
2. It allows you to contextualize the research problem.
3. A good problem statement helps you to set the aims and objectives of your systematic investigation.
4. It justifies your research and draws attention to the study's significance.

Why is a Problem Statement Important in Research Writing?

Writing a good problem statement serves both the researcher and the readers. For the researcher, the problem statement helps you visualize the scope of your project and outline it accordingly. Also, it allows you to map out specific aims and objectives for your study.

On the flip side, the problem statement helps the reader identify the core reason for your research and see how your work fits into the existing body of knowledge. It helps them get on the same page as you regarding the importance and significance of your systematic investigation.

If you require funding for your research, a problem statement can help potential financiers to see why investing in your project is the right move to make. It gives them an overview of the existing problem, your solution, and the impact of your solution on the field of study.

Elements and Structure of a Problem Statement

In its most basic form, a problem statement comprises three(3) elements which are:

1. The research problem
2. The claim or working thesis
3. The significance of the study

In other words, it tells the reader what you're trying to solve, how you plan to solve it, and why you want to solve it.

1. The Research Problem

Your research problem is the reason for your systematic investigation. It is the gap you identified and planned to fill based on the results of your study. You can also think of this as the [primary research](#) question.

A few questions you should ask yourself here include:

1. Is it clear what's being described in this problem statement?
2. Do I understand the main problem being described here?
3. Do I have a good grasp of what the main issue is here?

2. The Claim or Working Thesis

Your working thesis is the first attempt at asserting your position, and it spells out your stance on the matter at a specific point in time. It's called a "working" thesis because it is subject to change as your study progresses. In your working thesis, you have the chance to justify your position by providing primary and secondary claims that support your position.

3. The Significance of the Study

This is the point where you communicate the value of your research and show readers why it is necessary in the first place. Here, you can discuss the impact of your work and its relevance to your field of study. Don't forget to highlight the contributions of your work to existing knowledge and how others will benefit from it.

Read: [Research Report: Definition, Types + \[Writing Guide\]](#)

What is the Difference Between a Thesis Statement and a Problem Statement?

A problem statement focuses on the specific issue you've identified and hope to resolve with your research. It comprises the research problem, claim, or working statement and the significance of your research. On the other hand, a thesis statement makes a specific claim or assertion open for debate.

For example, the statement "writing is more of a science than an art" is an excellent example of a thesis statement because it proposes an idea that may be true or false. Once you establish the thesis statement for your research, you are expected to provide evidence and build a strong argument that supports this claim.

What are the Steps for Writing a Problem Statement?

1. Define Your Research Context
2. State Why The Problem Matters
3. State the Financial Cost
4. Back Up Your Claims
5. Propose A Solution
6. Conclude By Summarizing the Problem and Solution

1. Define Your Research Context

The first thing you need to do is build a solid context that makes it easier for readers to understand the problem. A hack for this is to describe an ideal world where the problem doesn't exist. In other words, help your readers to visualize how different things would be if they didn't have to deal with this problem in the first place.

For example, if you're researching the rise in the number of train accidents in London, start by describing how the process would function if the current problem didn't exist. When you've done this, you can refer to the research problem at the end of your explanation.

2. State Why the Problem Matters

You should let readers in on why the problem matters and why you must address it at this point. In other words, answer the question, "why is it important that we fix this particular problem?" What difference would it make?

Your job here is to show the reader why your research problem is the biggest elephant in the room. You may also consider including what attempts have already been made to solve the problem and why they didn't work out.

3. State the Financial Cost

If there's a financial implication of not fixing the problem, then it's a good idea to state it here. This is more useful if you're pitching for funding for your research.

4. Back Up Your Claims

It's not enough to say that the problem has some negative impact on other people or your organization; you must back up all of these claims with well-researched data. This is the point where you pull up information from relevant secondary data sources and reference them in your work.

5. Proffer a Solution

Now that we know the problem, the next question is, "what can be done about it"? To answer this, you need to propose a practical solution to the research problem. Take time to demonstrate why this is the most pragmatic solution and why it will work. More importantly, focus on the impact of your solution and hint at its benefits.

6. Conclude By Summarizing the Problem and Solution

Your conclusion should consist of the problem, why it needs to be fixed, and a summarized argument of why your solution is the best answer to the problem.

Sample Problem Statement

Problem: The [use of hard drugs](#) amongst teenagers in the District of Columbia has increased significantly over the past decade.

Background: According to the Drug Abuse Statistics Organization data, 50% of teenagers have misused a drug at least once.

Teenagers in the District of Columbia are 11.94% more likely to have used drugs in the last month than the average American teen.

Existing data shows that this is a significant problem but fails to address the root causes of rising teenage drug abuse in the state.

Therefore, more research is required to identify why teenagers in Colombia abuse drugs and proffer solutions to this menace.

Relevance: Young people who abuse drugs expose themselves to many risks, including life-threatening conditions and mental health-related problems. Drug abuse can impact the brain's ability to function in the short term and prevent proper growth and development in the long term. Data shows that teenagers who use hard drugs are more likely to be disillusioned. Addressing this problem will give concerned parties the much-needed insights to help them curtail drug abuse.

Objectives: This research aims to identify the root causes of teenage drug abuse and map out actionable solutions to address this.

Mistakes to Avoid when Writing Problem Statements

A good problem statement sets the tone for the rest of your dissertation, so you want to get it right. That said, here are some

things you should have at the back of your mind as you craft a problem statement for your research paper.

1. Make sure your problem statement is straight to the point. Every sentence should reinforce the importance of your study.
2. Narrow the scope of your problem statement.
3. Avoid unnecessary jargon and highly technical language.
4. Build a logical argument that will convince the reader
5. Emphasize the "why" of the problem

FAQ About Writing a Statement of the Problem

How do you identify a research problem?

The best way to identify a research problem is to read through existing studies to discover any gaps in knowledge. You can also discover research problems by observing your environment and identifying any contradictions that exist among perspectives.

Conclusion

Whether you're seeking funding for your research or approval from your professor, you need to write a well-defined statement of the problem. A problem statement allows you to pitch the core idea of your study and show others why it is worth being addressed. It should draw attention to the core idea of your research, and convince others to invest in your systematic investigation.

What Makes a Good Research Statement?

A good problem statement begins by introducing the broad area in which your research is centered, gradually leading the reader to the more specific issues you are investigating. The statement need not be lengthy, but a good research problem should incorporate the following features:

1. Compelling Topic

The problem chosen should be one that motivates you to address it but simple curiosity is not a good enough reason to pursue a research study because this does not indicate significance. The problem that you choose to explore must be important to you, but it must also be viewed as important by your readers and to the larger academic and/or social community that could be impacted by the results of your study.

2. Supports Multiple Perspectives

The problem must be phrased in a way that avoids dichotomies and instead supports the generation and exploration of multiple perspectives. A general rule of thumb in the social sciences is that a good research problem is one that would generate a variety of viewpoints from a composite audience made up of reasonable people.

3. Research ability

This isn't a real word but it represents an important aspect of creating a good research statement. It seems a bit obvious, but you don't want to find yourself in the midst of investigating a complex research project and realize that you don't have enough prior research to draw from for your analysis. There's nothing inherently wrong with original research, but you must choose research problems that can be supported, in some way, by the resources available to you. **If you are not sure if something is researchable,**

don't assume that it isn't if you don't find information right away--seek [help from a librarian!](#)

NOTE: Do not confuse a research problem with a research topic. A topic is something to read and obtain information about, whereas a problem is something to be solved or framed as a question raised for inquiry, consideration, or solution, or explained as a source of perplexity, distress, or vexation. In short, a research topic is something to be understood; a research problem is something that needs to be investigated.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-5

What is a Research Question?

A research question is a specific inquiry which the research seeks to provide a response to. It resides at the core of systematic investigation and it helps you to clearly define a path for the research process.

A research question is usually the first step in any research project. Basically, it is the primary interrogation point of your research and it sets the pace for your work.

Typically, a research question focuses on the research, determines the methodology and hypothesis, and guides all stages of inquiry, analysis, and reporting. With the right research questions, you will be able to gather useful information for your investigation.

Types of Research Questions

Research questions are broadly categorized into 2; that is, qualitative research questions and quantitative research questions. [Qualitative and quantitative research questions](#) can be used independently and co-dependently in line with the overall focus and objectives of your research.

If your research aims at collecting [quantifiable data](#), you will need to make use of quantitative research questions. On the other hand, qualitative questions help you to

gather [qualitative data](#) bothering on the perceptions and observations of your research subjects.

Qualitative Research Questions

A qualitative research question is a type of systematic inquiry that aims at collecting qualitative data from research subjects. The aim of qualitative research questions is to gather non-statistical information pertaining to the experiences, observations, and perceptions of the research subjects in line with the objectives of the investigation.

Types of Qualitative Research Questions

- **Ethnographic Research Questions**

As the name clearly suggests, ethnographic research questions are inquiries presented in ethnographic research. [Ethnographic research](#) is a qualitative research approach that involves observing variables in their natural environments or habitats in order to arrive at objective research outcomes.

These research questions help the researcher to gather insights into the habits, dispositions, perceptions, and behaviors of research subjects as they interact in specific environments.

Ethnographic research questions can be used in education, business, medicine, and other fields of study, and they are very useful in contexts aimed at collecting in-depth and specific information that are peculiar to research variables. For instance, asking educational ethnographic research questions can help you understand how pedagogy affects classroom relations and behaviors.

This type of research question can be administered physically through one-on-one interviews, naturalism (live and work), and participant observation methods. Alternatively, the researcher can ask ethnographic research questions via online surveys and questionnaires created with Formplus.

Examples of Ethnographic Research Questions

1. Why do you use this product?
2. Have you noticed any side effects since you started using this drug?
3. Does this product meet your needs?

- **Case Studies**

A case study is a qualitative research approach that involves carrying out a detailed investigation into a research subject(s) or variable(s). In the course of a case study, the

researcher gathers a range of data from multiple sources of information via different data collection methods, and over a period of time.

The aim of a case study is to analyze specific issues within definite contexts and arrive at detailed research subject analyses by asking the right questions. This research method can be explanatory, [descriptive](#), or [exploratory](#) depending on the focus of your systematic investigation or research.

An explanatory case study is one that seeks to gather information on the causes of real-life occurrences. This type of case study uses “how” and “why” questions in order to gather valid information about the causative factors of an event.

Descriptive case studies are typically used in business researches, and they aim at analyzing the impact of changing market dynamics on businesses. On the other hand, exploratory case studies aim at providing answers to “who” and “what” questions using data collection tools like interviews and questionnaires.

Some questions you can include in your case studies are:

1. Why did you choose our services?
2. How has this policy affected your business output?
3. What benefits have you recorded since you started using our product?

- **Interviews**

An interview is a qualitative research method that involves asking respondents a series of questions in order to gather information about a research subject. Interview questions can be [close-ended](#) or [open-ended](#), and they prompt participants to provide valid information that is useful to the research.

An [interview may also be structured, semi-structured](#), or [unstructured](#), and this further influences the types of questions they include. Structured interviews are made up of more close-ended questions because they aim at gathering quantitative data while unstructured interviews consist, primarily, of open-ended questions that allow the researcher to collect qualitative information from respondents.

You can conduct interview research by scheduling a physical meeting with respondents, through a telephone conversation, and via digital media and video conferencing platforms like Skype and Zoom. Alternatively, you can use Formplus surveys and questionnaires for your interview.

Examples of interview questions include:

1. What challenges did you face while using our product?
2. What specific needs did our product meet?

3. What would you like us to improve our service delivery?

Quantitative Research Questions

Quantitative research questions are questions that are used to gather quantifiable data from research subjects. These types of research questions are usually more specific and direct because they aim at collecting information that can be measured; that is, statistical information.

Types of Quantitative Research Questions

- **Descriptive Research Questions**

Descriptive research questions are inquiries that researchers use to gather quantifiable data about the attributes and characteristics of research subjects. These types of questions primarily seek responses that reveal existing patterns in the nature of the research subjects.

It is important to note that [descriptive research](#) questions are not concerned with the causative factors of the discovered attributes and characteristics. Rather, they focus on the “what”; that is, describing the subject of the research without paying attention to the reasons for its occurrence.

Descriptive research questions are typically closed-ended because they aim at gathering definite and specific responses from research participants. Also, they can be used in [customer experience surveys](#) and [market research](#) to collect information about target markets and consumer behaviors.

Descriptive Research Question Examples

1. How often do you make use of our fitness application?
2. How much would you be willing to pay for this product?

- **Comparative Research Questions**

A comparative research question is a type of quantitative research question that is used to gather information about the differences between two or more research subjects across different variables. These types of questions help the researcher to identify distinct features that mark one research subject from the other while highlighting existing similarities.

Asking comparative research questions in [market research surveys](#) can provide insights on how your product or service matches its competitors. In addition, it can

help you to identify the strengths and weaknesses of your product for a better competitive advantage.

The 5 steps involved in the framing of comparative research questions are:

1. Choose your starting phrase
2. Identify and name the dependent variable
3. Identify the groups you are interested in
4. Identify the appropriate adjoining text
5. Write out the comparative research question

Comparative Research Question Samples

1. What are the differences between a landline telephone and a smartphone?
2. What are the differences between work-from-home and on-site operations?

- **Relationship-based Research Questions**

Just like the name suggests, a relationship-based research question is one that inquires into the nature of the association between two research subjects within the same demographic. These types of research questions help you to gather information pertaining to the nature of the association between two research variables.

Relationship-based research questions are also known as correlational research questions because they seek to clearly identify the link between 2 variables.

Read: [Correlational Research Designs: Types, Examples & Methods](#)

Examples of relationship-based research questions include:

1. What is the relationship between purchasing power and the business site?
2. What is the relationship between the work environment and workforce turnover?

Examples of a Good Research Question

Since research questions lie at the core of any systematic investigations, it is important to know how to frame a good research question. The right research questions will help

you to gather the most objective responses that are useful to your systematic investigation.

A good research question is one that requires impartial responses and can be answered via existing sources of information. Also, a good research question seeks answers that actively contribute to a body of knowledge; hence, it is a question that is yet to be answered in your specific research context.

- **Open-Ended Questions**

An [open-ended question](#) is a type of research question that does not restrict respondents to a set of premeditated answer options. In other words, it is a question that allows the respondent to freely express his or her perceptions and feelings towards the research subject.

Examples of Open-ended Questions

1. How do you deal with stress in the workplace?
2. What is a typical day at work like for you?

- **Close-ended Questions**

A [close-ended question](#) is a type of survey question that restricts respondents to a set of predetermined answers such as [multiple-choice questions](#). Close-ended questions typically require yes or no answers and are commonly used in quantitative research to gather [numerical data](#) from research participants.

Examples of Close-ended Questions

- Did you enjoy this event?
 1. Yes
 2. No
- How likely are you to recommend our services?
 1. Very Likely
 2. Somewhat Likely
 3. Unlikely

- **Likert Scale Questions**

A Likert scale question is a type of close-ended question that is structured as [a 3-point, 5-point, or 7-point psychometric scale](#). This type of question is used to measure the survey respondent's disposition towards multiple variables and it can be unipolar or bipolar in nature.

Example of Likert Scale Questions

- How satisfied are you with our service delivery?
 1. Very dissatisfied
 2. Not satisfied
 3. Neutral
 4. Satisfied
 5. Very satisfied
- **Rating Scale Questions**

A [rating scale](#) question is a type of close-ended question that seeks to associate a specific qualitative measure (rating) with the different variables in research. It is commonly used in customer experience surveys, market research surveys, employee reviews, and product evaluations.

Example of Rating Questions

- How would you rate our service delivery?
 1. Excellent
 2. Good
 3. Neutral
 4. Bad
 5. Very bad

Examples of a Bad Research Question

Knowing what bad research questions are would help you avoid them in the course of your systematic investigation. These types of questions are usually unfocused and often result in research biases that can negatively impact the outcomes of your systematic investigation.

- **Loaded Questions**

A loaded question is a question that subtly presupposes one or more unverified assumptions about the research subject or participant. This type of question typically boxes the respondent in a corner because it suggests implicit and explicit biases that prevent objective responses.

Example of Loaded Questions

1. Have you stopped smoking?
 2. Where did you hide the money?
- **Negative Questions**

A negative question is a type of question that is structured with an implicit or explicit negator. Negative questions can be misleading because they upturn the typical yes/no response order by requiring a negative answer for affirmation and an affirmative answer for negation.

Examples of Negative Questions

1. Would you mind dropping by my office later today?
2. Didn't you visit last week?

- **Leading Questions**

A lleading question is a type of survey question that nudges the respondent towards an already-determined answer. It is highly suggestive in nature and typically consists of biases and unverified assumptions that point toward its premeditated responses.

Examples of Leading Questions

1. If you enjoyed this service, would you be willing to try out our other packages?
2. Our product met your needs, didn't it?

University of Global Village (UGV)

Department of English

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Week-6

Hypothesis

A hypothesis is a statement that explains the predictions and reasoning of your research—an “educated guess” about how your scientific experiments will end. As a fundamental part of the scientific method, a good hypothesis is carefully written, but even the simplest ones can be difficult to put into words.

What is a hypothesis?

One of our [10 essential words for university success](#), a **hypothesis** is one of the earliest stages of the scientific method. It's essentially an educated guess—based on observations—of what the results of your experiment or research will be.

If you've noticed that watering your plants every day makes them grow faster, your hypothesis might be "plants grow better with regular watering." From there, you can begin experiments to test your hypothesis; in this example, you might set aside two plants, water one but not the other, and then record the results to see the differences.

The language of hypotheses always discusses **variables**, or the elements that you're testing. Variables can be objects, events, concepts, etc.—whatever is observable.

There are two types of variables: independent and dependent. **Independent variables** are the ones that you change for your experiment, whereas **dependent variables** are the ones that you can only observe. In the above example, our independent variable is how often we water the plants and the dependent variable is how well they grow.

Hypotheses determine the direction and organization of your subsequent research methods, and that makes them a big part of [writing a research paper](#). Ultimately the reader wants to know whether your hypothesis was proven true or false, so it must be written clearly in the [introduction](#) and/or [abstract](#) of your paper.

How to write a hypothesis in 6 steps

1 Ask a question

Curiosity has inspired some of history's greatest scientific achievements, so a good place to start is to ask yourself questions about the world around you. Why are things the way they are? What causes the factors you see around you? If you can, choose a research topic that you're interested in so your curiosity comes naturally.

2 Conduct preliminary research

Next, collect some background information on your topic. How much background information you need depends on what you're attempting. It could require reading several books, or it could be as simple as performing

a web search for a quick answer. You don't necessarily have to prove or disprove your hypothesis at this stage; rather, collect only what you need to prove or disprove it yourself.

3 Define your variables

Once you have an idea of what your hypothesis will be, select which variables are independent and which are dependent. Remember that independent variables can only be factors that you have absolute control over, so consider the limits of your experiment before finalizing your hypothesis.

4 Phrase it as an if-then statement

When writing a hypothesis, it helps to phrase it using an if-then format, such as, “*If I water a plant every day, then it will grow better.*” This format can get tricky when dealing with multiple variables, but in general, it's a reliable method for expressing the cause-and-effect relationship you're testing.

5 Collect data to support your hypothesis

A hypothesis is merely a means to an end. The priority of any scientific research is the conclusion. Once you have your hypothesis laid out and your variables chosen, you can then begin your experiments. Ideally, you'll collect data to support your hypothesis, but don't worry if your research ends up proving it wrong—that's all part of the scientific method.

6 Write with confidence

Last, you'll want to record your findings in a research paper for others to see. This requires a bit of writing know-how, quite a different skill set than conducting experiments.

That's where Grammarly can be a major help; our writing suggestions point out not only [grammar](#) and [spelling mistakes](#), but also new [word choices](#) and better phrasing. While you write, Grammarly automatically recommends optimal language and highlights areas where readers might get confused, ensuring that your hypothesis—and your final paper—are clear and polished.

What makes a good hypothesis?

No matter what you're testing, a good hypothesis is written according to the same guidelines. In particular, keep these five characteristics in mind:

Cause and effect

Hypotheses always include a cause-and-effect relationship where one variable causes another to change (or *not* change if you're using a null hypothesis). This can best be reflected as an if-then statement: If one variable occurs, then another variable changes.

Testable prediction

Most hypotheses are designed to be tested (with the exception of logical hypotheses). Before committing to a hypothesis, make sure you're actually able to conduct experiments on it. Choose a testable hypothesis with an independent variable that you have absolute control over.

Independent and dependent variables

Define your variables in your hypothesis so your readers understand the big picture. You don't have to specifically say which ones are independent and dependent variables, but you definitely want to mention them all.

Candid language

[Writing](#) can easily get convoluted, so make sure your hypothesis remains as simple and clear as possible. Readers use your hypothesis as a contextual pillar to unify your entire paper, so there should be no confusion or ambiguity. If you're unsure about your phrasing, try reading your hypothesis to a friend to see if they understand.

Adherence to ethics

It's not always about what you *can* test, but what you *should* test. Avoid hypotheses that require questionable or taboo experiments to keep ethics (and therefore, credibility) intact.

7 examples of hypotheses (with examples)

Depending on the nature of your research and what you expect to find, your hypothesis will fall into one or more of the seven main categories. Keep in mind that these categories are not exclusive, so the same hypothesis might qualify as several different types.

1 Simple hypothesis

A simple hypothesis suggests only the relationship between two variables: one independent and one dependent.

Examples:

- If you stay up late, then you feel tired the next day.
- Turning off your phone makes it charge faster.

2 Complex hypothesis

A complex hypothesis suggests the relationship between more than two variables, for example, two independents and one dependent, or vice versa.

Examples:

- People who both (1) eat a lot of fatty foods and (2) have a family history of health problems are more likely to develop heart diseases.
- Older people who live in rural areas are happier than younger people who live in rural areas.

3 Null hypothesis

A null hypothesis, abbreviated as H_0 , suggests that there is no relationship between variables.

Examples:

- There is no difference in plant growth when using either bottled water or tap water.
- Professional psychics do not win the lottery more than other people.

4 Alternative hypothesis

An alternative hypothesis, abbreviated as H_1 or H_A , is used in conjunction with a null hypothesis. It states the opposite of the null hypothesis, so that one and only one must be true.

Examples:

- Plants grow better with bottled water than tap water.
- Professional psychics win the lottery more than other people.

5 Logical hypothesis

A logical hypothesis suggests a relationship between variables *without* actual evidence. Claims are instead based on reasoning or deduction, but lack actual data.

Examples:

- An alien raised on Venus would have trouble breathing in Earth's atmosphere.
- Dinosaurs with sharp, pointed teeth were probably carnivores.

6 Empirical hypothesis

An empirical hypothesis, also known as a “working hypothesis,” is one that is currently being tested. Unlike logical hypotheses, empirical hypotheses rely on concrete data.

Examples:

- Customers at restaurants will tip the same even if the wait staff's base salary is raised.
- Washing your hands every hour can reduce the frequency of illness.

7 Statistical hypothesis

A statistical hypothesis is when you test only a sample of a population and then apply statistical evidence to the results to draw a conclusion about the entire population. Instead of testing *everything*, you test only a portion and generalize the rest based on preexisting data.

Examples:

- In humans, the birth-gender ratio of males to females is 1.05 to 1.00.
- Approximately 2% of the world population has natural red hair.

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Course Code: ENG-418

Week-7

What is a research framework?

A research framework is a set of concepts, principles, and guidelines that shape and guide your research process. It helps you to define your research problem, objectives, questions, hypotheses, assumptions, and limitations. It also helps you to choose your research design, methods, data collection, analysis, and interpretation. A research framework can be derived from a theory, a model, a paradigm, or a perspective.

A research framework refers to the overall structure, approach, and theoretical underpinnings that guide a research study. It is a systematic way of organizing and conceptualizing the research process, including the research question, data collection methods, analysis techniques, and interpretation of findings. The framework provides a set of guidelines and principles that researchers use to guide their work and ensure that the study is rigorous, valid, and reliable. It also helps to establish the theoretical and conceptual foundations of the study and provides a framework for interpreting the results.

...see more

Why is a research framework important?

A research framework is important because it provides a clear and coherent structure for your research project. It helps you to avoid confusion, inconsistency, and bias in your research. It also helps you to communicate your research to others, such as your supervisors, peers, reviewers, and readers. A research framework can help you to justify your research choices, demonstrate your contribution, and evaluate your results.

-

A research framework is like a map for doing a study. It helps by giving clear directions on what the study is about and how to do it. This means choosing the right methods for collecting and analyzing information. It keeps everyone on the same page, especially if more than one person is working on the study. It also helps in reviewing what other experts have said about the topic, making sure the study is done correctly and the results can be trusted. Plus, it makes it easier to explain the study to others and deal with any problems that come up. It's also useful for getting support and approval if needed. In short, a research framework is very important because it guides the whole research process, making sure it's organised and effective.

...see more

A research framework is important for several reasons. It provides a systematic and structured approach to conducting research, which ensures that the study is rigorous, valid, and reliable, and helps researchers to organize their thoughts and ideas, identify gaps in the literature, and develop a clear and focused research question. A research framework establishes theoretical and conceptual foundations. It provides a framework for data collection

and analysis, and provides a set of guidelines that researchers use to guide their work, which helps to eliminate bias, errors, and inconsistencies. It helps researchers to identify patterns, trends, and relationships between variables, and to draw meaningful conclusions from the data.

What are the types of research frameworks?

There are many types of research frameworks, but we will focus on four common ones: deductive, inductive, abductive, and mixed. Each of these frameworks has a different logic, purpose, and approach to research. Deductive research starts with a general theory or hypothesis and tests it with specific data and observations. It is often used in quantitative, experimental, and causal research. Inductive research begins with specific data and observations and generates a general theory or hypothesis from them. It is often used in qualitative, descriptive, and interpretive research. Abductive research starts with an unexpected or puzzling phenomenon and seeks to explain it with the best possible theory or hypothesis. It is often used in design, innovation, and problem-solving research. Mixed research combines elements of deductive, inductive, and/or abductive frameworks. It is often used in interdisciplinary, comparative, and evaluative research.

There are different types of research frameworks that researchers can use, depending on the nature and scope of their study. Some of the most common types of research frameworks include: -> Conceptual framework; -> Theoretical framework; -> Methodological framework; -> Analytical framework; -> Empirical framework. These are just a few examples of the types of research frameworks that researchers can use. The specific type of framework used will depend on the research question, the nature of the study, and the researcher's goals and objectives.

How do you choose a research framework?

When selecting a research framework, consider your research question, goals, methods, and context. Ask yourself what the main purpose of your research is, what the nature of your research question is, what type and source of data you have, what level and scope of analysis you need, and what the context and audience of your research is. Based on your answers, you can choose the most suitable research framework for your project. Additionally, you can seek advice from your supervisor, peers, or literature.

Choosing the best research framework for a project can be a complex process that depends on several factors. Here are some general steps that can help guide this decision: -> Identify the research question; -> Evaluate available frameworks; -> Consider research design; -> Consider resources; -> Consult with experts; -> Choose the best fit. In summary, choosing the best research framework for a project requires a thorough evaluation of available frameworks, consideration of research design, available resources, and consultation with experts.

...

What are the advantages and disadvantages of each research framework?

Each research framework has its own advantages and disadvantages, depending on your research situation and preferences. Deductive research is beneficial for testing existing theories or hypotheses, establishing causal relationships, and generalizing results. However, it can also be disadvantageous for ignoring contextual factors, oversimplifying complex phenomena, and limiting creativity and innovation. Inductive research is advantageous for exploring new phenomena, generating new theories or hypotheses, and

understanding meanings and experiences. On the other hand, it can be disadvantageous for lacking empirical validation, being subjective and biased, and having limited applicability and transferability. Abductive research is advantageous for explaining unexpected or puzzling phenomena, creating novel and useful solutions, and bridging gaps and contradictions. Yet, it can also be disadvantageous for being speculative and uncertain, requiring high levels of creativity and intuition, and being difficult to evaluate and replicate. Mixed research is advantageous for addressing complex and multifaceted research questions, integrating and triangulating different types of data, methods, and perspectives, and enhancing the validity and reliability of the research. However, it can also be disadvantageous for being time-consuming and resource-intensive, requiring high levels of expertise and coordination, and facing potential conflicts and inconsistencies.

How To Write an Abstract in 7 Steps (With an Example)

An effective and well-written abstract helps readers understand the scope of your paper and whether the information is relevant to their studies. An abstract is also useful for indexing in online databases.

In this article, we discuss what an abstract is, the different types of abstracts and how to write one. We also share an example of an abstract to help you draft your own.

Key takeaways:

- An abstract is a concise summary of a longer work, such as a dissertation or research paper, and allows readers to decide whether to read the full paper.
- Abstracts should be written after the full paper is written, and are usually about 150-250 words and one to two paragraphs long.

An abstract should include a statement of the **problem** you are trying to solve and the purpose of your research, the **methods** used to find the solution, the **results**

What is an abstract?

An abstract is a short and powerful summary that describes the focus of a research paper. It is originally written content—not an excerpt from the larger work—and usually contains keywords that are found throughout the full paper itself.

Abstracts generally contain four main elements:

- **Purpose:** Clearly define the purpose and importance of your research. This includes a statement of the problem or issue.
- **Methodology:** State the research methods used to answer your question.
- **Results:** Summarize the main research results.
- **Conclusion:** What are the implications of your research?

Abstracts are useful because they allow people who are considering reading an article to quickly decide if it is what they're looking for or piques their interest. Online databases also may use abstracts for indexing purposes.

When to write an abstract

Although the abstract appears as the first part of your paper, it should be written after you have completed your full paper. It should be able to stand on its own as a summary of your full paper, and someone who hasn't read your paper or related sources should be able to understand it.

The abstract should be on its own page, and generally goes after the title page and acknowledgments, but before the table of contents.

How to write an abstract

Here are the basic steps to follow when writing an abstract:

1. Write your paper

Since the abstract is a summary of a research paper, the first step is to [write your paper](#). Even if you know what you will be including in your paper, it's always best to save your abstract for the end so you can accurately summarize the findings you describe in the paper.

2. Review the requirements

If you're writing for publication in a journal or as part of a work project, there may be specific requirements regarding length or style. Review any requirements before you start writing the abstract.

3. Consider your audience and publication

Abstracts are designed to help readers quickly determine if they want to continue reading your work, so it's important to understand who will be reading the abstract as you write it. For example, should it be written in language appropriate for someone in academics or the medical industry or does it need to be understood by a lay reader?

4. Explain the problem

This refers to the specific problem that your research addresses or tries to solve. Identify your main claim or argument and the scope of your study, whether it's something specific or a general problem.

5. Explain your methods

Next, you'll explain the methods you took to accomplish your study, including the research you conducted, variables you included and your approach. Include any evidence you had to support your assertion.

6. Describe your results

Share the general findings and answers you reached as a result of your study. If you can't succinctly summarize all of your results, you can simply highlight the most important findings.

7. Give a conclusion

Finalize your summary by addressing the meaning of your findings and the importance of the paper. While you will use a conclusion in both types of abstracts, only in the informative abstract will you discuss the implications of your work.

What is IMRaD structure?

IMRaD structure is a common format for scientific articles. IMRaD stands for:

Introduction

In the introduction, you show that you are knowledgeable about the field of study and the existing research that already exists within the field. Your introduction should include a summary of the existing research, your thesis statement, a theory (if relevant) and an introduction to the current situation.

Method

This chapter should show how you applied valid and reliable methods to reach your results. Here you will explain your research, professional intervention and what you did or did not do.

Results

The largest portion of your IMRaD paper should be devoted to the results and data you uncovered. These statements should be written matter-of-factly and clearly.

Discussion

This chapter is where you discuss the results of the study or project, make comparisons with other studies, discuss whether more research is needed or make recommendations that could be applied in practice.

Tips for writing an abstract

Here are some tips to help you write your abstract:

- Stick to the word limit. Abstracts are usually 100-250 words long.
- Follow the specific formatting requirements for your abstract.
- Provide a statement of what the paper found rather than what it will ask or explore.
- For each chapter or section, list keywords and write one to two sentences that summarize each section. Use this as a framework to put your abstract together.
- Include keywords from your full paper in your abstract.
- Read other abstracts and use them as a framework for structure and style.
- Reference specific details of your findings.

What to avoid when writing an abstract

When you are writing your abstract, you should avoid:

- Extensively referring to other works
- Defining any terms
- Adding information that isn't contained in the larger work
- Adding unnecessary filler words and obscure jargon

Example abstract

Here is an example abstract you can reference as you draft your own:

Andrea Messing, "Insect Repellent Potential of Peppermint Essential Oil."

Abstract:

*The peppermint plant, also known as *Mentha balsamea* Wild, is a hybrid mint, a cross between watermint and spearmint. One of the popular uses for peppermint—aside from its use as a dietary supplement or health application—is its potential to repel insects.*

This study focuses on the development of insect repellent using peppermint oil. 25 grams of fresh peppermint was collected, crushed and placed in a glass jar. The jar was then filled with olive oil, and the oil was allowed to steep in a warm location for two days. After two days, the oil was strained using a folded cheesecloth. The extracted oil was gathered and diluted 70% in three separate containers to be transferred into spray bottles.

*Testing involved spraying the sample into a glass jar with *Anopheles juidthae* (common mosquitoes) and compared with the effect of a commercial insect repellent. This study challenges the belief that synthetic insect repellents are more effective than all-natural, essential oil options.*

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Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-8

What Is Data Collection: Methods, Types, Tools, and Techniques

Defining Data: The process of gathering and analyzing accurate data from various sources to find answers to research problems, trends and probabilities, etc., to evaluate possible outcomes is Known as Data Collection.

What is Data Collection?

Before we define what is data collection, it's essential to ask the question, "[What is data](#)?" The abridged answer is, data is various kinds of information formatted in a particular way. Therefore, data collection is the process of gathering, measuring, and analyzing accurate data from a variety of relevant sources to find answers to research problems, answer questions, evaluate outcomes, and forecast trends and probabilities.

Our society is highly dependent on data, which underscores the importance of collecting it. Accurate data collection is necessary to make informed business decisions, ensure quality assurance, and keep research integrity.

Why Do We Need Data Collection?

Before a judge makes a ruling in a court case or a general creates a plan of attack, they must have as many relevant facts as possible. The best courses of action come from informed decisions, and information and data are synonymous.

The concept of data collection isn't a new one, as we'll see later, but the world has changed. There is far more data available today, and it exists in forms that were unheard of a century ago. The data collection process has had to change and grow with the times, keeping pace with technology.

Whether you're in the world of academia, trying to conduct research, or part of the commercial sector, thinking of how to promote a new product, you need data collection to help you make better choices.

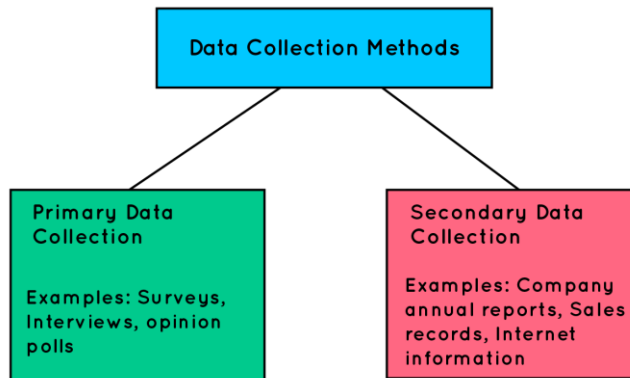
Data Collection Methods

Data represents information collected in the form of numbers and text. Data collection is done after an experiment or an observation. [Data](#) collection is useful in planning, estimation and it also saves lot of time and resources. Data collection is either qualitative or quantitative. Data collection methods are used in businesses and sales organizations to analyze the outcome of a problem, arrive at a solution, draw conclusions about the performance of a business and so on.

Data Collection Methods

Data collection is defined as a method of collecting, analyzing data for the purpose of validation and research using some techniques. Data collection is done to analyze a problem and learn about its outcome and future trends. When there is a need to arrive at a solution for a question, data collection methods helps to make assumption about the result in the future. It is very important that we collect reliable data from the correct sources to make the calculations and analysis easier. Basically there are two types of data collection methods. This is dependent on the type of data that is being collected. They are,

- Primary Data Collection Methods



Types of Data Collection Methods

For any study or research problem that is taken, there may be a requirement for primary data or secondary data. Primary and secondary data are used in different conditions. Primary data collection is more time consuming than secondary data collection.

Primary Data Collection Methods

Primary data collection is the original form of data that is collected directly from the source. For example, data collected through surveys, opinion polls from people, conducting experiments, Primary data can be classified in to the following two types. They are,

- Quantitative data collection methods
- Qualitative data collection methods

Qualitative Data Collection Methods

Qualitative data collection methods does not include any mathematical calculation to collect data. It is mainly used for analyzing the quality, or understanding the reason behind something. Some of the common methods used for qualitative data collection are discussed below.

Interview

Method

As the name suggests data collection is made by verbal conversation of interviewing people in person or in a telephone or using any computer aided model. A short note on each of these methods is given below.

Personal or Face to Face Interview: This is done by an interviewer with a person from whom data is collected. The interview may be structured or it may not be structured. Data to be collected is directly got from the person who is interviewed by straight forward questions or investigations.

Telephonic Interview: This is done by asking questions in a telephonic call. There are many online calling software readily available to carry out this data collection method. Data is collected from people directly by collecting their views or opinions on a topic.

Computer Assisted Interview: This type of interview is same as that of a personal interview, except that the interviewer and the person being interviewed are doing it in a desktop or a laptop. Also, the data collected is directly updated in a database in a

aim of making the process quicker and easier and it eliminates lot of paper work to be done in updating the collection of data.

Questionnaire Method of Collecting Data

Questionnaire method is nothing but conducting surveys with a set of questions targeting the quantitative research. These survey questions are easily made using online survey questions creation software. It also ensures that the trust of the people attending the surveys are legitimized. Some types of questionnaire methods are,

Web Based Questionnaire: Web based questionnaire is a method in which a survey link is sent to the targeted audience. They click on the link which takes them to the survey questions. This is a very cost efficient and a quick method which people can do it at their own convenient time. The survey has the flexibility of doing in any device also. So it is really reliable and flexible.

Mail Based Questionnaire: In this type of questionnaire mails are sent to the target audience which contains sheets of paper containing survey questions. Basically it contains the purpose of conducting the survey and the type of research that is being made. Some incentives are also given to complete this survey which is a main attraction. The benefit of this method is that the respondents name remains undisclosed to the researchers and they are free to take any time to complete this survey.

Observation

Method

As the word 'observation' suggests, in this method data is being collected directly by observing. This can be achieved by counting the number of people or number of events that take place in a particular time frame. The main skill needed here is to observe and arrive at the numbers correctly. Structured observation is a type of observation method in which a researcher observes for certain specific behaviors.

Document Review Method

Document review method is a data collection method that is used to collect data from existing documents that are having data about the past. There are three types of documents from which we can collect data. They are,

Public Records: The data that is collected in an organization like annual reports, sales information of the past months are used to do future analysis.

Personal Records: As the name suggests, the documents pertaining to an individual such as type of job, their designation, their interests are taken in to account.

Quantitative Data Collection Methods

The term 'Quantity' refers to a certain number. Quantitative data collection methods express the data in figures or numbers using either traditional methods or online data collection methods. Once these data are collected the results can be arrived at by using some statistical methods and mathematical tools. Some of the quantitative data collection methods include probability sampling, surveys, conducting interviews.

Secondary Data Collection Methods

The data collected by another person other than the researcher is called secondary data. Data that is to be known is readily available and does not require any special methods of data collection. Data can be obtained from directly from the company or organization in which the research is conducted or from outside sources also. The internal sources of secondary data collection include Company documents, financial statements, annual reports, employee information, reports got from customers, dealers. External sources of secondary data include information got from books,

journals, magazines, census taken by government, information available in the internet about the topic of research. The main advantage of this type of data collection method is that it is easy to collect since they are readily available.

Data Collection Tools

Now that we've explained the various techniques, let's narrow our focus even further by looking at some specific tools. For example, we mentioned interviews as a technique, but we can further break that down into different interview types (or "tools").

- Word Association.

The researcher gives the respondent a set of words and asks them what comes to mind when they hear each word.

- Sentence Completion.

Researchers use sentence completion to understand what kind of ideas the respondent has. This tool involves giving an incomplete sentence and seeing how the interviewee finishes it.

- Role-Playing.

Respondents are presented with an imaginary situation and asked how they would act or react if it was real.

- In-Person Surveys.

The researcher asks questions in person.

- Online/Web Surveys.

These surveys are easy to accomplish, but some users may be unwilling to answer truthfully, if at all.

- Mobile Surveys.

These surveys take advantage of the increasing proliferation of mobile technology. Mobile collection surveys rely on mobile devices like tablets or smartphones to conduct surveys via SMS or mobile apps.

- Phone Surveys.

No researcher can call thousands of people at once, so they need a third party to handle the chore. However, many people have call screening and won't answer.

- Observation.

Sometimes, the simplest method is the best. Researchers who make direct observations collect data quickly and easily, with little intrusion or third-party bias. Naturally, it's only effective in small-scale situations.

Specific Data Collection Techniques

Let's get into specifics. Using the primary/secondary methods mentioned above, here is a breakdown of specific techniques.

Primary Data Collection

- Interviews.

The researcher asks questions of a large [sampling](#) of people, either by direct interviews or means of mass communication such as by phone or mail. This method is by far the most common means of data gathering.

- Projective Technique.

Projective data gathering is an indirect interview, used when potential respondents know why they're being asked questions and hesitate to answer. For instance, someone may be reluctant to answer questions about their phone service if a cell phone carrier representative poses the questions. With projective data gathering, the interviewees get an incomplete question, and they must fill in the rest, using their opinions, feelings, and attitudes.

- Delphi Technique.

The Oracle at Delphi, according to Greek mythology, was the high priestess of Apollo's temple, who gave advice, prophecies, and counsel. In the realm of data collection, researchers use the Delphi technique by gathering information from a panel of experts. Each expert answers questions in their field of specialty, and the replies are consolidated into a single opinion.

- Focus Groups.

Focus groups, like interviews, are a commonly used technique. The group consists of anywhere from a half-dozen to a dozen people, led by a moderator, brought together to discuss the issue.

- Questionnaires.

Questionnaires are a simple, straightforward data collection method. Respondents get a series of questions, either open or close-ended, related to the matter at hand.

Secondary Data Collection

Unlike primary data collection, there are no specific collection methods. Instead, since the information has already been collected, the researcher consults various data sources, such as:

- Financial Statements
- Sales Reports
- Retailer/Distributor/Deal Feedback
- Customer Personal Information (e.g., name, address, age, contact info)
- Business Journals
- Government Records (e.g., census, tax records, Social Security info)
- Trade/Business Magazines
- The internet
- Data Collection Tools

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What are Common Challenges in Data Collection?

There are some prevalent challenges faced while collecting data, let us explore a few of them to understand them better and avoid them.

Data Quality Issues

The main threat to the broad and successful application of machine learning is poor data quality. Data quality must be your top priority if you want to make technologies like machine learning work for you. Let's talk about some of the most prevalent data quality problems in this blog article and how to fix them.

Inconsistent Data

When working with various data sources, it's conceivable that the same information will have discrepancies between sources. The differences could be in formats, units, or occasionally spellings. The introduction of inconsistent data might also occur during firm mergers or relocations. Inconsistencies in data have a tendency to accumulate and reduce the value of data if they are not continually resolved. Organizations that have heavily focused on data consistency do so because they only want reliable data to support their analytics.

Data Downtime

Data is the driving force behind the decisions and operations of data-driven businesses. However, there may be brief periods when their data is unreliable or not prepared. Customer complaints and subpar analytical outcomes are only two ways that this data unavailability can have a significant impact on businesses. A data engineer spends about 80% of their time updating, maintaining, and guaranteeing the integrity of the data pipeline. In order to ask the next business question, there is a high marginal cost due to the lengthy operational lead time from data capture to insight.

Schema modifications and migration problems are just two examples of the causes of data downtime. Data pipelines can be difficult due to their size and complexity. Data downtime must be continuously monitored, and it must be reduced through automation.

Ambiguous Data

Even with thorough oversight, some errors can still occur in massive databases or data lakes. For data streaming at a fast speed, the issue becomes more overwhelming. Spelling mistakes can go unnoticed, formatting difficulties can occur,

and column heads might be deceptive. This unclear data might cause a number of problems for reporting and analytics.

Duplicate Data

Streaming data, local databases, and cloud data lakes are just a few of the sources of data that modern enterprises must contend with. They might also have application and system silos. These sources are likely to duplicate and overlap each other quite a bit. For instance, duplicate contact information has a substantial impact on customer experience. If certain prospects are ignored while others are engaged repeatedly, marketing campaigns suffer. The likelihood of biased analytical outcomes increases when duplicate data are present. It can also result in ML models with biased training data.

Too Much Data

While we emphasize data-driven analytics and its advantages, a data quality problem with excessive data exists. There is a risk of getting lost in an abundance of data when searching for information pertinent to your analytical efforts. Data scientists, data analysts, and business users devote 80% of their work to finding and organizing the appropriate data. With an increase in data volume, other problems with data quality become more serious, particularly when dealing with streaming data and big files or databases.

Inaccurate Data

For highly regulated businesses like healthcare, data accuracy is crucial. Given the current experience, it is more important than ever to increase the data quality for COVID-19 and later pandemics. Inaccurate information does not provide you with a true picture of the situation and cannot be used to plan the best course of action. Personalized customer experiences and marketing strategies underperform if your customer data is inaccurate.

Data inaccuracies can be attributed to a number of things, including data degradation, human mistake, and data drift. Worldwide data decay occurs at a rate of about 3% per month, which is quite concerning. Data integrity can be compromised while being transferred between different systems, and data quality might deteriorate with time.

Hidden Data

The majority of businesses only utilize a portion of their data, with the remainder sometimes being lost in data silos or discarded in data graveyards. For instance, the customer service team might not receive client data from sales, missing an opportunity to build more precise and comprehensive customer profiles. Missing out on possibilities to develop novel products, enhance services, and streamline procedures is caused by hidden data.

Finding Relevant Data

Finding relevant data is not so easy. There are several factors that we need to consider while trying to find relevant data, which include -

- Relevant Domain
- Relevant demographics
- Relevant Time period and so many more factors that we need to consider while trying to find relevant data.

Data that is not relevant to our study in any of the factors render it obsolete and we cannot effectively proceed with its analysis. This could lead to incomplete research or analysis, re-collecting data again and again, or shutting down the study.

Dealing With Big Data

Big data refers to exceedingly massive data sets with more intricate and diversified structures. These traits typically result in increased challenges while storing, analyzing, and using additional methods of extracting results. Big data refers especially to data sets that are quite enormous or intricate that conventional data processing tools are insufficient. The overwhelming amount of data, both unstructured and structured, that a business faces on a daily basis.

The amount of data produced by healthcare applications, the internet, social networking sites social, sensor networks, and many other businesses are rapidly growing as a result of recent technological advancements. Big data refers to the vast volume of data created from numerous sources in a variety of formats at extremely fast rates. Dealing with this kind of data is one of the many challenges of Data Collection and is a crucial step toward collecting effective data.

Low Response and Other Research Issues

Poor design and low response rates were shown to be two issues with data collecting, particularly in health surveys that used questionnaires. This might lead to an insufficient or inadequate supply of data for the study. Creating an incentivized data collection program might be beneficial in this case to get more responses.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-9

Variables: Definition, Types of Variable in Research

Within the context of a research investigation, concepts are generally referred to as variables. A **variable** is, as the name applies, something that varies. Age, sex, export, income and expenses, family size, country of birth, capital expenditure, class grades, blood pressure readings, preoperative anxiety levels, eye color, and vehicle type are all examples of variables because each of these properties varies or differs from one individual to another.

Variable Definition in Research

A variable is any property, a characteristic, a number, or a quantity that increases or decreases over time or can take on different values (as opposed to constants, such as n, that do not vary) in different situations.

When conducting research, experiments often manipulate variables. For example, an experimenter might compare the effectiveness of four types of fertilizers.

In this case, the variable is the 'type of fertilizers'. A social scientist may examine the possible effect of early marriage on divorce.

Here early marriage is the variable. A business researcher may find it useful to include the dividend in determining the share prices. Here dividend is the variable.

Effectiveness, divorce and share prices are also variables because they also vary as a result of manipulating fertilizers, early marriage, and dividends.

What is dependent and independent variable in research?

The dependent variable in a research study or experiment is what is being measured in the study or experiment.

The independent variable in a research study or experiment is what the researcher is changing in the study or experiment. It is the variable that is being manipulated.

The independent variable is responsible for changing the dependent variable.

Types of Variable

1. Qualitative Variables.
2. Quantitative Variables.
3. Discrete Variable.
4. Continuous Variable.
5. Dependent Variables.
6. Independent Variables.
7. Background Variable.
8. Moderating Variable.
9. Extraneous Variable.
10. Intervening Variable.
11. Suppressor Variable.

Qualitative Variables

An important distinction between variables is between the qualitative variable and the quantitative variable.

Qualitative variables are those that express a qualitative attribute such as hair color, religion, race, gender, social status, method of payment, and so on. The values of a qualitative variable do not imply a meaningful numerical ordering.

The value of the variable 'religion' (Muslim, Hindu, ..,etc.) differs qualitatively; no ordering of religion is implied. Qualitative variables are sometimes referred to as **categorical variables**.

For example, the variable sex has two distinct categories: 'male' and 'female.' Since the values of this variable are expressed in categories, we refer to this as a categorical variable.

Similarly, place of residence may be categorized as being urban and rural and thus is a categorical variable.

Categorical variables may again be described as **nominal** and **ordinal**.

Ordinal variables are those which can be logically ordered or ranked higher or lower than another but do not necessarily establish a numeric difference between each category, such as examination grades (A+, A, B+, etc., clothing size (Extra large, large, medium, small).

Nominal variables are those who can neither be ranked nor logically ordered, such as religion, sex, etc.

A qualitative variable is a characteristic that is not capable of being measured but can be categorized to possess or not to possess some characteristics.

Quantitative Variables

Quantitative variables, also called **numeric variables**, are those variables that are measured in terms of numbers. A simple example of a quantitative variable is a person's age.

The age can take on different values because a person can be 20 years old, 35 years old, and so on. Likewise, family size is a quantitative variable,

because a family might be comprised of one, two, three members, and so on.

That is, each of these properties or characteristics referred to above varies or differs from one individual to another. Note that these variables are expressed in numbers, for which we call them quantitative or sometimes numeric variables.

A quantitative variable is one for which the resulting observations are numeric and thus possesses a natural ordering or ranking.

Discrete and Continuous Variables

Quantitative variables are again of two types: discrete and continuous.

Variables such as some children in a household or number of defective items in a box are discrete variables since the possible scores are discrete on the scale.

For example, a household could have three or five children, but not 4.52 children.

Other variables, such as 'time required to complete an MCQ test' and 'waiting time in a queue in front of a bank counter,' are examples of a continuous variable.

The time required in the above examples is a continuous variable, which could be, for example, 1.65 minutes, or it could be 1.6584795214 minutes.

Of course, the practicalities of measurement preclude most measured variables from being continuous.

Discrete Variable

Definition 2.6: A discrete variable, restricted to certain values, usually (but not necessarily) consists of whole numbers, such as the family size, number of defective items in a box. They are often the results of enumeration or counting.

A few more examples are;

- The number of accidents in the twelve months.
- The number of mobile cards sold in a store within seven days.
- The number of patients admitted to a hospital over a specified period.

- The number of new branches of a bank opened annually during 2001- 2007.
- The number of weekly visits made by health personnel in the last 12 months.

Continuous Variable

A continuous variable is one that may take on an infinite number of intermediate values along a specified interval. Examples are:

- The sugar level in the human body;
- Blood pressure reading;
- Temperature;
- Height or weight of the human body;
- Rate of bank interest;
- Internal rate of return (IRR),
- Earning ratio (ER);
- Current ratio (CR)

No matter how close two observations might be, if the instrument of measurement is precise enough, a third observation can be found, which will fall between the first two.

A continuous variable generally results from measurement and can assume countless values in the specified range.

Dependent and Independent Variables

In many research settings, there are two specific classes of variables that need to be distinguished from one another, **independent variable** and **dependent variable**.

Many research studies are aimed at unrevealing and understanding the causes of underlying phenomena or problems with the ultimate goal of establishing a causal relationship between them.

Look at the following statements:

- Low intake of food causes underweight.
- Smoking enhances the risk of lung cancer.
- Level of education influences job satisfaction.
- Advertisement helps in sales promotion.
- The drug causes the improvement of a health problem.
- Nursing intervention causes more rapid recovery.

- Previous job experiences determine the initial salary.
- Blueberries slow down aging.
- The dividend per share determines share prices.

In each of the above queries, we have two variables: one independent and one dependent. In the first example, 'low intake of food' is believed to have caused the 'problem of underweight.'

It is thus the so-called independent variable. Underweight is the dependent variable because we believe that this 'problem' (the problem of underweight) has been caused by 'the low intake of food' (the factor).

Similarly, smoking, dividend, and advertisement all are independent variables, and lung cancer, job satisfaction, and sales are dependent variables.

In general, an independent variable is manipulated by the experimenter or researcher, and its effects on the dependent variable are measured.

Independent Variable

The variable that is used to describe or measure the factor that is assumed to cause or at least to influence the problem or outcome is called an **independent variable**.

The definition implies that the experimenter uses the independent variable to describe or explain the influence or effect of it on the dependent variable.

Variability in the dependent variable is presumed to depend on variability in the independent variable.

Depending on the context, an independent variable is sometimes called a predictor variable, regressor, controlled variable, manipulated variable, explanatory variable, exposure variable (as used in reliability theory), risk factor (as used in medical statistics), feature (as used in machine learning and pattern recognition) or input variable.

The explanatory variable is preferred by some authors over the independent variable when the quantities treated as independent variables may not be statistically independent or independently manipulable by the researcher.

If the independent variable is referred to as an explanatory variable, then the term response variable is preferred by some authors for the dependent variable.

Dependent Variable

The variable that is used to describe or measure the problem or outcome under study is called a **dependent variable**.

In a causal relationship, the cause is the independent variable, and the effect is the dependent variable. If we hypothesize that smoking causes lung cancer, 'smoking' is the independent variable and cancer the dependent variable.

A business researcher may find it useful to include the dividend in determining the share prices. Here dividend is the independent variable, while the share price is the dependent variable.

The dependent variable usually is the variable the researcher is interested in understanding, explaining, or predicting.

In lung cancer research, it is the carcinoma that is of real interest to the researcher, not smoking behavior per se. The independent variable is the presumed cause of, antecedent to, or influence on the dependent variable.

Depending on the context, a dependent variable is sometimes called a response variable, regressand, predicted variable, measured variable, explained variable, experimental variable, responding variable, outcome variable, output variable, or label.

An explained variable is preferred by some authors over the dependent variable when the quantities treated as dependent variables may not be statistically dependent.

If the dependent variable is referred to as an explained variable, then the term predictor variable is preferred by some authors for the independent variable.

Levels of an Independent Variable

If an experimenter compares an experimental treatment with a control treatment, then the independent variable (a type of treatment) has two levels: experimental and control.

If an experiment were to compare five types of diets, then the independent variables (types of diet) would have five levels.

In general, the number of levels of an independent variable is the number of experimental conditions.

Background Variable

In almost every study, we collect information such as age, sex, educational attainment, socioeconomic status, marital status, religion, place of birth, and the like. These variables are referred to as **background variables**.

These variables are often related to many independent variables so that they influence the problem indirectly. Hence they are called background variables.

If the background variables are important to the study, they should be measured. However, we should try to keep the number of background variables as few as possible in the interest of the economy.

Moderating Variable

In any statement of relationships of variables, it is normally hypothesized that in some way, the independent variable 'causes' the dependent variable to occur. In simple relationships, all other variables are extraneous and are ignored. In actual study situations, such a simple one-to-one relationship needs to be revised to take other variables into account to better explain the relationship.

This emphasizes the need to consider a second independent variable that is expected to have a significant contributory or contingent effect on the originally stated dependent-independent relationship. Such a variable is termed a **moderating variable**.

Suppose you are studying the impact of field-based and classroom-based training on the work performance of the health and family planning workers, you consider the type of training as the independent variable.

If you are focusing on the relationship between the age of the trainees and work performance, you might use 'type of training' as a moderating variable.

Extraneous Variable

Most studies concern the identification of a single independent variable and the measurement of its effect on the dependent variable.

But still, several variables might conceivably affect our hypothesized independent-dependent variable relationship, thereby distorting the study. These variables are referred to as **extraneous variables**.

Extraneous variables are not necessarily part of the study. They exert a confounding effect on the dependent-independent relationship and thus need to be eliminated or controlled for.

An example may illustrate the concept of extraneous variables. Suppose we are interested in examining the relationship between the work-status of mothers and breastfeeding duration.

It is not unreasonable in this instance to presume that the level of education of mothers as it influences work-status might have an impact on breastfeeding duration too.

Education is treated here as an extraneous variable. In any attempt to eliminate or control the effect of this variable, we may consider this variable as a **confounding variable**.

An appropriate way of dealing with confounding variables is to follow the stratification procedure, which involves a separate analysis for the different levels of lies confounding variables.

For this purpose, one can construct two crosstables: one for illiterate mothers and the other for literate mothers. If we find a similar association between work status and duration of breastfeeding in both the groups of mothers, then we conclude that the educational level of mothers is not a confounding variable.

Intervening Variable

Often an apparent relationship between two variables is caused by a third variable.

For example, variables X and Y may be highly correlated, but only because X causes the third variable, Z, which in turn causes Y. In this case, Z is the **intervening variable**.

An intervening variable theoretically affects the observed phenomena but cannot be seen, measured, or manipulated directly; its effects can only be

inferred from the effects of the independent and moderating variables on the observed phenomena.

In the work-status and breastfeeding relationship, we might view motivation or counseling as the intervening variable.

Thus, motive, job satisfaction, responsibility, behavior, justice are some of the examples of intervening variables.

Suppressor Variable

In many cases, we have good reasons to believe that the variables of interest have a relationship within themselves, but our data fail to establish any such relationship. Some hidden factors may be suppressing the true relationship between the two original variables.

Such a factor is referred to as a **suppressor variable** because it suppresses the actual relationship between the other two variables.

The suppressor variable suppresses the relationship by being positively correlated with one of the variables in the relationship and negatively correlated with the other. The true relationship between the two variables will reappear when the suppressor variable is controlled for.

Thus, for example, low age may pull education up but income down. In contrast, a high age may pull income up but education down, effectively canceling out the relationship between education and income unless age is controlled for.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-10

Sampling and Steps in the Sampling Process

Sample and Sampling

Sampling is a part of the total population. It can be an individual element or a group of elements selected from the population. Although it is a subset, it is representative of the population and suitable for research in terms of cost, convenience, and time. The sample group can be selected based on a probability or a nonprobability approach. A sample usually consists of various units of the population. The size of the sample is represented by “n”.

A good sample is one which satisfies all or few of the following conditions:

1. **Representativeness:** When sampling method is adopted by the researcher, the basic assumption is that the samples so selected out of the population are the best representative of the population under study. Thus good samples are those who accurately represent the population. [Probability sampling technique](#) yield representative samples. On measurement terms, the sample must be valid. The validity of a sample depends upon its accuracy.
2. **Accuracy:** Accuracy is defined as the degree to which bias is absent from the sample. An accurate (unbiased) sample is one which exactly represents the population. It is free from any influence that causes any differences between sample value and population value.
3. **Size:** A good sample must be adequate in size and reliable. The sample size should be such that the inferences drawn from the sample are accurate to a given level of confidence to represent the entire population under study.

The size of sample depends on number of factors. Some important among them are:

1. **Homogeneity or Heterogeneity of the universe:** Selection of sample depends on the nature of the universe. It says that if the nature of universe is homogeneous then a small sample will represent the behavior of entire universe. This will lead to selection of small sample size rather than a large one. On the other hand, if the universe is heterogeneous in nature then samples are to be chosen as from each heterogeneous unit.
2. **Number of classes proposed:** If a large number of class intervals to be made then the size of sample should be more because it has to represent the entire universe. In case of small samples there is the possibility that some samples may not be included.
3. **Nature of study:** The size of sample also depends on the nature of study. For an intensive study which may be for a long time, large samples are to be chosen. Similarly, in case of general studies large number of respondents may be appropriate one but if the study is of technical in nature then the selection of large number of respondents may cause difficulty while gathering information.

Sampling is the act, process, or technique of selecting a representative part of a population for the purpose of determining the characteristics of the whole population. In other words, the process of selecting a sample from a population using special [sampling techniques](#) called sampling. It should be ensured in the sampling process itself that the sample selected is representative of the population.

- **Population OR Universe:** The entire aggregation of items from which samples can be drawn is known as a population. In sampling, the population may refer to the units, from which the sample is drawn. Population or populations of interest are interchangeable terms. The term “unit” is used, as in a business research process, samples are not necessarily people all the time. A population of interest may be the universe of nations or cities. This is one of the first things the analyst needs to define properly while [conducting a business research](#). Therefore, population, contrary to its general notion as a nation’s entire population has a much broader meaning in sampling. “N” represents the size of the population.
- **Census:** A complete study of all the elements present in the population is known as a census. It is a time consuming and costly process and is, therefore, seldom a popular with researchers. The general notion that a census generates more accurate data than sampling is not always true. Limitations include failure in generating a complete and accurate list of all the members of the population and refusal of the elements to provide information. The national population census is an example of census survey.
- **Precision:** Precision is a measure of how close an estimate is expected to be, to the true value of a parameter. Precision is a measure of similarity. Precision is usually expressed in terms of imprecision and related to the standard error of the estimate. Less precision is reflected by a larger standard error.
- **Bias:** Bias is the term refers to how far the average statistic lies from the parameter it is estimating, that is, the error, which arises when estimating a quantity. Errors from chance will cancel each other out in the long run, those from bias will not. Bias can take different forms.

Steps in Sampling Process

An operational sampling process can be divided into seven steps as given below:

1. Defining the target population.
2. Specifying the sampling frame.
3. Specifying the sampling unit.
4. Selection of the sampling method.
5. Determination of sample size.
6. Specifying the sampling plan.
7. Selecting the sample.

1. Defining the Target Population:

Defining the population of interest, for business research, is the first step in sampling process. In general, target population is defined in terms of element, sampling unit, extent, and time frame. The definition should be in line with the objectives of the

research study. For ex, if a kitchen appliances firm wants to conduct a survey to ascertain the demand for its micro ovens, it may define the population as 'all women above the age of 20 who cook (assuming that very few men cook)'. However this definition is too broad and will include every household in the country, in the population that is to be covered by the survey. Therefore the definition can be further refined and defined at the sampling unit level, that, all women above the age 20, who cook and whose monthly household income exceeds Rs.20,000. This reduces the target population size and makes the research more focused. The population definition can be refined further by specifying the area from where the researcher has to draw his sample, that is, households located in Hyderabad.

A well defined population reduces the probability of including the respondents who do not fit the research objective of the company. For ex, if the population is defined as all women above the age of 20, the researcher may end up taking the opinions of a large number of women who cannot afford to buy a micro oven.

2. Specifying the Sampling Frame:

Once the definition of the population is clear a researcher should decide on the sampling frame. A sampling frame is the list of elements from which the sample may be drawn. Continuing with the micro oven ex, an ideal sampling frame would be a database that contains all the households that have a monthly income above Rs.20,000. However, in practice it is difficult to get an exhaustive sampling frame that exactly fits the requirements of a particular research. In general, researchers use easily available sampling frames like telephone directories and lists of credit card and mobile phone users. Various private players provide databases developed along various demographic and economic variables. Sometimes, maps and aerial pictures are also used as sampling frames. Whatever may be the case, an ideal sampling frame is one that entire population and lists the names of its elements only once.

A sampling frame error pops up when the sampling frame does not accurately represent the total population or when some elements of the population are missing another drawback in the sampling frame is over —representation. A telephone directory can be over represented by names/household that have two or more connections.

3. Specifying the Sampling Unit:

A sampling unit is a basic unit that contains a single element or a group of elements of the population to be sampled. In this case, a household becomes a sampling unit and all women above the age of 20 years living in that particular house become the sampling elements. If it is possible to identify the exact target audience of the business research, every individual element would be a sampling unit. This would present a case of primary sampling unit. However, a convenient and better means of sampling would be to select households as the sampling unit and interview all females above 20 years, who cook. This would present a case of secondary sampling unit.

4. Selection of the Sampling Method:

The sampling method outlines the way in which the sample units are to be selected. The choice of the sampling method is influenced by the objectives of the business research, availability of financial resources, time constraints, and the nature of the problem to be investigated. All sampling methods can be grouped under two distinct heads, that is, probability and non-probability sampling.

5. Determination of Sample Size:

The sample size plays a crucial role in the sampling process. There are various ways of classifying the techniques used in determining the sample size. A couple those hold primary importance and are worth mentioning are whether the technique deals with fixed or sequential sampling and whether its logic is based on traditional or Bayesian methods. In non-probability sampling procedures, the allocation of budget, thumb rules and number of sub groups to be analyzed, importance of the decision, number of variables, nature of analysis, incidence rates, and completion rates play a major role in sample size determination. In the case of probability sampling, however, formulas are used to calculate the sample size after the levels of acceptable error and level of confidence are specified. The details of the various techniques used to determine the sample size will be explained at the end of the chapter.

6. Specifying the Sampling Plan:

In this step, the specifications and decisions regarding the implementation of the research process are outlined. Suppose, blocks in a city are the sampling units and the households are the sampling elements. This step outlines the modus operandi of the sampling plan in identifying houses based on specified characteristics. It includes issues like how is the interviewer going to take a systematic sample of the houses. What should the interviewer do when a house is vacant? What is the recontact procedure for respondents who were unavailable? All these and many other questions need to be answered for the smooth functioning of the research process. These are guide lines that would help the researcher in every step of the process. As the interviewers and their co-workers will be on field duty of most of the time, a proper specification of the sampling plans would make their work easy and they would not have to revert to their seniors when faced with operational problems.

7. Selecting the Sample:

This is the final step in the sampling process, where the actual selection of the sample elements is carried out. At this stage, it is necessary that the interviewers stick to the rules outlined for the smooth implementation of the business research. This step involves implementing the sampling plan to select the sampling plan to select a sample required for the survey.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-11

How to Write a Literature Review | Guide, Examples, & Templates

There are five key steps to writing a literature review:

1. [Search for relevant literature](#)
2. [Evaluate sources](#)
3. [Identify themes, debates, and gaps](#)
4. [Outline the structure](#)
5. [Write your literature review](#)

A good literature review doesn't just summarize sources—it analyzes, [synthesizes](#), and critically evaluates to give a clear picture of the state of knowledge on the subject.

What is the purpose of a literature review?

When you write a [thesis](#), [dissertation](#), or [research paper](#), you will likely have to conduct a literature review to situate your research within existing knowledge. The literature review gives you a chance to:

- Demonstrate your familiarity with the topic and its scholarly context
- Develop a [theoretical framework](#) and [methodology](#) for your research
- Position your work in relation to other researchers and theorists
- Show how your research addresses a gap or contributes to a debate
- Evaluate the current state of research and demonstrate your knowledge of the scholarly debates around your topic.

Writing literature reviews is a particularly important skill if you want to [apply for graduate school](#) or pursue a career in research. We've written a step-by-step guide that you can follow below.

Examples of literature reviews

Writing literature reviews can be quite challenging! A good starting point could be to look at some examples, depending on what kind of literature review you'd like to write.

- **Example literature review #1:** [“Why Do People Migrate? A Review of the Theoretical Literature”](#) (**Theoretical** literature review about the development of economic migration theory from the 1950s to today.)
- **Example literature review #2:** [“Literature review as a research methodology: An overview and guidelines”](#) (**Methodological** literature review about interdisciplinary knowledge acquisition and production.)
- **Example literature review #3:** [“The Use of Technology in English Language Learning: A Literature Review”](#) (**Thematic** literature review about the effects of technology on language acquisition.)
- **Example literature review #4:** [“Learners’ Listening Comprehension Difficulties in English Language Learning: A Literature Review”](#) (**Chronological** literature review about how the concept of listening skills has changed over time.)

You can also check out our templates with literature review examples and sample outlines at the links below.

Step 1 – Search for relevant literature

Before you begin searching for literature, you need a clearly defined [topic](#).

If you are writing the literature review section of a dissertation or research paper, you will search for literature related to your [research problem](#) and [questions](#).

Literature review research question example What is the impact of social media on body image among Generation Z?

Make a list of keywords

Start by creating a list of keywords related to your research question. Include each of the key concepts or variables you’re interested in, and list any synonyms and related terms. You can add to this list as you discover new keywords in the process of your literature search.

Keywords example

- Social media, Facebook, Instagram, Twitter, Snapchat, TikTok
- Body image, self-perception, self-esteem, mental health
- Generation Z, teenagers, adolescents, youth

Search for relevant sources

Use your keywords to begin searching for sources. Some useful databases to search for journals and articles include:

- Your university’s library catalogue
- [Google Scholar](#)
- [JSTOR](#)
- [EBSCO](#)
- [Project Muse](#) (humanities and social sciences)
- [Medline](#) (life sciences and biomedicine)
- [EconLit](#) (economics)
- [Inspec](#) (physics, engineering and computer science)

You can also use [boolean operators](#) to help narrow down your search.

Make sure to read the [abstract](#) to find out whether an article is relevant to your question. When you find a useful book or article, you can check the bibliography to find other relevant sources.

Step 2 – Evaluate and select sources

You likely won't be able to read absolutely everything that has been written on your topic, so it will be necessary to [evaluate](#) which sources are most relevant to your research question.

For each publication, ask yourself:

- What question or problem is the author addressing?
- What are the key concepts and how are they defined?
- What are the key theories, models, and methods?
- Does the research use established frameworks or take an innovative approach?
- What are the results and conclusions of the study?
- How does the publication relate to other literature in the field? Does it confirm, add to, or challenge established knowledge?
- What are the strengths and weaknesses of the research?

Make sure the sources you use are [credible](#), and make sure you read any landmark studies and major theories in your field of research.

You can use our template to summarize and evaluate sources you're thinking about using. Click on either button below to download.

Take notes and cite your sources

As you read, you should also begin the writing process. Take notes that you can later incorporate into the text of your literature review.

It is important to keep track of your sources with [citations](#) to [avoid plagiarism](#). It can be helpful to make an [annotated bibliography](#), where you compile full citation information and write a paragraph of [summary](#) and analysis for each source. This helps you remember what you read and saves time later in the process.

Tip You can use Scribbr's [free APA citation generator](#) or [MLA citation generator](#) to quickly create correct and consistent citations. Want to check your literature review for plagiarism? Try Scribbr's [Plagiarism Checker for students](#).

Step 3 – Identify themes, debates, and gaps

To begin organizing your literature review's argument and structure, be sure you understand the connections and relationships between the sources you've read. Based on your reading and notes, you can look for:

- **Trends and patterns (in theory, method or results):** do certain approaches become more or less popular over time?
- **Themes:** what questions or concepts recur across the literature?

- **Debates, conflicts and contradictions:** where do sources disagree?
- **Pivotal publications:** are there any influential theories or studies that changed the direction of the field?
- **Gaps:** what is missing from the literature? Are there weaknesses that need to be addressed?

This step will help you work out the structure of your literature review and (if applicable) show how your own research will contribute to existing knowledge.

Example of trends and gaps
In reviewing the literature on social media and body image, you note that:

- Most research has focused on young women.
- There is an increasing interest in the visual aspects of social media.
- But there is still a lack of robust research on highly visual platforms like Instagram and Snapchat—this is a gap that you could address in your own research.

Step 4 – Outline your literature review’s structure

There are various approaches to organizing the body of a literature review. Depending on the length of your literature review, you can combine several of these strategies (for example, your overall structure might be thematic, but each theme is discussed chronologically).

Chronological

The simplest approach is to trace the development of the topic over time. However, if you choose this strategy, be careful to avoid simply listing and summarizing sources in order.

Try to analyze patterns, turning points and key debates that have shaped the direction of the field. Give your interpretation of how and why certain developments occurred.

Thematic

If you have found some recurring central themes, you can organize your literature review into subsections that address different aspects of the topic.

For example, if you are reviewing literature about inequalities in migrant health outcomes, key themes might include healthcare policy, language barriers, cultural attitudes, legal status, and economic access.

Methodological

If you draw your sources from different disciplines or fields that use a variety of [research methods](#), you might want to compare the results and conclusions that emerge from different approaches. For example:

- Look at what results have emerged in [qualitative versus quantitative research](#)

- Discuss how the topic has been approached by empirical versus theoretical scholarship
- Divide the literature into sociological, historical, and cultural sources

Theoretical

A literature review is often the foundation for a [theoretical framework](#). You can use it to discuss various theories, models, and definitions of key concepts.

You might argue for the relevance of a specific theoretical approach, or combine various theoretical concepts to create a framework for your research.

Tip Make sure to check out our [examples of literature reviews](#) for each type

Step 5 – Write your literature review

Like any other [academic text](#), your literature review should have an [introduction](#), a main body, and a [conclusion](#). What you include in each depends on the objective of your literature review.

Introduction

The introduction should clearly establish the focus and purpose of the literature review.

Tip If you are writing the literature review as part of your dissertation or thesis, reiterate your central problem or research question and give a brief summary of the scholarly context. You can emphasize the timeliness of the topic (“many recent studies have focused on the problem of x”) or highlight a gap in the literature (“while there has been much research on x, few researchers have taken y into consideration”).

Body

Depending on the length of your literature review, you might want to divide the body into subsections. You can use a [subheading](#) for each theme, time period, or methodological approach.

As you write, you can follow these tips:

- **[Summarize](#) and synthesize:** give an overview of the main points of each source and combine them into a coherent whole
- **Analyze and interpret:** don’t just [paraphrase](#) other researchers—add your own interpretations where possible, discussing the significance of findings in relation to the literature as a whole
- **Critically evaluate:** mention the strengths and weaknesses of your sources
- **Write in well-structured paragraphs:** use [transition words](#) and [topic sentences](#) to draw connections, comparisons and contrasts

Conclusion

In the conclusion, you should summarize the key findings you have taken from the literature and emphasize their significance.

Tip Be sure to show how your research addresses gaps and contributes new knowledge, or discuss how you have drawn on existing theories and methods to build a framework for your research.

When you've finished writing and revising your literature review, don't forget to proofread thoroughly before submitting. Not a language expert? Check out Scribbr's [professional proofreading services](#)!

[How to Write a Literature Review | Guide, Examples, & Templates \(scribbr.com\)](#)

How to Write a Literature Review

Andrew S. Denney and Richard Tewksbury

Learning how to effectively write a literature review is a critical tool for success for an academic, and perhaps even professional career. Being able to summarize and synthesize prior research pertaining to a certain topic not only demonstrates having a good grasp on available information for a topic, but it also assists in the learning process. Although literature reviews are important for one's academic career, they are often misunderstood and underdeveloped. This article is intended to provide both undergraduate and graduate students in the criminal justice field specifically, and social sciences more generally, skills and perspectives on how to develop and/or strengthen their skills in writing a literature review. Included in this discussion are foci on the structure, process, and art of writing a literature review.

What is a Literature Review?

In essence, a literature review is a comprehensive overview of prior research regarding a specific topic. The overview both shows the reader what is known about a topic, and what is not yet known, thereby setting up the rationale or need for a new investigation, which is what the actual study to which the literature review is attached seeks to do. Stated a bit differently (Creswell 1994, pp. 20, 21) explains:

The literature in a research study accomplishes several purposes: (a) It shares with the reader the results of other studies that are closely related to the study being reported (Fraenkel & Wallen, 1990). (b) It relates a study to the larger, ongoing dialog in the literature about a topic, filling in gaps and extending prior studies (Marshall & Rossman, 1989). (c) It provides a framework for establishing the importance of the study.

As an overview, a well done literature review includes all of the main themes and subthemes found within the general topic chosen for the study. These themes and subthemes are usually interwoven with the methods or findings of the prior research. Also, a literature review sets the stage for and

LITERATURE REVIEW : EXAMPLE

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Synthesis of literature

Introducing a reoccurring theme

Positioning research findings (different points of view)

Elaborating on research findings (that align with your point of view)

Stating the significance of research findings

The impact of social media on the academic performance of tertiary students has been well researched. Although some research findings outline social and emotional benefits of using social media for learning (e.g., Kabilan et al., 2010; McCarthy, 2013), a number of studies demonstrate a correlation between student use of social media and poor academic achievement. For example, a study of both undergraduate and graduate students found that social media users had a lower Grade Point Average (GPA) (Kirschner & Karpinski, 2010). These findings were also mirrored in an extensive study of nearly two thousand undergraduate students (Junco, 2012). However, researchers also argue that the use of social media is, in itself, not necessarily a negative predictor of GPA. Instead, negative impact relates to how students use social media. In one large-scale study, for instance, students who attempted to multi-task, by using social media at the same time as studying, were not only less efficient and less productive, but also had lower GPAs than students who studied without using social media (Karpinski, Kirschner, Ozer, Mellot, & Ochwo, 2013). Similarly, Lau (2017) concluded that it was the simultaneous use of social media for non-academic purposes that had a negative correlation with academic performance. These recent studies have begun to provide insight into how social media use may negatively affect the academic performance of tertiary students.

Identifying limitations & future research

Specifying a limitation

Explaining the impact of the limitation

Suggesting future research

Stating possible contribution

One limitation of past studies is a focus on the relationship between students' social media use and their overall academic performance, rather than on close study of how students use social media. This means that researchers currently know relatively little about the different ways in which students use social media during and/or for their studies. If tertiary educators and researchers want a better understanding of student behaviour and factors related to study success, then examining how successful students use social media is critical. Future research could, for instance, investigate how high performing students may achieve academic excellence, while also being active social media users. Such research could contribute to identifying specific strategies and patterns of use that relate to successful management and integration of social media in student life.

Adapted from Auckland University of Technology.



 creative commons



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University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-12

Technology and Academic Research.

There is no denying that technology has made huge changes to how we live. Every major walk of life has been affected, either positively or negatively, by [technological advancements](#). The pros, however, often outweigh the cons. When you realize that it is because of technology that we are able to do most of what we do on a daily basis, be it shopping, running a business, video chatting, watching a movie, or getting treated for a disease, you can easily recognize just how much various technologies have improved our lives.

One area in which scientific advancements have made big changes is education. Particularly, the use of information technology in research that young learners and seasoned professionals conduct is to be noted. “There are so many advancements that help academic researchers do their work that it is hard to list them down. Someone who studies in a university may often be using a lot of the technologies without even realizing it”, says Duncan Jones, a leading writer at [PapersOwl](#) who also happens to be an academic researcher. When it comes to scientific research, the assistance a student or a professional can get from various tools is very significant.

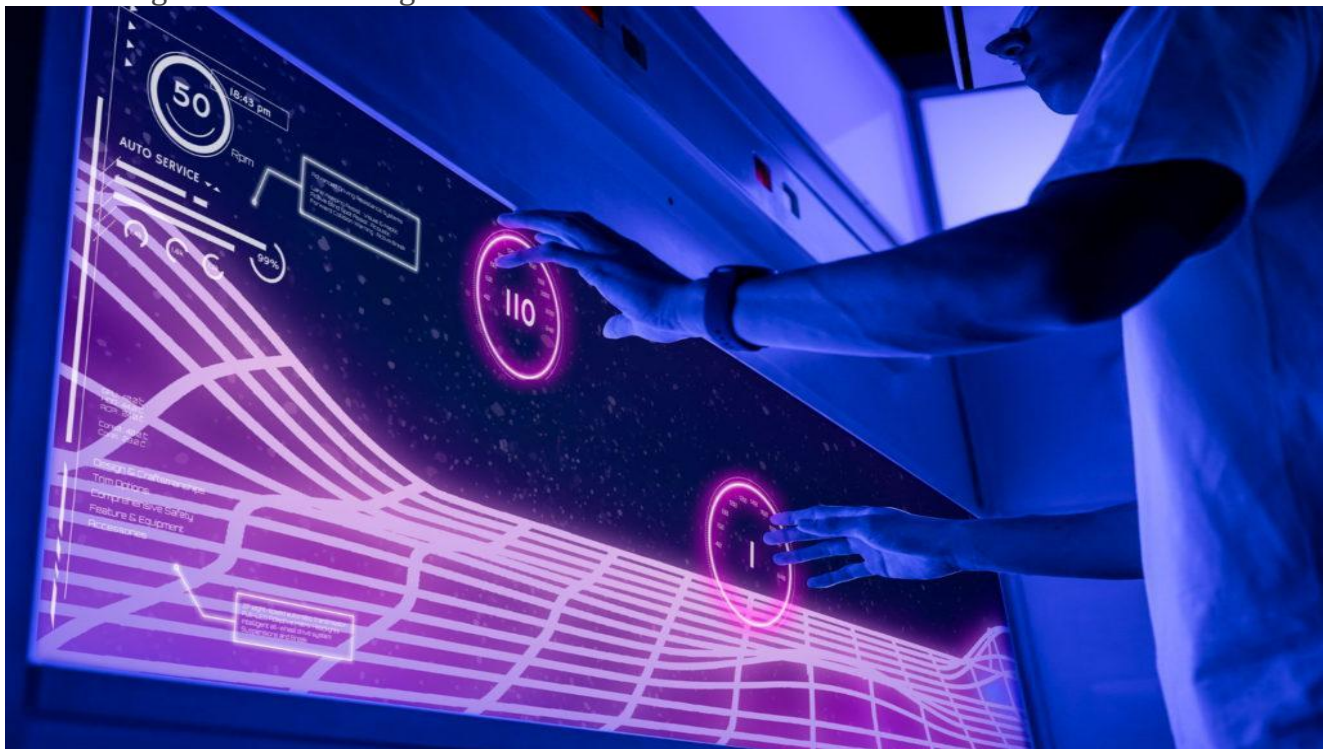


How Technology Has Changed Education

Before we talk about research, let's briefly go over some of the major changes that have been made to educational processes thanks to developments in science.

- The ability to create study materials, manage them, organize them, and share them with different people all from a central system was not possible a few years ago.
- The collaborative work that college-goers often do, using apps and programs, while sitting in different parts of the world is all thanks to such developments.
- The ability for schools to conduct remote classes during the pandemic was also because of these developments.
- Schools can now offer online programs for those who cannot afford to travel to another country to get a top-notch educational experience. There are also various [MOOCs](#) that can help people develop their skills while sitting at home!
- Teachers can easily get in touch with the learners, and vice versa, to discuss their assignments and any other issues.

There is a lot more that our educational institutions do on a daily basis that is all thanks to the advances made in various IT departments. The use of electronic bulletin boards in schools, the use of artificial intelligence to help out a student, and the everyday utilization of special software to help with communications are some of the things that should be given their due attention.



5 Ways Technology is Helping with Research

1. Programs for Analysis

Since the 1960s, when a program named SPSS started helping researchers complete complex statistical tasks like [linear regression](#), tech developments have been a big part of conducting advanced research. Whether we talk about computer scientists working on complex models and analyzing experimental data or young college-goers

sitting in a library with heaps of data collected for sophisticated analysis, it is all because of various programs running on computers that such tasks can be completed easily. This kind of advanced technology has increased not only the processes' speed but also their accuracy.

2. Data Collection

Imagine how difficult it would be if you didn't have virtual programs and platforms to reach out to thousands of potential subjects for a study. A lot of today's research projects, especially those undertaken by graduate students, utilize such platforms to conduct their research. Platforms like Facebook and Google Forms help researchers create questionnaires and send them out to countless subjects in a matter of minutes. There is no longer a need to print out hundreds of surveys and mail them to others in the hope that they will actually pay attention to theirs and try to assist you. This is one of the most underappreciated forms of research technology that helps collect insight for multiple projects every year.

3. Landing Interviews

Those who go to universities know how important it is that when they write a paper or an article, they include high-quality references. One way to do this is by interviewing professionals and experts on the subject. With the help of digital platforms and services, it has become simpler to get in touch with an expert who is sitting on the other side of the globe. This was not possible about a decade ago. You would have to try and set up meetings with them and then actually manage to visit them. If they were in a different country or a faraway city, you might not have been able to get your reference. These days, all it takes is one Zoom call.

4. Sharing Outcomes

A big part of academics is to share the outcomes of a study once completed. In today's day and age, this is simpler than it was decades ago. Any faculty member or student who has published some sort of academic research in the past would know that the ability to upload your work after you have created it can be very rewarding. Not only can others end up learning from it, but they can also be so impressed with the social impact your statistical analysis can make that they offer to collaborate with you.

5. Easier Interface for Learners

For college-goers who are used to online learning and using search engines on a daily basis, it is easier to design surveys and polls using digital programs than making such elements by hand. With such options at their disposal, they can focus more on the content of their research than worry about handling and safeguarding large amounts of physical data. The ease of use that they can find when given access to simple ways to collect data makes an otherwise complicated process very easy for them.



Conclusion

While traditional elements of conducting research still exist and are appreciated, having the ability to back them up with technological advances is something that saves time and also often produces better results. Anyone who has ever conducted some in-depth research would understand how much time and effort it can require. The developments in the fields of IT are helping to cut down that effort while allowing more researchers to emerge and share their work with the world.

University of Global Village (UGV)

Department of English

Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-13

What Is Plagiarism? - Definition, Types, Tips, and Consequences



Introduction

Plagiarism is a hot topic. In recent years, it has been widely reported that many people are not just stealing others' writings without giving credit but also posting them as if they were their own work with no changes whatsoever.

What Is the Meaning of Plagiarism?

Content plagiarism is the act of taking someone's work and copying it without crediting the sources. When someone posts content without giving credit to the original creator, they steal that person's work.

Plagiarism applies to using a previously published idea, expression, word, image, or process as one's original creation. It can also be considered to be theft and or copyright infringement.

Why Is Plagiarism Bad?

Plagiarism is bad because it devalues the work of others. It's like taking someone else's words, ideas and content without giving credit for their effort. It also violates the copyright laws in some countries, which can lead to legal action and fines.

Plagiarized content is also bad for SEO because when a site does not have original content, it makes the page less valuable to search engines and visitors. It can also hurt the reputation of your website and the trustworthiness of the site as a whole.

What Are Forms of Plagiarism?

Complete Plagiarism

Complete plagiarism happens when a writer completely "steals" the work and introduces it as their own. For example, you may copy-paste the whole e-book of another company and use the original content without changing a single detail for your content marketing strategy.

Direct Word for Word Plagiarism

Direct plagiarism is copying another person's work without giving them credit and replacing some words with the source. It is the easiest type of plagiarism to identify because it often doesn't change the meaning of the copied text.

Direct refers to the act of stealing someone's work word by word and pasting it into your content piece. Direct plagiarizing does not steal the whole work as it was with complete plagiarism but takes specific paragraphs without quoting or giving credit to resources.

Also, two or three words might be changed. But it is too obvious and still considered plagiarism.

Source-Based Plagiarism

Self-plagiarism occurs when writers:

- Cite sources but deliver their idea in a false way
- Reference some sources but ignore others
- Credit false, imaginary source

Plagiarism of Your Work

There are cases of self-plagiarism. Yes, you can use your ideas, words, and sentences however you use them. But this type of plagiarism has drawbacks.

Indeed, you are not stealing anything if you repurpose the content on multiple pages. Still, if Google detects a case of duplicate content, you may get penalized.

So, even if you have discussed the topic 100x times, you should go the extra mile and try to use different variations of words and sentences to avoid the duplicate content penalty.

Paraphrasing Plagiarism

Let's say you take the original concept of an idea derived from research and paraphrase it without referring to the primary source you plagiarize.

Accidental Plagiarism

Accidental plagiarism can happen when you neglect to cite your sources or misquote your sources. This type of plagiarism is often the result of carelessness or ignorance rather than intentional cheating. If you accidentally use someone else's words without giving them credit,

you still plagiarise. Lack of intent does not absolve persons from responsibility for plagiarism.

Mosaic or Patchwork Plagiarism

Mosaic plagiarism is a type of plagiarism where the writers borrow from a source without using quotation marks or use synonyms for the author's language while keeping to the same general structure and meaning of the original. Patchwork plagiarism can be subtle and difficult to catch, to trick the reader into thinking it's new content.

What Are the SEO Consequences of Plagiarism?

There are several potential consequences for plagiarism when it comes to SEO. First and foremost, plagiarizing content can get you penalized by Google. This means that your website will rank lower in search engine results pages (SERPs), making it much harder for people to find you. In addition, plagiarism can also cause your site to be removed from Google's index altogether, meaning that it will no longer appear in search results.

Aside from the potential penalties from Google, plagiarizing content can also lead to legal trouble. If you're caught copying someone else's work without giving them credit, you may be subject to fines or even imprisonment. And if you steal someone else's copyrighted material and use it on your website, you could face lawsuits from the copyright holder.

Finally, plagiarism is just bad for business overall. It makes you look like a dishonest or lazy person, and it can turn away potential customers and clients. So, not only will plagiarism hurt your SEO efforts, but it can also hurt your bottom line.

How to Avoid Plagiarised Content?

1. Collect Your Sources and References Together

As we have already mentioned, there are cases when writers or students forget to refer to sources, and they unintentionally plagiarize.

It is easily avoidable if you create a list of references and link them to your outline parts. After you align sources with your H2-H3, mark what needs to be quoted, paraphrased, hyperlinked, or included in the footer.

Planning is a half-the-battle won! You should include the step of source collecting in your writing workflow.

2. Quote

The quote is a word used to describe the act of copying a piece of text verbatim and inserting it into your writing. This text should be enclosed in quotation marks and correctly attributed to the original author. Quote sparingly - only use quotes when necessary to drive home a point or illustrate a specific example.

When you include a quote in your writing, it is crucial to ensure that the content is original and accurately quoted. Use quotation marks in the content and cite the source. Also, if you

are doing academic work, do not forget to include the author's name and date of publication in one sentence. For content, you can simply identify the source name.

There are multiple citation styles for citations, but the most common one is the [APA style](#).

3. Paraphrase

A paraphrase is a way of rewriting someone else's texts in your own words while retaining the same meaning. So, use paraphrase when you want to avoid plagiarism, as simply copying large chunks of text from another source can get you into trouble. However, by reading attentively and rewriting the information in your own words, you will avoid plagiarism, better understand the material, and diversify your knowledge about the topic.

The best way to paraphrase is to take the crucial points of the source and rewrite them in your own words without changing their meaning. Indeed, it takes a bit of practice, but it's essential to do if you want to avoid plagiarism accusations.

But if you use the primary source of findings - research, academic paper, etc. mention the primary source of data or information.

4. Give Credit to Your Sources

When you write, it's vital to give credit where it's due. It is especially true when you are borrowing someone else's words or ideas.

- If you are unsure whether something needs a citation, it's always better to be safe than sorry! Add one anyway, and then your readers can decide for themselves if the information is worth further exploration.
- You should add a citation when an idea is similar to the source material but not identical. It shows that you've done your research and that you're respectful of other people's work.
- It can be easy to lose track of sources while writing. That's why it's important to include all the relevant information – author name, date of publication, and so on – in your citations.

5. Add Your Unique Perspective to Existing Content and Story

The internet is full of blogs - [4.4 million new articles](#) are published daily across digital platforms. So, in this competitive environment, you should decorate the digital world with your unique knowledge and expertise.

That is what blogs are about!

6. Use Plagiarism Checker

Plagiarism checkers work by scanning your text, comparing it to a database of web pages and publications, and highlighting passages that appear similar to other texts. While there are distinctions between the plagiarism checker qualities, it is always a good idea to run your text

through one before submitting the product. It will help you avoid any accidental instances of plagiarism.

University of Global Village (UGV)

Department of English

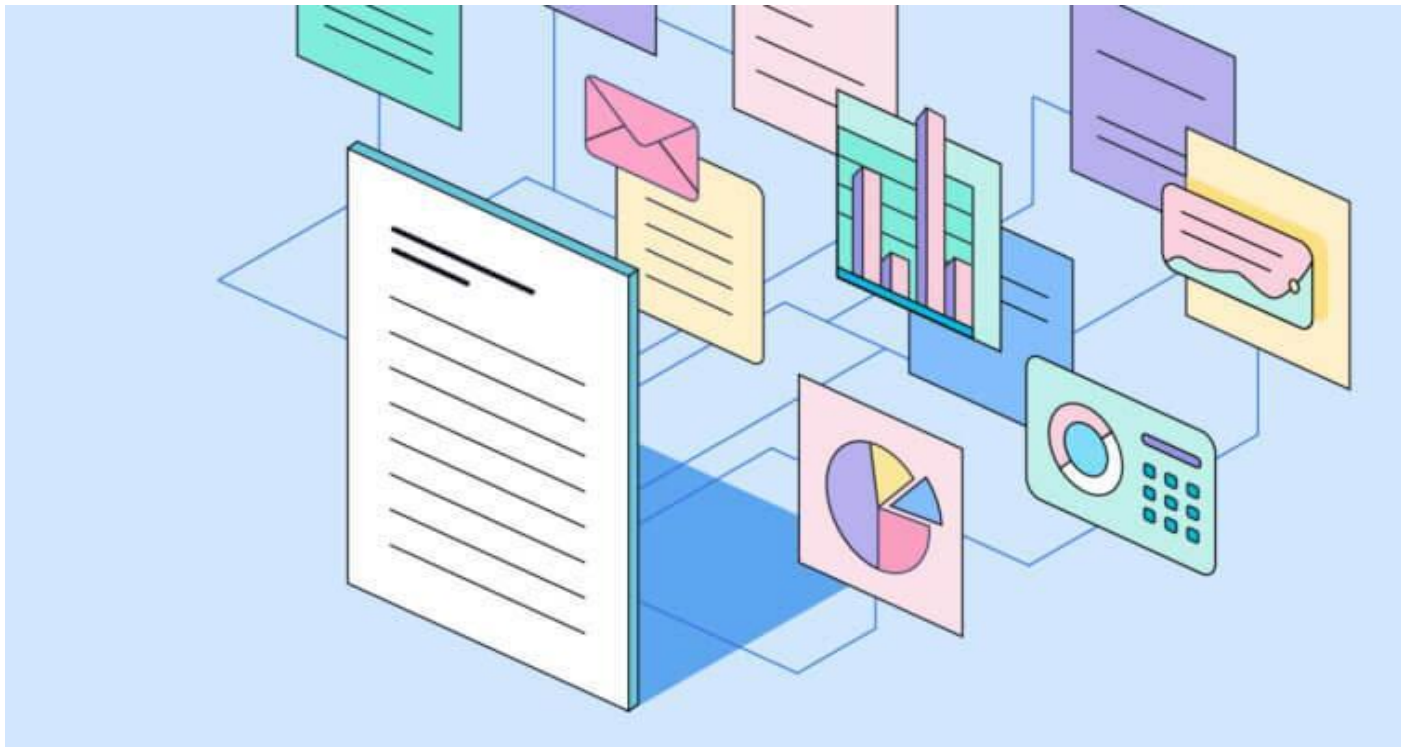
Semester: 8th Semester

Course Title: Research Methodology and Dissertation

Course Code: ENG-418

Week-14

How to Write a Bibliography, With Examples



You spent the past six hours grinding out your latest paper, but finally, it's finished. It's late, you're exhausted, and all you want to do is click "Submit Assignment" and then get some sleep.

Not so fast. If your paper doesn't have a properly formatted bibliography, it's not finished.

A bibliography is a list of all the sources you consulted while [writing](#) your paper. Every book, article, and even video you used to gather information for your paper needs to be cited in your bibliography so your instructor (and any others reading your work) can trace the facts, statistics, and insights back to their original sources.

Give your paper extra polish

Grammarly helps you communicate confidently
WRITE WITH GRAMMARLY

What is the purpose of a bibliography?

A bibliography is the list of sources a work's author used to create the work. It accompanies just about every type of [academic writing](#), like [essays](#), [research papers](#), and [reports](#). You might also find a brief, less formal bibliography at the end of a journalistic piece, presentation, or video when the author feels it's necessary to [cite their sources](#). In nearly all academic instances, a bibliography is required. Not including a bibliography (or including an incomplete, incorrect, or falsified bibliography) can be considered an act of [plagiarism](#), which can lead to a failing grade, being dropped from your course or program, and even being suspended or expelled from your school.

A bibliography accomplishes a few things. These include:

- Showing your instructor that you conducted the necessary research for your assignment
- Crediting your sources' authors for the research they conducted
- Making it easy for anybody who reads your work to find the sources you used and conduct their own research on the same or a similar topic

Additionally, future historians consulting your writing can use your bibliography to identify [primary and secondary sources](#) in your research field. Documenting the course information from its original source through later academic works can help researchers understand how that information has been cited and interpreted over time. It can also help them review the information in the face of competing—and possibly contradictory or revisionary—data.

In nearly all cases, a bibliography is found at the end of a book or paper.

What are the different kinds of bibliographies?

Different types of academic works call for different types of bibliographies. For example, your computer science professor might require you to submit an annotated bibliography along with your paper because this type of bibliography explains the *why* behind each source you chose to consult.

Analytical bibliography

An analytical bibliography documents a work's journey from manuscript to published book or article. This type of bibliography includes the physical characteristics of each cited source, like each work's number of pages, type of binding used, and illustrations.

Annotated bibliography

An annotated bibliography is a bibliography that includes annotations, which are short notes explaining why the author chose each of the sources. Generally a few sentences long, these notes might summarize or reflect on the source.

An annotated bibliography is not the same as a [literature review](#). While a literature review discusses how you conducted your research and how your work fits into the overall body of established research in your field, an annotated bibliography simply explains how each source you used is relevant to your work.

Enumerative bibliography

An enumerative bibliography is the most basic type of bibliography. It's a list of sources used to conduct research, often ordered according to specific characteristics, like alphabetically by authors' last names or grouped according to topic or language.

Specific types of enumerative bibliographies used for research works include:

National bibliography

A national bibliography groups sources published in a specific region or nation. In many cases, these bibliographies also group works according to the time period during which they were published.

Personal bibliography

A personal bibliography lists multiple works by the same individual author or group of authors. Often, personal bibliographies include works that would be difficult to find elsewhere, like unpublished works.

Corporate bibliography

In a corporate bibliography, the sources are grouped according to their relation to a specific organization. The sources can be about an organization, published by that organization, or owned by that organization.

Subject bibliography

Subject bibliographies group works according to the subjects they cover. Generally, these bibliographies list primary and secondary sources, whereas other types of enumerative bibliographies, like personal bibliographies, might not.

Other types of bibliographies

In some cases, it makes sense to use a bibliography format other than those listed here. These include:

Single-author bibliography

This type of bibliography lists works by a single author. With certain assignments, like an essay comparing two of an author's books, your bibliography is a single-author bibliography by default. In this case, you can choose how to order the sources, such as by publication date or alphabetically by title.

Selected bibliography

A selected bibliography is a bibliography that only lists some of the sources you consulted. Usually, these are the most important sources for your work. You might write a selected bibliography if you consulted a variety of minor sources that you didn't end up citing directly in your work. A selected bibliography may also be an annotated bibliography.

How is a bibliography structured?

Although each [style guide](#) has its own formatting rules for bibliographies, all bibliographies follow a similar structure. Key points to keep in mind when you're structuring a bibliography include:

- Every bibliography page has a header. Format this header according to the style guide you're using.
- Every bibliography has a title, such as "Works Cited," "References," or simply "Bibliography."
- Bibliographies are lists. List your sources alphabetically according to their authors' last names or their titles—whichever is applicable according to the style guide you're using. The exception is a single-author bibliography or one that groups sources according to a shared characteristic.
- Bibliographies are double-spaced.
- Bibliographies should be in legible fonts, typically the same font as the papers they accompany.

As noted above, different kinds of assignments require different kinds of bibliographies. For example, you might write an analytical bibliography for your art history paper because this type of bibliography gives you space to discuss how the construction methods used for your sources inform their content and vice-versa. If you aren't sure which kind of bibliography to write, ask your instructor.

How do you write a bibliography?

The term "bibliography" is a catch-all for any list of sources cited at the end of an academic work. Certain style guides use different terminology to refer to bibliographies. For example, MLA format refers to a paper's bibliography as its Works Cited page. APA refers to it as the References page. No matter which style guide you're using, the process for writing a bibliography is generally the same. The primary difference between the different style guides is how the bibliography is formatted.

The first step in writing a bibliography is organizing all the relevant information about the sources you used in your research. Relevant information about a source can vary according to the type of media it is, the type of bibliography you're writing, and your style guide. Determine which information you need to include about each source by consulting the style

guide you're using. If you aren't sure what to include, or if you're not sure which style guide to use, ask your instructor.

The next step is to format your sources according to the style guide you're using. [MLA](#), [APA](#), and the [Chicago Manual of Style](#) are three of the most commonly used style guides in academic writing.

MLA Works Cited page

In [MLA format](#), the bibliography is known as the **Works Cited** page. MLA is typically used for writing in the humanities, like English and History. Because of this, it includes guidelines for citing sources like plays, [videos](#), and [works of visual art](#)—sources you'd find yourself consulting for these courses, but probably not in your science and business courses.

In MLA format, [books](#) are cited like this:

- Last Name, First Name. *Title of Book*. City of Publication, Publisher, Publication

Date.

If the cited book was published prior to 1900, is from a publisher with offices in multiple countries, or is from a publisher that is largely unknown in the US, include the book's city of publication. Otherwise, this can be left out.

[Scholarly articles](#) are cited in this format:

- Author(s). "Title of Article." Title of Periodical, Day Month Year, pages.

APA References page

In [APA format](#)—the format typically used in psychology, nursing, business, and the social sciences—the bibliography page is titled **References**. This format includes citation instructions for [technical papers](#) and data-heavy research, the types of sources you're likely to consult for academic writing in these fields.

In APA format, [books](#) are cited like this:

- Last name, First initial. (Year of publication). *Title of work*. Publisher Name. Digital object identifier (DOI).

[Scholarly articles](#) are cited in this format:

- Authors. (Year published). Title of article. *Title of Periodical*, volume number (issue number), article's page range (i.e., 10-15). URL.

Chicago Manual of Style

[The Chicago Manual of Style \(CMoS\)](#) permits authors to format [bibliographies](#) in two different ways: the **notes and bibliography** system and the **author-date** system. The former is generally used in the humanities, whereas the latter is usually used in the sciences and social sciences.

Both systems include guidelines for citations on a paper's body pages as well as a bibliographic list that follows the paper. This list is titled **Bibliography**.

In CMoS, [books](#) are cited like this:

- Last name, First name. *Title of Book*. Place of publication: Publisher, Year of publication.

[Scholarly articles](#) are cited in this format:

- Last name, First name. "Article Title." *Journal Title* volume number 58, no. issue number (year published): page numbers of the article (i.e., 10-15).

Bibliography FAQs

What is a bibliography?

A bibliography is the list of sources a work's author used to create the work.

What are the different kinds of bibliographies?

There are many different kinds of bibliographies. These include:

- Enumerative bibliographies

- Annotated bibliographies
- Analytical bibliographies

How do you write a bibliography for different style guides?

Each style guide publishes its bibliography guidelines online. Locate the guidelines for the style guide you're following ([Chicago Manual of Style](#), [MLA](#), [APA](#)), and using the examples provided, format and list the sources for your work.

Some basic aspects of research methodology

Bibliography:

A bibliography is a list of works (such as books and articles) written on a particular subject or by a particular author. *Adjective*: bibliographic.

Also known as a list of *works cited*, a bibliography may appear at the end of a book, report, online presentation, or research paper. Students are taught that a bibliography, along with correctly formatted in-text citations, is crucial to properly citing one's research and to avoiding accusations of plagiarism. In formal research, all sources used, whether quoted directly or synopsized, should be included in the bibliography.

An annotated bibliography includes a brief descriptive and evaluative paragraph (the *annotation*) for each item in the list. These annotations often give more context about why a certain source may be useful or related to the topic at hand.

- **Etymology:** From the Greek, "writing about books" (*biblio*, "book", *graph*, "to write")
- **Pronunciation:** bib-lee-OG-rah-fee

What is referencing?

Academic writing relies on more than just the ideas and experience of one author. It also uses the ideas and research of other sources: books, journal articles, websites, and so forth. These other sources may be used to support the author's ideas, or the author may be discussing, analysing, or critiquing other sources.

Referencing is used to tell the reader where ideas from other sources have been used in an assignment. There are many reasons why it is important to reference sources correctly:

- It shows the reader that you can find and use sources to create a solid argument

- It properly credits the originators of ideas, theories, and research findings
- It shows the reader how your argument relates to the big picture

References

Durie, M. (2003). *Ngā kāhui pou: Launching Māori futures*. Huia.

Hazledine, T., & Quiggan, J. (2006). Public policy in Australia and New Zealand: The new global context. *Australian Journal of Political Science*, 41(2), 131–143.

Lazar, J. (2006). *Web usability: A user-centered design approach*. Pearson Addison Wesley.

Ministry for Primary Industries. (2012). *Food safety*. <https://www.mpi.govt.nz/food-safety>

What Is a Footnote?

A footnote is a notation at the bottom of the page in a printed document. Footnotes are usually presented in smaller print than the dominant text, and they are used for a variety of purposes. The “foot” part refers to the fact that the notation is located in the “footer” or “bottom” of the document. A similar concept is the endnote, a note which is provided at the end of a document, rather than at the bottom of a specific page.

When a text has these notes, they are indicated with various symbols or superscript numbers. The [asterisk](#) symbol, *, is a common symbol, but a variety of symbols including daggers, †, may be used. In a text with a lot of notes, numbers are usually used to indicate them, so the reader can keep track of what is going on. Endnotes are typically indicated with numbers, to make it easier for people to look them up.

What is an in-text citation?

An in-text citation is a reference made within the body of text of an academic essay. The in-text citation alerts the reader to a source that has informed your own writing.

The exact format of an in-text citation will depend on the style you need to use, for example, APA. Check with your academic

institution to ensure you provide the in-text citations in the format they are expecting and use Cite This For Me's citation generator to create them for you, automatically.

How to write an in-text citation

In most cases only the author's last name, date of publication and page number from which the quotation or paraphrase is taken needs to be included, with the complete reference appearing in your bibliography (or works cited) page at the end of your essay.

The in-text citation should be presented in brackets directly after the text you have quoted or paraphrased so it's easy for the reader to identify. In some cases, in-text citations are presented as a superscript number, with the corresponding number listed in your bibliography.

Looking for an easier option? Why not let Cite This For Me do the hard work for you by using our mobile app or free web tool. We've got over 7,000 styles in our books and are constantly adding new ones, so we're sure to have the style you need.

What is MLA, APA, and CMS?

Robin Jeffrey

MLA stands for Modern Language Association. It is a style of formatting academic papers that is used mostly in the arts and humanities.

APA stands for American Psychological Association, the professional guild who first developed the guidelines of the style. APA is a style of formatting academic papers that is used mostly in the social sciences.

Books MLA style:

Last Name, First Name. Title of Book. Edition used. Place of publication: Publisher, Year of publication. Medium of publication.

Book with one author

Aprilson, Andy. *The Emergency Budget Task Force Handbook*. Mississippi: Haberdasher, 2001. Print.

Book with two authors

Bringham, Darrin E., and Sally Knope. *Resting Heartbeat Science*. 12th ed. Alahandro: Spaghetti, 2001. Print.

Book with three authors

Christopherson, Charles, Ronald Swanson, and Roger Koltz. *Fog Pirates: On Board the USS Hammerhead*. Pickleton: Putters, 2001. Print.

Books APA style:

Book referencing examples:

Mitchell, J.A., Thomson, M., & Coyne, R.P. (2017). *A guide to citation*. London, England: My Publisher

Jones, A.F & Wang, L. (2011). *Spectacular creatures: The Amazon rainforest* (2nd ed.). San Jose, Costa Rica: My Publisher

Plagiarism

Introduction

Plagiarism is a hot topic. In recent years, it has been widely reported that many people are not just stealing others' writings without giving credit but also posting them as if they were their own work with no changes whatsoever.

What Is the Meaning of Plagiarism?

Content plagiarism is the act of taking someone's work and copying it without crediting the sources. When someone posts content without giving credit to the original creator, they steal that person's work.

Plagiarism applies to using a previously published idea, expression, word, image, or process as one's original creation. It can also be considered to be theft and or copyright infringement.

Why Is Plagiarism Bad?

Plagiarism is bad because it devalues the work of others. It's like taking someone else's words, ideas and content without giving credit for their effort. It also violates the copyright laws in some countries, which can lead to legal action and fines.

Plagiarized content is also bad for SEO because when a site does not have original content, it makes the page less valuable to search engines and visitors. It can also hurt the reputation of your website and the trustworthiness of the site as a whole.

What Are Forms of Plagiarism?

Complete Plagiarism

Complete plagiarism happens when a writer completely "steals" the work and introduces it as their own. For example, you may copy-paste the whole e-book of another company and use the original content without changing a single detail for your content marketing strategy.

Direct Word for Word Plagiarism

Direct plagiarism is copying another person's work without giving them credit and replacing some words with the source. It is the easiest type of plagiarism to identify because it often doesn't change the meaning of the copied text.

Direct refers to the act of stealing someone's work word by word and pasting it into your content piece. Direct plagiarizing does not steal the whole work as it was with complete plagiarism but takes specific paragraphs without quoting or giving credits to resources.

Also, two or three words might be changed. But it is too obvious and still considered plagiarism.