UNIT 3 RESEARCH TOOLS FOR PROJECTS, PAPERS AND REPORTS

Vanishree Joseph

Structure

3.1 Introduction
3.2 Objectives
3.3 Secondary Data
  3.3.1 Advantages of Secondary Data
  3.3.2 Disadvantages of Secondary Data
3.4 Library and Online Research
  3.4.1 Advantages of Using the Library
  3.4.2 Disadvantages of Using the Library
  3.4.3 Advantages of Using Internet
  3.4.4 Disadvantages of Using Internet
3.5 Web Databases
3.6 Style Manuals
3.7 Bibliography
3.8 Footnotes, Endnotes and Citations
3.9 Let Us Sum Up
3.10 Unit End Questions
3.11 References
3.12 Suggested Readings

3.1 INTRODUCTION

This Unit deals with research tools used for projects, papers and reports. Data collection for inquiry forms the major part of the research. There are various ways and means to obtain data. In modern days technology plays a crucial role in providing different data sets and data sets based on web is quite widely used now. How web data bases can be used is also discussed in this Unit. Research reports can not be finalized until sources are acknowledged and references are being made. The final section of this Unit deals with the difference types of referencing style. Let us read the objectives of reading this Unit.
3.2 OBJECTIVES

After completing this Unit, you should be able to:

- Analyse the advantages and disadvantages of secondary data;
- Explain the importance of library and online research in the contemporary world;
- Examine the utility of web databases; and
- Explain various referencing styles.

3.3 SECONDARY DATA

Secondary data is obtained from sources which have been collected and compiled for another purpose, but which are available and important for the research being undertaken. It consists of already available compendia, statistical statements and reports. For example census reports, reports of Sample Survey Organization, National Family Health Survey, and Reports of Government Departments can be used by researchers. These secondary sources of data not only consist of published reports but also unpublished records like personnel records of any organization, inventory records, minutes of meetings etc. They are diverse in nature and consist of all kinds of material having common characteristic features. For your understanding those features are listed below:

- They are available in a concrete form;
- These data have been generated independently of the researcher; and
- They are not limited in time and space.

Further, these data can be used by the researcher in the following manner:

- They can be used for reference purposes;
- They can be used as benchmarks against which the findings of the present research may be tested; and
- They may be used as the sole source of information for a research project.

- Research may be carried solely using secondary sources completely depending upon the nature of the research topic and research questions.

Furthermore, secondary sources of data may be classified in terms of internal and external sources. Internal sources may be obtained within the organization whereas external is sought from outside sources. While pursuing research with the use of secondary sources there are certain advantages and disadvantages. These are discussed in the following subsection.
3.3.1 Advantages of Secondary Data

Data obtained through secondary sources have some advantages. They can be obtained quickly. Only desk work is involved to collect data once the researcher identifies the location of secondary sources.

- Space and time will not be a constraint for the researcher and s/he can cover wider geographical areas and longer reference periods by sitting at one place.
- By using the a larger set of data spanning different geographical spaces and historical periods, broader generalization can be made.
- Secondary information helps to verify the findings based on primary data.
- Finally, it reduces the cost incurred for research, since the data have already been collected by someone else who has invested money, time and energy.

But secondary data are not free from certain disadvantages which are presented below.

3.3.2 Disadvantages of Secondary Data

- These data may not always meet the requirement of the researcher.
- There is no surety of the accuracy of data.
- These data may not be up-to-date.
- The origin of data may not be available to the researcher. Sometime the accessibility of data depends upon the proximity of its location with the researcher.

However, secondary data is very important for providing some background information to the researcher and will help him/her formulate the research questions. Every researcher should search through the relevant secondary data before collecting primary data. Thus, secondary sources of data are vital for research in all its phases from conceptualization of the research problem to dissemination of research findings.

After reading about secondary data, you will read about the use and importance of library and online research sources.

3.4 LIBRARY AND ONLINE RESEARCH

Research can not be done without using the sources available in a library. Libraries provide information and knowledge to the researcher. In the modern era of information technology online resources are also playing an important role in providing information and knowledge to the researcher. Both of
them have their own strengths and weaknesses. In this section, the uses of library and online facilities are discussed. In a library, the researcher has physical access to books and materials and on the internet everything is virtual. Nowadays, libraries are also providing access to online resources and the gap between the two is getting narrow. Internet provides access to online resources. The advantages of using internet are:

- Availability of recent and current information around the world.
- Accessibility and convenient to work from anywhere.
- Provides diverse information.
- Easy to download and edit information.
- Requires only minimum skill for use.

But, there are certain disadvantages in using the internet for research. They are:

- Available information is unorganized.
- Lack of reliability of available information. Accuracy is not checked often.
- May not be available for longer period.
- Not possible to get information on all topics.
- Payment required for specialized information

On the other hand, using a library for research has many advantages as listed below:

- Easy to identify and locate material in libraries as they follow standard classification systems.
- Resources are not compromised in quality as they have their own selection criteria.
- Library staff can provide assistance in locating needed resources.
- Print form is much easier to read.
- Preserved items and old records and other data of historical importance can be available only in the library.

But, libraries do have some disadvantages and they are:

- Library is not accessible all the time.
- Research has to be carried out in a specific physical time-bound environment, which may not always be convenient.
3.5 WEB DATABASE

A web database is a wide term for managing data online. A web database gives you the ability to build your own databases/data storage without your being a database guru or even a technical person. There are many types of web databases depending on their usage. Some of the major types of databases are discussed below:

1) Catalogs - in both business-to-business and business-to-consumer e-commerce. Catalog databases allow browsers to search items by keywords or combinations of keywords. Many sites provide a local search engine that scours only pages of that particular site.

2) Libraries of books, articles, CDs, and movie clips. These types of sites also often include a local search engine that allows a user to search for the keywords in a title, author name, or specific entries in an article. University faculty, staff, and students often have access to such large databases through their institutions. Most of these databases are not owned by the academic institutions, but are operated by organizations that specialize in running library databases such as ABI/Inform and UMI.

3) Directories, which can include names, addresses, telephone numbers, and e-mail addresses. For instance, professional associations can provide members with access to membership lists.

4) Client lists and profiles. Usually, individual users have access to these databases only for the purpose of inserting or updating their own records. A registered username and password are usually required to gain access to these databases.

From a technical point of view, online databases that are used via Web browsers are not different from other databases; however, an interface must be designed to work with the web. The user is provided with a form in which to enter queries or keywords to obtain information from the site’s database. The interface designers must provide a mechanism to parse data that users insert in the online forms, so that the data can be placed in the proper fields in the database.

A database is a collection of records that are compiled efficiently to regulate managing, storing and accessing of logically inter-related information. There are two popular types of Databases: Desktop and Server.

Desktop databases are designed to run on personal computers. More popular desktop database products include FileMaker Pro, Microsoft Access and Lotus Approach.
Server databases are generally used by business and organizations as they offer the ability to manage huge amounts of data and allow many users to view and update information simultaneously. Server databases are expensive but are worth the cost for the benefits of data management that they offer.

Attempt the following exercise to assess your learning from the last couple of sections.

**Check Your Progress:**

i) **Write advantages and disadvantages of the following:**

a) Secondary data

b) Internet research

ii) **What is understood by web based research?**

You will now read about different styles of citing references in a publication.

### 3.6 STYLE MANUAL

A handbook or guide that illustrates the accepted format for citing your references in term papers, theses, articles, etc. is given below:

- **ACS Style Guide**
- **AMA Manual of Style**
- **AP Stylebook**
The section that follows now deals with writing of bibliography in a research publication.

3.7 BIBLIOGRAPHY

A bibliography is a complete or selective list of works compiled on the bases of some common principle, as authorship, subject, place of publication, or publisher.

It is a list of source materials that are used or consulted in the preparation of a work or that are referred to in the text.

Bibliography is also a branch of library science dealing with the history, physical description, comparison, and classification of books and other works.

Bibliographic works differ in the amount of detail depending on the purpose and can generally be divided into two categories: enumerative bibliographies (also called compilative, reference or systematic bibliopgrahies), which result in an overview of publications in a particular category; and analytical or critical bibliographies, which study the production of books. Earlier, bibliographies mostly focused on books. Now, both categories of bibliography cover works in other areas including audio recordings, motion pictures and videos, graphic objects, databases, CD-ROMs and websites.
Citation styles vary, but an entry for a book in a bibliography usually contains the following elements:

- author(s)
- title
- publisher and place of publication
- date of publication
- place of publication

An entry for a journal or periodical article usually contains:

- author(s)
- article title
- journal title
- volume number
- pages
- date of publication

A bibliography may be arranged by author, topic, or some other scheme. Annotated bibliographies give short descriptions (also known as abstracts) about how each source is useful to an author in constructing an argument or writing a paper. These descriptions, usually a few sentences long, provide a summary of the source and describe its relevance. Reference management software may be used to keep track of references and generate bibliographies as required. Mendeley is a software which can be used for reference purpose. Endnotes is a name of another software which helps with different reference styles.

After reading about how to write bibliography in different research publications, in the following section you will read about a very important component of any research publication. It is the use of footnotes and endnotes.

### 3.8 FOOTNOTES AND ENDNOTES

Footnotes are an essential element in presentation of an academic argument. Informed use of footnotes allows you to display full range of readings and research you have undertaken, and avoid weighing down your main text with interesting but tangential information.

You should see footnotes as an opportunity, not as a chore. For these reasons, you should not leave compiling your footnotes to the end of the dissertation writing process. They also often take more time than you expect. You have the choice of using footnotes or endnotes. In either case they
should be numbered with Arabic number sequences (i.e. 1, 2, 3 etc.) rather than any alternative system (Roman numerals, for example, i, ii, iii, iv, v etc. are not acceptable). The footnotes for each chapter should begin with a fresh numerical sequence. The footnotes in the introduction and conclusion should also have separate sequences. If you are using endnotes, these sequences should be separated by headings which indicate which chapter they refer to. Any direct quotation or substantial borrowing from an authority, or reference to an authority by name, must be acknowledged in a footnote. Author’s names in footnotes appear in the normal order, e.g. John Smith (NOT Smith, John, which is reserved for the Bibliography). For place of publication, always cite a city or town rather than a country. If two cities are cited, e.g. New York and Oxford, say so. If there are three or more, just list the first. For American cities, you have the option of adding an abbreviation of the state too, but if in doubt just omit. The publisher’s name should always follow AFTER the place of publication, thus (London: Jonathan Cape), NEVER (Jonathan Cape: London). Date of publication - use the date of the actual edition you are using (not the first date of publication), since the pagination may vary between different editions even if they have not been revised.

Always italicise, never underline (a hangover from the days when dissertations used to be typed on typewriters). Footnotes can be elaborate, but beware of using overlong footnotes. Remember, footnotes do count towards the overall word-limit, so moving material into footnotes is not a way of saving space. You can be concise with footnotes, do make use of judicious phrases like ‘for further discussion see …’ rather than reiterating arguments that are only laterally related to your material. In almost all cases footnote references should be placed at the end of sentences in the main text. The most common exception to this is where you have a list in the main text, where each of the separate elements requires individual footnotes, in which case footnote references should follow them immediately. The secret of good footnoting is good note-taking. Always keep a complete record of the full source and specific page numbers as you take notes. Whenever you copy any passage - even a short passage - verbatim into your notes, be sure to use inverted commas in your notes to indicate that you have done so. This will help you to avoid accidental plagiarism.

Footnote will be given at the end of the page where as endnote will be given at the end of the text.

The following section will equip with referencing of different published sources (in MLA Style Manual).

**References to books:**

Full name of Author(s), *Complete Title* (in italics), place of publication and publisher separated by colon followed by comma and date (in brackets), page number(s) (p. or pp.). Thus:
References to articles:
Full name of Author(s), ‘Complete title’ (in single quotation marks), Name of Periodical (in italics) volume number and part (in Arabic numbers), year (in brackets), page number(s) (p. or pp.).


For some monthly journals you may wish to specify the month as well as the year. Apollo magazine and The Burlington Magazine are cases in point. This is especially important for publications like Apollo where each monthly issue has a new pagination (The Burlington Magazine, by contrast, has a continuous pagination over the whole year). Where a journal does not have a continuous pagination over the course of a year/volume then it is difficult to locate a reference without knowing the precise number or month of a particular issue. Thus:

Donal Cooper and Janet Robson, ‘Pope Nicholas IV and the Upper Church at Assisi’, Apollo 157, no. 492 (February 2003), pp. 31-35.


References to essays in anthologies/edited books:
Full name of Author(s), ‘Title of chapter’ (in single quotation marks), ‘in’, Full Title of Book (in italics), ‘ed.’ or ‘eds’ (for plural - note lack of full stop here) followed by name(s) of editor(s), place of publication and publisher separated by colon, followed by comma and date (all in brackets), page number(s) of chapter referred to (p. or pp.). Thus:


References to catalogues:
Full title of exhibition (in italics) (open brackets: ‘exhibition catalogue’, name(s) and place(s) of museums where exhibition held, dates of exhibition 30 September 2003 - 7 January 2004), ‘ed.’ or ‘eds’ followed by name(s) of editor(s), place of publication and publisher separated by colon and followed by commas and date of catalogue publication (in brackets), page number(s) referred to (p. or pp.). Thus:

Citing electronic sources:

Full name of Author(s), ‘Title of Page’ (in single quotation marks), title of complete work, if this page is part of a group of documents, date page was created (if known), URL (written thus: http://www.warwick.ac.uk/arthistory/research.html) and date you consulted it: e.g. consulted 24 February 2014. For successive references, you may limit the reference to the author and date as with other abbreviated references. A useful guide is Melvin E. Page, A Brief Citation Guide for Internet Resources in History and the Humanities (1996): http://www.h-net.msu.edu/about/citation/

Even if you are consulting articles through electronic resources (especially through JSTOR and similar journal databases) you should use the hard-copy citation (which JSTOR, for example, provides as a cover sheet to its PDF files. You should only give a URL for dedicated e-journals which are ONLY available online, and which are not published in hard-copy.

Citing manuscripts and archival sources:

When citing manuscripts, you should include place, name of library, then MS (to indicate manuscript) with the number or pressmark used by the library concerned, followed by folio number (either fol. or ff. and including r-v to distinguish recto and verso). Thus:

London, British Library, MS Harley 4431, fol. 24r-v.

Paris, Bibliothèque nationale de France, MS ital. 548, fol. 10v.

Please ensure that archive names and locations are given in full and that citations of pressmark or finding numbers follow the exact form used by the library or repository of archives concerned. For an archival source, you should cite place, name of archive, name of the collection or section to which it belongs, number of document within that section (and/or title where this is appropriate), and folio. Thus:

Florence, Archivio di Stato, Notarile Antecosiminiano 7147, ff. 166v-168r.

For references to the recto and verso of the same sheet cite in the singular, thus: ‘fol. 166r-v’. You may wish to use abbreviations for certain archives, some of which are in standard usage, for example MWCD for the Ministry of Women and Child Development, MHRD for the Ministry of Human Resource Development). If you use these they should be included in your list of abbreviations at the beginning of your dissertation. In the first citation to a document from one of these archives you should give the full formula followed by ‘hereafter cited as …’ in brackets, thus:
References to manuscripts and archival documents are especially important. By definition, these are unique sources, with only a single copy in existence. Your reference must be sufficiently clear so as to enable a scholar from any part of the world to locate the particular page or folio within the manuscript you are referring to. If you are citing an original source at second hand, from a secondary work, without having consulted the original work, you must make this clear in your reference. Thus:


By constructing your footnote in this way you avoid the pretence that you yourself have consulted the primary source. This reference also shows that you have relied on another scholar’s transcription of the quotation.

References to successive editions of a book

Important works often go through several editions. You should always cite the edition which you are using, as paginations can change between different editions even when the book has not been revised. You can specify this in your references thus:


Similarly, you should state whether an edition is a revised edition. Note that word programmes often automatically put ‘-rd’ and ‘-th’ endings into superscript, we ask you to change -rd and -th back to regular font size (i.e. to -rd and -th)

Citing dissertations:

Name of author, ‘Full Title of dissertation’ (in single quotation marks, not italics), ‘Ph.D. thesis’ or ‘MA dissertation/report’, name of University and date (in brackets), page number(s) referred to (p. or pp.). Thus:


Successive references:

A full reference to the work should be included when it is first cited. Thereafter shorter references may be used. Thus, for the examples cited above:

Campbell (1996), pp. 55-58


In rare cases where you have to cite two works published by the same author in the same year, you should distinguish these by a superscript a or b. Thus:

Avery (2003²), p. 123

In your first, full reference you should include (hereafter referred to as Avery, 2003²) at the end of the reference in brackets. In the full bibliography you should include (referred to in the text as Avery, 2003²) in brackets at the end of the bibliographic entry. You should not use Latinisms like ‘op. cit.’ or ‘loc. cit.’ which are now generally discouraged. Where you immediately repeat the reference used in the previous footnote you may use ‘ibid.’ (Latin meaning ‘In the same’). Thus:

(44) Bellini and the East (2005), p. 56
(45) Ibid., p. 58

However, ‘ibid’ should be used sparingly, and only where there is no possible confusion as to what it refers to (it should be avoided, for example, where the previous footnote contains more than one reference). Moreover, ‘ibid’ is not only confined to footnotes and it can be used in texts while the reference is cited again within the same paragraph.

Take up the following exercise to assess your learning of the last few sections.

Check Your Progress:

i) What is a bibliography?

ii) What is the difference between footnotes and endnotes? Why are these used while writing a paper?

Revisit what you have read in this unit by going through the following section.
3.9 LET US SUM UP

This Unit has dealt with what is the need of using secondary data, web databases, online resources and library for writing papers/articles or other academic research work. It has also given you different styles of referencing. Any research report will be complete only if proper referencing is made. The quality of the report lies on the quality of the references used and indexed.

3.10 UNIT END QUESTIONS

1) Explain the need for secondary data. Give examples in support of your answer.
2) Find out some of the online libraries and examine their utility in research.

3.11 REFERENCES


3.12 SUGGESTED READINGS
