

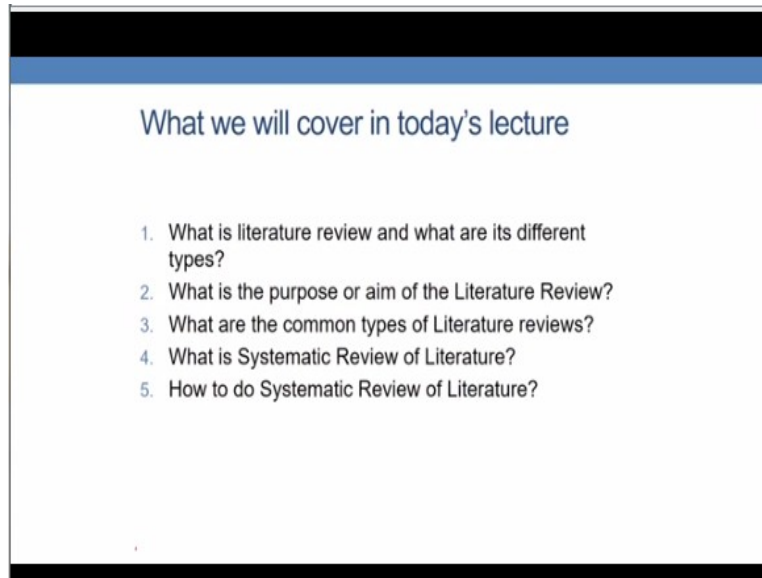
Development Research Methods
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Lecture-07
Week3, Lesson 1: Literature Study

Hello and welcome to lesson 1 of week 3 of the development research methods course. In this lesson we will study about one of the most important stages of research project or academic research which is referred to as literature study or the review of literature. Now for many students and early researchers embarking upon development research, literature review may seem like a highly daunting task and given the research problems at hands that needs of lot of attention. Early on in the research process literature study seems like getting in on the way of various other important tasks that the researcher is engaged with. Now although this is understandable, the literature review is far more central to the whole research process than we can think of. If we look at what makes a good literature review, we can see that it provides some critical elements of your dissertation or research project and tests a number of key areas, tests us in a number of key areas.

If we can write a good review, we will have demonstrated a range of skills and competencies. For example, we may be considered as a well-read student or a researcher who is able to structure her arguments and commentaries regarding a certain research topic more coherently. We may also be considered as having a good grounding in the relevant literature that we have to study for our research project. We would also have got analytical skills as we can identify the key themes and the areas in which we are undertaking research. And we can also construct our arguments properly. Constructive criticism of existing work can be carried out effectively. We can also link a library research or research pertaining to secondary resources with the field research more effectively if we have a very good grounding in the literature review or the literatures study stage. We can communicate our ideas better, we can outline and synthesize our research ideas more effectively, and we can also provide our own clear commentary and arguments and debates pertaining to the research topic that we have taken up. It is also important to remember that writing a very good review of literature or review establishes our own

credentials as a researcher by the time we are established as a researcher. So, keeping these things in mind, what we will cover in today's lecturer as follows.

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We will first see what is literature review and what are its different types. We will also look at what is the purpose or aim of the literature review, what are the common types of literature reviews. Now among the different types of literature reviews, in this lesson we will focus mostly on one type of literature review which has come to be known as systematic review of literature. And this is increasingly being used in the field of development research methods. And then finally we will also see how to carry out a systematic review of literature.

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What is a literature review and what are the different types?

- A literature review is an objective, thorough summary and critical analysis of the relevant available research and non-research literature on the topic being studied.
- Its goal is to bring the reader up-to-date with current literature on a topic and form the basis for justification for future research in this area.
- Types of literature reviews
 1. Traditional or narrative literature review
 2. Systematic literature review

Now let us begin with this question of what is a literature review and what are its different types. Literature review is nothing but an objective and a thorough summary and critical analysis of the relevant available research and non-research literature on the topic being studied. Notice the term non-research literature, for example in today's increasing world of information that is being bombarded on us, the amount of non-research literature that is available on the web is of astounding importance to us. For example, if you look at the amount of research materials that is available through blogs written by individuals and various institutions that are maintaining these blogs, it also provides us a lot of information that we can begin our research with.

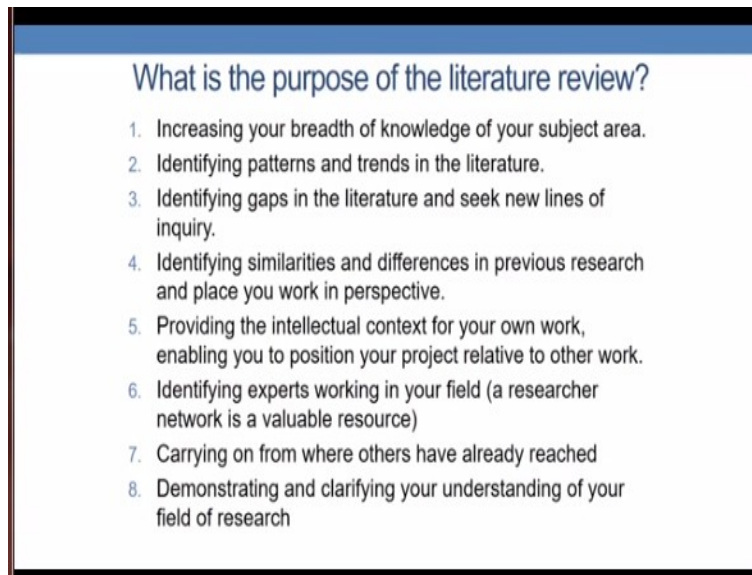
So, when we are talking about literature study or review of literature, it also refers to non-research literature and not just researched literature which finds publications in various reputed journals. So, we are looking at a thorough summary and critical analysis of the relevant available research and non-research literature on the topic being studied. One of the goals of review of literature is to bring the reader up-to-date with current literature on a topic and form the basis for justification for future research in this area.

Now there are various types of review of literature but the most common types that are used in development research are as follows. One is the traditional or narrative literature review and the second is systematic literature review. Those of you who are interested in looking up various other forms of literature review, you can also look at meta narrative and meta-analysis forms of literature review which brings in a lot of statistical analysis into how literature review should be

carried out looking at the relevance and reliability of the different kinds of findings that are coming from the literature study. Nevertheless for the purpose of our today's lesson on literature study, we will focus mostly on systematic literature review after touching up on the basic characteristics or general features of what constitutes the traditional or narrative literature review.

Now before we look at the general features of the traditional or narrative literature review, let us also ask the question of what is the purpose of the literature review.

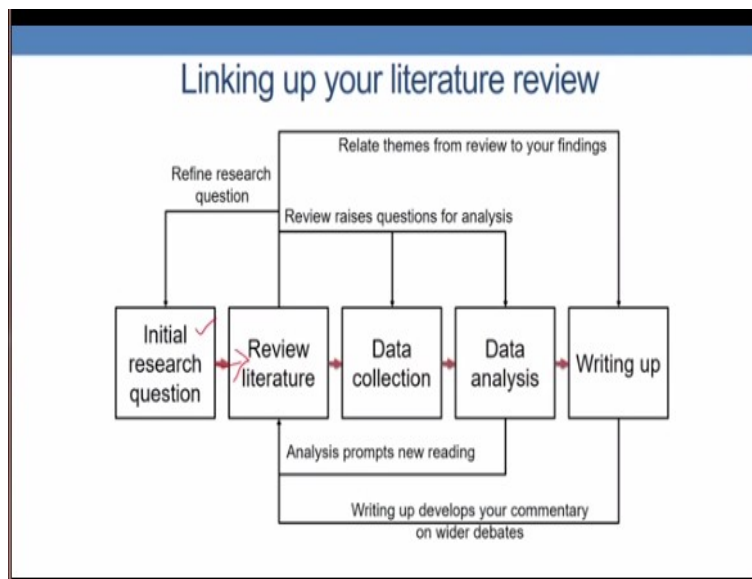
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One is of course we are trying to increase the depth of knowledge of our subject area- the depth and breadth of the knowledge of our subject area. We are trying to identify patterns and trends in the literature. We are trying to identify gaps in the literature and seek new lines of inquiry. In fact, for any research project or particularly, academic dissertations that students carry out, one of the first things that the supervisors ask to focus on is to identify what is the literature gap in the literature that is being studied. And those literature gaps may be tried to be fulfilled by posing new research questions that can address the literature gap. Similarly, identifying similarities and differences in previous research and place our work in perspective, we can provide the intellectual context for our own work which enables us to position our project relative to other work. We can also identify experts working in a field which enables us to create a researcher

network which is a very valuable resource during the process of carrying out independent research and for all future research well. We can carry on from where others have already reached based upon the research gaps that we have identified. We can also demonstrate and clarify our own understanding of the field of research.

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Now we can link up the literature review with the writing up process also. Usually we begin with an initial research question. Now based upon the initial research question we embark upon a review of literature. Now once the review of literature is done, we raise certain questions for analysis. So, we collect our data based upon the questions that have come up from the review of literature. And then we move onto data analysis. However review of literature can go in a back and forth process. After analysis of data, we can relate the themes from the review to our findings and these findings can then help us refine our research questions further. It can also prompt us to go on for new reading of the literature that we have studied which can then help us to write up. So that we can develop a commentary on wider debates.

So the initial research question goes through a process of review of literature on which is based data collection and analysis and writing up. However, during the period in which we are carrying out data collection and analysis, based upon the findings we can also go back to our initial

research question and refine the questions further and that is how important literature review is for the entire research process.

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Traditional or Narrative Literature reviews

- A narrative or traditional literature review is a comprehensive, critical and objective analysis of the current knowledge on a topic.

Onwuegbuzie and Frels (pp 24-25, 2016) define four common types of narrative reviews:

1. **General literature review** that provides a review of the most important and critical aspects of the current knowledge of the topic. This general literature review forms the introduction to a thesis or dissertation and must be defined by the research objective, underlying hypothesis or problem or the reviewer's argumentative thesis.
2. **Theoretical literature review** which examines how theory shapes or frames research
3. **Methodological literature review** where the research methods and design are described. These methodological reviews outline the strengths and weaknesses of the methods used and provide future direction
4. **Historical literature review** which focus on examining research throughout a period of time, often starting with the first time an issue, concept, theory, phenomena emerged in the literature, then tracing its evolution within the scholarship of a discipline. The purpose is to place research in a historical context to show familiarity with state-of-the-art developments and to identify the likely directions for future research.

Onwuegbuzie, A. J. & Frels, R. (2016) 7 steps to a comprehensive literature review: A multimodal & cultural approach. London, UK: Sage Publications

Now let us look at what other basic features of a traditional or narrative literature review. Now if you look at most of academic research in the social sciences, mostly literature reviews follow the traditional or narrative process. However, in the recent times with the cutting inter-disciplinarity in various social science disciplines, systematic review of literature is being used quite a lot. However, that is not to say that traditional or narrative literature reviews have become redundant or irrelevant. It is also good to start with the traditional or narrative literature review.

So, what is it? A narrative or traditional literature review is basically a comprehensive, critical and objective analysis of the current knowledge on a topic. It improves or enhances the current knowledge base of the topic that we have taken up for our study. Now 4 common types of narrative reviews are usually employed when we carry out this kind of literature study. One is general literature review, theoretical literature review, methodological literature review, and historical literature review. So, the general literature review provides a review of the most important and critical aspects of current knowledge of the topic. And this general literature review forms the introduction to a thesis or dissertation and it is identified or defined by the research objective. We focus on the hypothesis or problem or the reviewer's argumentative

thesis. The general literature review mostly gives us a description of the research topic that we have taken up.

The theoretical literature review examines how theory shapes or frames research. It contributes a lot to the theoretical construct that we intend to take up for our research. Similarly, methodological literature review focuses a lot on research methods and designs. And these methodological reviews outline the strengths and weaknesses of the methods used and provide a future direction for our study. And the methodological literature review is very significant when the focus of the study is mostly on different kinds of methodologies that are used for coming up with more significant findings of the empirical studies that we have taken up.

Similarly, historical literature review focuses on examining research throughout a period of time. We often start with the first time an issue, the concept, the theory or the phenomena that emerged in literature. And then we trace its evolution within the scholarship of a discipline, and the purpose of this kind of literature review is to place research in a historical context to show familiarity with state-of-the-art developments and to identify the likely directions for future research. For example, if we have taken up a research topic such as a study of food insecurity in rural India. If we have to use a historical literature review, if we establish a time line of let say the postcolonial period, we know that a lot of relevant literature is available from the 1940s onwards. So, if we are looking at the evolution of policies and frameworks that have taken place right from the 1940s till the most recent period, then what we are engaging here is what is referred to as a historical literature review.

Now there are certain general points to remember about how to present a narrative review. Some of the things to remember are as follows;

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Some general points about how to present a narrative review

- Present each study in a way that makes its relation to the themes clear and explicit
- Show how strong or how weak the overall evidence for each main point is
- Describe findings in the context of providing something new to the literature
- Structure the review into sub-sections, with a coherent "story" and flow throughout.
- Provide a balanced coverage and critique of all aspects of the literature (ideally spending some time searching for evidence that would seem to contradict the main conclusions and patterns)
- Cite a study's conclusion whilst also describing the method and specific results to provide a context

We present each study in a way that it makes its relation to the themes clear and explicit. What are the themes that we have taken up and how we are presenting our study in relation to the themes that should be clear and explicit. We have to show how strong or how weak the overall evidence for each main point is. We have to describe the findings and the context of providing something new to the literature. We must structure the review into sub-sections with a coherent story and flow throughout. We can also provide a balanced coverage and critique of all aspects of the literature and ideally it is good to spend some time searching for evidence that would seem to contradict the main conclusions and patterns. And we can also cite a study's conclusion while also describing the method and specific results to provide a context. This in a nutshell is how to provide the narrative or the traditional review of literature in development research.

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Systematic Literature Review (SLR)

- SLR identifies, selects and critically appraises research in order to answer a clearly formulated question.
- Follows a clearly defined protocol or plan where the criteria is clearly stated before the review is conducted.
- Comprehensive, transparent search conducted over multiple databases and grey literature that can be replicated and reproduced by other researchers.
- The search terms, search strategies (including database names, platforms, dates of search) and limits all need to be included in the review.
- 7 key principles behind systematic literature reviews are Transparency, Clarity, Integration, Focus, Equality, Accessibility, Coverage

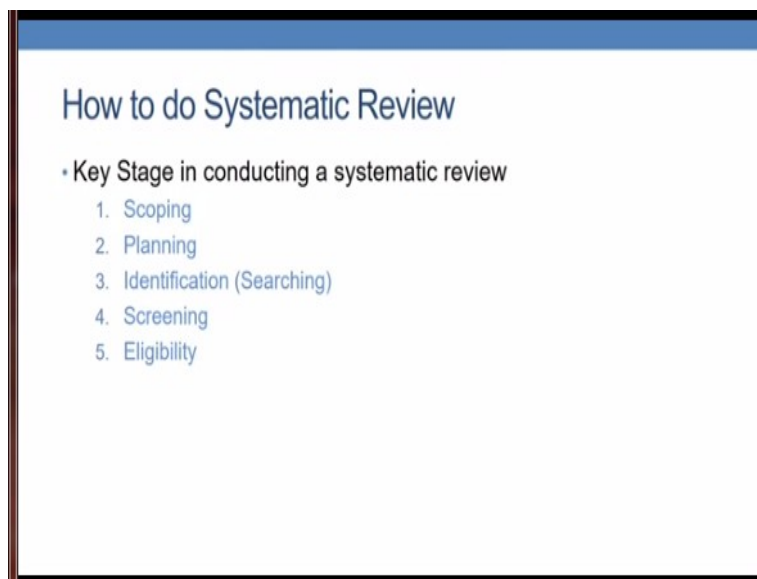
Let us now look at systematic literature review. Now a huge amount of research is produced each year as we know and often they are with conflicting findings. And, these between study differences could be due to the way the study design has been carried out or it could be due to certain flawed design of the study or it could simply be due to a chance, variations of the sample that we have been taken up for the study. Now in such situations it is not always clear what is the overall picture that is emerging from a study or which results are most reliable and should be used as the basis for practice and policy decisions. I have taken this example of nutrition and complementary feeding practices in the earlier classes.

Let us say for example we are studying the effect of complimentary feeding practices on the overall nutrition status of children in the age group of 6 months to 2 years in various districts of India. And let us say after carrying out an empirical investigation, one study says that complimentary feeding practices have had a positively significant effect on the nutrition status of children. Whereas, another studies says that no such effect is seen, no such causal relationship comes out with regard to the relationship between complementary feeding practice and nutrition status. And another study says that there seems to be a negative effect on the overall nutrition status of children. How do we then come up with a comparison? How do we then come with an overall picture of what is the effect of complementary feeding practices on the nutritional status of children? It is in these situations that systematic review of literature becomes of utmost importance.

Now what is the systematic literature review do? It does the following. SLR identifies, selects, and critically appraises research in order to answer a clearly formulated question. It follows a clearly defined protocol or plan where the criterion is clearly stated before the review is conducted. We enter into a comprehensive, transparent search conducted over multiple databases and grey literature that can be replicated and reproduced by other researchers. And the search terms, search strategies including database's names, platforms, dates of search and limits, all of these needs to be included in the review which makes systematic review of literature very robust in comparison to the narrative or traditional review of literature.

There are 7 key principles that guide systematic literature review. One is transparency in the search of the literature. Clarity with regard to the question that we are formulating before we enter into the SLR process. Integration of different forms of research. Focus on the question that we have formulated. Equality, accessibility and coverage of the themes that we want to search as part of the systematic literature review process. Now, systematic reviews basically aim to address these problems as I said by identifying, critically evaluating and integrating the findings of all relevant high quality individual studies addressing one or more research questions.

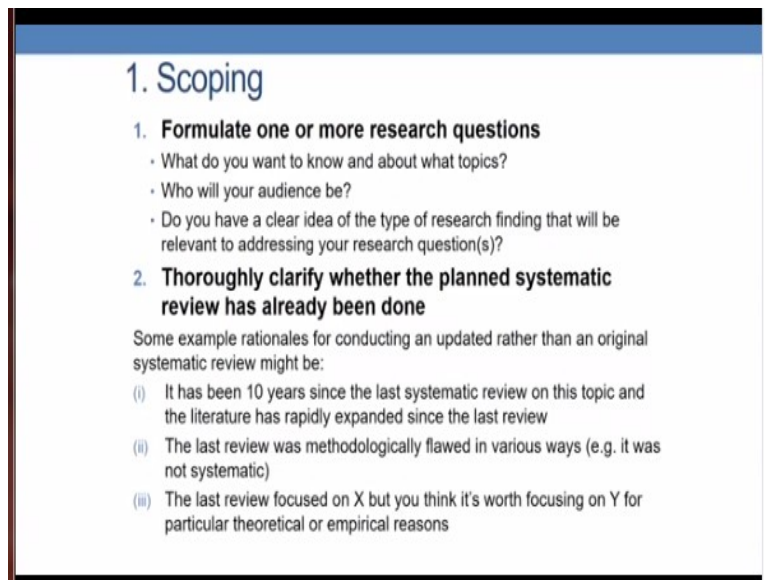
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Now how to do systematic review? There are certain key stages in conducting a systematic review and 5 such stages has been identified by various researchers who have contributed to the

literature on systematic review- scoping, planning, identification, screening and eligibility. Let us look at each of these stages one after the other.

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1. Scoping

- 1. Formulate one or more research questions**
 - What do you want to know and about what topics?
 - Who will your audience be?
 - Do you have a clear idea of the type of research finding that will be relevant to addressing your research question(s)?
- 2. Thoroughly clarify whether the planned systematic review has already been done**

Some example rationales for conducting an updated rather than an original systematic review might be:

 - (i) It has been 10 years since the last systematic review on this topic and the literature has rapidly expanded since the last review
 - (ii) The last review was methodologically flawed in various ways (e.g. it was not systematic)
 - (iii) The last review focused on X but you think it's worth focusing on Y for particular theoretical or empirical reasons

Now the first stage in being able to carry out an effective systematic review of literature is what is referred to as scoping stage. There are 2 sub stages in the scoping stage. One is to formulate one or more research questions and second is to thoroughly clarify whether the planned systematic review has already been done. Now some of the questions that need to be asked when we are formulating one or more research questions referred to as a scoping study is- what do we want to know about what topics, who will your audience be, do we have a clear idea of the type of research finding that will be relevant to addressing your research questions. Clear and specific and answerable research questions are essential to a successful review. For example, if we are asking this question- is family therapy and effective treatment for anorexia, it will be a more effective question and produce a more focused set of search results than if we ask how do I help people with eating disorders which is a more generic kind of a question. So, we probably need to do some scoping of the literature, finding out what is the scope of the study, to find out what has been done before and what might make a novel, important, and interesting scientific contribution to the literature. So, examining a narrow research question or research area will make the research task much easier and faster.

The second sub stage in the scoping stage of the systematic review of literature is what is called thoroughly clarifying whether the planned systematic review has already been done. Now this is mostly to avoid wasting of time and energy. We can establish whether SLR of your research questions has already been done or is registered or is an ongoing review. So, for that we need to search thoroughly the databases that exist. This search will begin to familiarize us with the literature. It will save our time if a review already exists and it does not need an updating or help provided a rational for why we are conducting an updated review is essential. Some rationales for conducting an updated rather than an original systematic review might be the following.

First could be that it has been 10 years since the last systematic review on this topic, and the literature has rapidly expanded since the last review and therefore, we need to update the literature. The last review may have been methodologically flawed in various ways or in other words it may not have been systematic. Similarly, the last review may have focused on some reasons say X, but we want to focus on something else, say Y, of a particular theoretical or empirical reasons.

Now if a review has already been done and does not need repeating that review will form useful reading for our project. So, this is what is referred to as the scoping stage of the systematic review of literature. We are basically ensuring what is the topic, who our audience are going to be, which means the focus here is on the specificity of the question and also trying to assess whether there is a need for carrying out a systematic review of literature or updating the review of literature. This is the scoping stage of the systematic review of literature.

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2. Planning

1. Break your research question(s) down into individual concepts to create search terms
 - Using alternative terms and concepts (Synonyms, different spellings, broader/narrower terms, etc.)
 - Balance between search sensitivity and specificity
2. Formulate preliminary inclusion and exclusion criteria - and then review these in the initial stages of the literature searching and sifting process
 - Criteria can concern: Research question, Conceptualization, Research design, Time frame, Data, etc.
3. Create clear record keeping systems and keep meticulous records by working systematically

The second stage is what is referred to as the planning stage and it contains 3 sub stages. First is of course, we break our research question down into individual concepts to create search terms. Then we formulate preliminary inclusion and exclusion criteria and then review these in the initial stages of the literature searching and sifting process. And finally, we create clear record keeping systems and keep meticulous records by working systematically.

So, what happens when we are looking to break down of research questions into individual concepts to create search terms? So, search terms can operationalize our research questions and help us find as many potential relevant articles as possible to include. If we are aiming to conduct a search that is exhaustive and therefore representative of all studies that have been conducted on the topic of interest. Reading the existing literature and talking to our supervisor will give us a good idea of how to translate our research question into search terms. For example, using alternative terms and concepts, synonyms and different spellings. Going back to our example of food security, if we are doing a study on food security some of the alternative search terms to be used while searching the literature could be, let us say food self-sufficiency or food safety, food quality or food sovereignty. These are certain alternative terms that could be used for beginning with a systematic review of literature.

Secondly, there should be a balance between sensitivity and specificity. At this stage now when we are looking at sensitivity, we are basically looking at finding as many articles as exist with regard to our topic. But when we are trying to balance between specificity after giving a

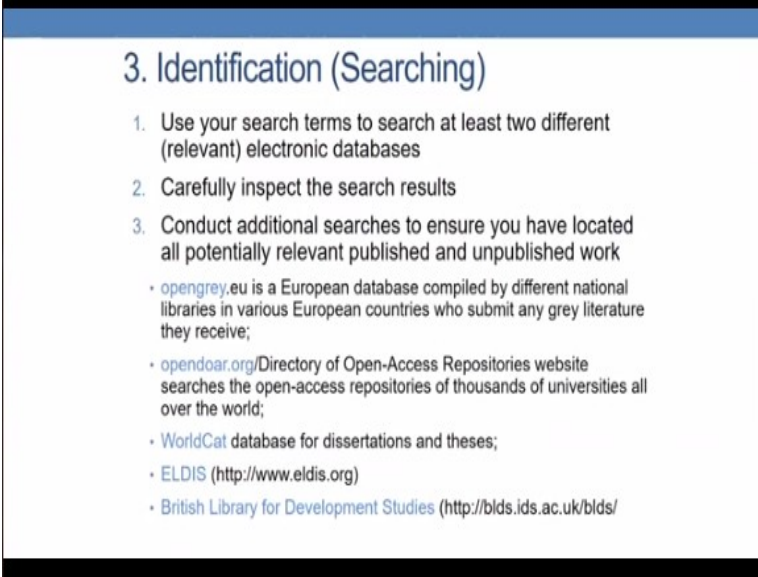
literature search on a large number of articles that is useful for our study, we should then go and ensure and assess whether the literature that we have collected is relevant for our topic or not. And therefore, there needs to be a fine balance between sensitivity and specificity.

The second is with regard to formulating preliminary inclusion and exclusion criteria. Now based on our knowledge and the supervisor's knowledge of the literature, we can actually formulate a list of objective and unbiased inclusion and exclusion criteria which will allow us to address the research questions that we are posing ensuring the quality and similarity of included studies. Now, some of the common inclusion and exclusion criteria basically concern the research question or the research topic. Usually when we are embarking upon development research projects through dissertations we may not want to ask the similar kinds of research questions or the same research questions that have already been taken up by research projects earlier. Similarly, definition or conceptualization of the topic that we have taken up. If I am doing a study on food security or food sovereignty, what is the already existing conceptualization with regard to food security and food sovereignty. The different measures and key variables, what is being measured, how to be measured, the research design, participants, the time frame and the data to be collected is of utmost importance when we are planning the systematic review of literature.

In the third sub stage of the planning stage, we can create and clear record keeping systems. Now, before actually doing any searching of the literature, it is worth creating one or more record keeping systems to record what we do and what decisions we take. This means seem an unnecessary effort, but if the literature is large or massive it is almost impossible to remember exactly what we did and what information we collected as part of the search process. Therefore, it is always best to create records of what is the literature that we have searched and included and what is the literature that we have already rejected and may not have been used in the research questions framing stage. Often, we see that in the research framing question stage, we might have used certain literature and rejected certain literature, whereas in the report writing or the final dissertation writing phase we might want to include the rejected literature. And therefore, creating record of literature selected and rejected is of utmost importance and this is also a part of the literature planning stage.

So, how can we maintain these records? Some of the suggestions could be as follows; you can make a record of the details of the searches you do in the results. You can also make a list of the number of studies excluded at the screening stage. You can make a table to record the list of studies excluded at the first stage and you can also make a table describing the efforts made to find and retrieve the unpublished work. For example, during the period of PhD research which may range between 2 years to 5 years, it is possible that there is certain literature that you have found in the beginning of your PhD but is not available in public platforms towards the end of your research dissertation. And it is in these cases that it becomes and however these unpublished materials can form a very good foundation can give a very good basis for carrying out your research topic or your research thesis. And therefore, it becomes all the more essential to maintain proper records of unpublished work which you may have found at the beginning of the research process.

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3. Identification (Searching)

1. Use your search terms to search at least two different (relevant) electronic databases
2. Carefully inspect the search results
3. Conduct additional searches to ensure you have located all potentially relevant published and unpublished work
 - opengrey.eu is a European database compiled by different national libraries in various European countries who submit any grey literature they receive;
 - opendoar.org/Directory of Open-Access Repositories website searches the open-access repositories of thousands of universities all over the world;
 - WorldCat database for dissertations and theses;
 - ELDIS (<http://www.eldis.org>)
 - British Library for Development Studies (<http://blds.ids.ac.uk/blds/>)

The third stage is what is referred to as the identification or the searching stage. Now since after having reached this stage, the aim is to find all available published and unpublished work which addresses the research questions and operationalizing through our search items. The best way to find the vast majority of published work which addresses our research questions is to comprehensively search at least two different electronic databases. And then we carefully inspect the search results. We conduct additional searches to ensure that we have located all potentially

relevant published and unpublished work. So, what do we do? We can select databases that are relevant to our topic area, for example if searching electronic databases, some of the tips are as follows. We can select databases that are relevant to our topic area example Medline, EMBASE ISI Web of Knowledge.

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| Searching in Electronic databases- Some Tips | |
|--|---|
| Databases | • Select databases that are relevant to your topic area (e.g. Medline, EMBASE, ISI Web of Knowledge) |
| Parts | • Consider which parts of articles you want to search (e.g. abstract, title) |
| Limits and filters | • Search by article type (e.g. research syntheses, empirical articles), subject categories, sub-headings, etc. |
| Boolean Search | • Boolean search operators broaden or narrow your search: • AND (a search for all of your search terms; e.g., 'heart AND lung'), • OR (a search for at least one of your search terms; e.g., 'heart OR lung'), • NOT (a search to exclude certain search terms; e.g., 'heart not lung') |
| Truncation Symbols | • Use a truncation symbol to look for all words starting with a particular combination of letters (e.g. 'dep\$' or 'dep*' will retrieve 'depression', 'depressive', 'depressed', etc); • Use the truncation symbol (*) between words to match words (e.g. 'midsummer * dream' will return results that contain the exact phrase, 'a midsummer night's dream'); |

We can consider which parts of articles we want to search, example abstract, the full text or the title. We can consider using limits and filters within particular databases to search by article type example- are we looking for review articles and research synthesis, are we looking for empirical articles, subject categories, sub-headings etc. We can also use Boolean search operators to broaden or narrow our search. For example, using the term 'AND' search for all of our search items. Example, if we are looking for heart and lung, then we get a search result which includes research articles that includes both the terms heart and lung or we can also use the operator 'OR'. So that a search for at least one of your search terms example heart or lungs and similarly the Boolean search operator 'NOT' where we can specify, we are looking for heart but not lung. So, these are certain Boolean search operators that can enhance our search in a very meaningful way.

We can also consider using a truncation symbol to look for all words starting with a particular combination of letters. For example you can use dollar or star sign depending on the database,

example dep\$ or dep* will retrieve search results such as depression, depressive, depressed and all of these terms can be of importance for the study that we are undertaking as far as the initial stage of collecting a lot of research is concerned the sensitivity of the topic that we have taken up. We can also consider using parenthesis because commands within these run first when we are giving parenthesis.

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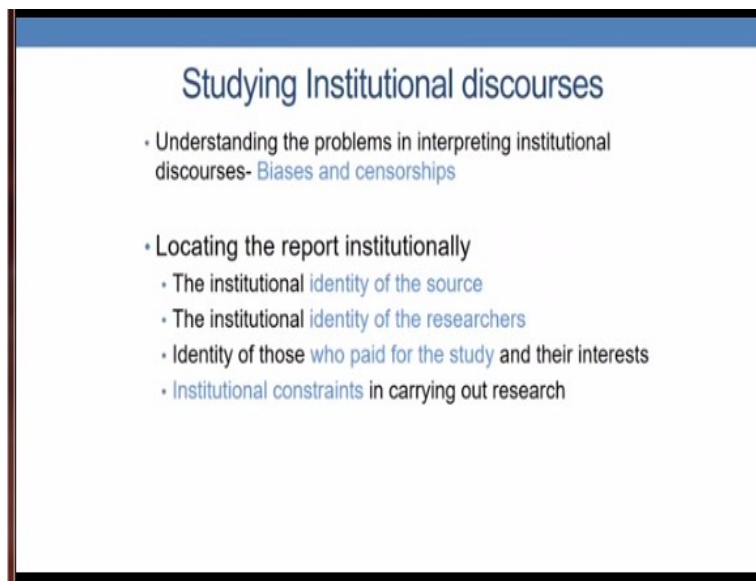
| Searching in Electronic databases- Tips 2 | |
|---|--|
| Wildcard Symbols | • Consider using a wildcard symbol to stand-in for one character, if that character exists ('#' or '?' or '\$' depending on the database) (e.g. 'wom#n' will find 'women' or 'woman'); |
| Parentheses | • Consider using parentheses because commands within these run first (e.g. '(smok* OR tobacco)') |
| Proximity | • Consider searching by proximity, to search for one word within n number of words of another word ('adjn' or 'NEAR/n' depending on the database) (e.g. 'patient adj3 anxiety' will retrieve records where 'patient' and 'anxiety' appear within three words of each other); |
| Exclusion | • Consider excluding unwanted meanings (e.g. 'jaguar NOT(car OR cars), if you want the animal); |
| Year | • Consider searching by publication year, if you have a good theoretical or empirical reason for doing so |

So, for example if we are using commands such as this- 'smoke OR tobacco' and we are using a parenthesis, then the search commands will run these first. We can also consider using a wild card symbol to stand-in for one character, if that character exists for example a #, tag, or \$ depending on the database. Example if we are using 'wom #n', we can find women or woman, so these kinds of wild card symbols can also be used for searching of electronic databases.

Proximity is another criterion. You can consider searching by proximity to search for one word within 'n' number of words or another word, let us say 'adjn or NEAR/n' depending on the database. Example 'patient adj3 anxiety' we will retrieve records where patient and anxiety appear within 3 words of each other. Similarly, exclusion criteria- we can consider excluding unwanted meanings, example jaguars can be a car or it can be an animal. So, if we are giving a search saying jaguar NOT, which is a Boolean operator, NOT car or cars if you want the animal. So, the search results give you only the relevant articles. We can consider searching by

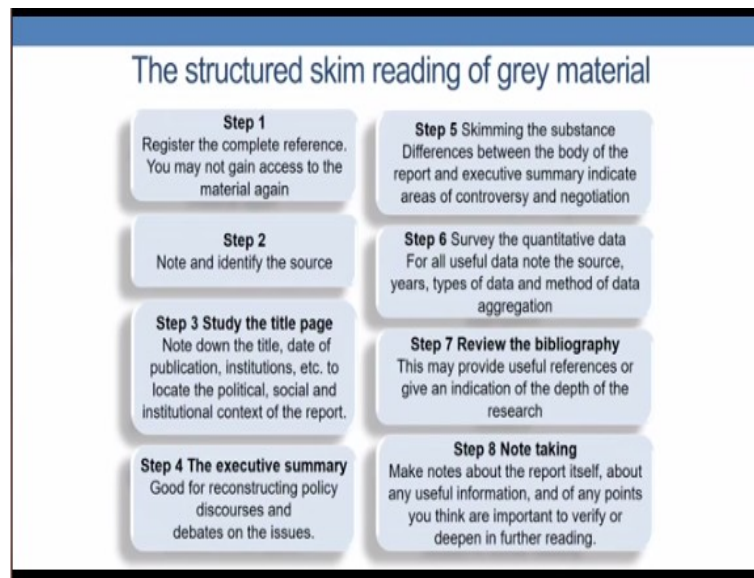
publication year if you have a good theoretical or empirical reason for doing so. Example, if you are conducting reviews since a previous review which was published in 2001. So, this is how you can mention your timeline- so in the search you can mention 2001 to current or if you want to delve with more historical literature you can give a search such as 1948 to current. So, this will give you more specific research search results.

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Now within this, it is also important to look at in this stage when we are identifying research materials, it is also important to look at institutional discourses. It is important to understand the problems in interpreting institutional discourses, biases and censorships. Now usually when we are locating the report institutionally, certain institutions have carried out reports. For example, we use World Bank reports or UNICEF reports or UNDP reports or we may use US aid reports. When we are using such kind of reports, it is important to look at what is the source of the reports, what is the ideology of these reports and what is the political discourse of these reports. So, the institutional identity of the source, the identity of the researchers, identity of those who are paid for the study and their interest, and what are the institutional constraints in carrying out to research is also extremely important. And this is what is referred to as the grey material and there are a number of steps involved when we are trying to skim through the grey material that is available to us guided by institutional discourses.

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One of the first steps is to register the complete reference. We may not gain access to the material again. The step 2 is to note and identify the source. Step 3 is to study the title page- we note down the title, date of publication, institutions etc, to locate the political, social and institutional context of the report. Then we look at the executive summary which is good for reconstructing policy discourses and debates on the issues. In step 5 we can skim the substance's differences between the body of the report and executive summary indicate areas of the controversy and negotiation. In step 6, we survey the quantitative data for all useful data, we can note the source, the years, types of data, and method of data aggregation. In step 7, we review the bibliography. This may provide useful references or give an indication of the depth of the research. And in the last step, we can take down notes. We take notes about the report itself about any useful information and of any points we think are important to verify or deepen in further reading.

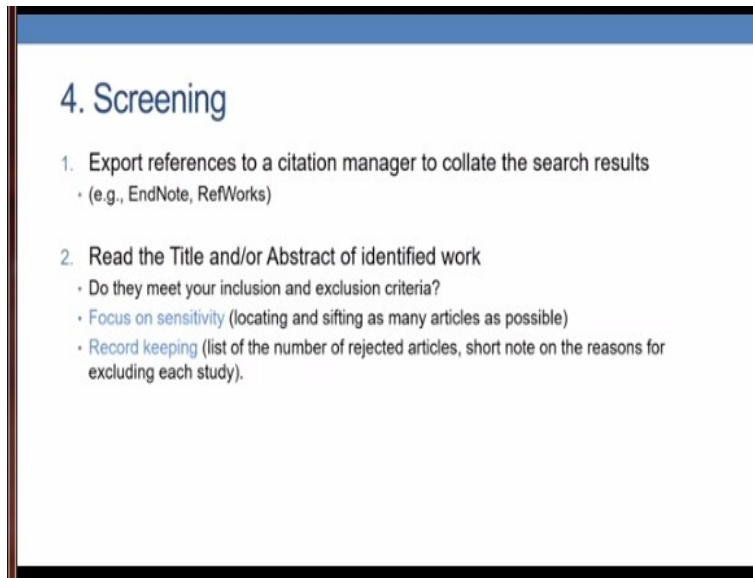
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Interpreting institutional discourses in
construction of argument

- Step 1 Identifying and rethinking assumptions
- Step 2 Formulating alternative questions and extending the range of possible answers
- Step 3 Reading both sides of key debates
- Step 4 Confronting the data: how well they answer old and new questions
- Step 5 Rethinking conclusions
- Step 6 Rethinking the audience

When we are interpreting institutional discourses also, it is important to get our argument right. So, therefore the construction of argument based upon interpreting of this institutional discourses also need to be given a lot of importance. A number of steps can be identified as far as interpretation and construction of argument based upon this is concerned. One is of course, we identify and rethink the assumptions that we are studying. We can formulate alternative questions and extend the range of possible answers. We read both sides of the key debates. We confront the data- how well they answer old and new questions. And we can rethink conclusions and rethink the audience. So, this can be a part of the identification of research materials.

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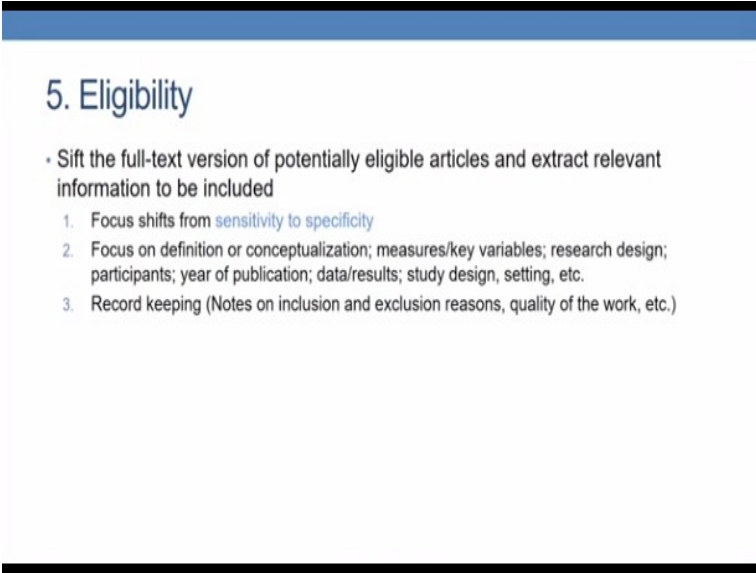
The 4th stage in the systematic review of literature stage is what is referred to as the screening stage and this is also a very important stage and there are 2 sub stages to it. One is how do we export the references, how do we take care of the references that we have collected. And second, how to read the title or abstract of identified work. Now our initial search probably may have revealed a large number of results. And exporting these search results to a citation manager example- EndNote, RefWorks has number of advantages. What are the advantages? It can save us a lot of time as it is an electronic rather than a manual process. The search results are saved and backed up meaning that we cannot lose this valuable information. The citation manager can identify and get rid of duplicate versions of the same work.

We can obtain and share with others full text versions of many of the articles identified and the citation manager will compile a reference list and format it in an array of referencing styles. And this can be very useful if we are submitting the manuscript for publication in a journal. Because if one referencing style is not used by a certain journal, it can be used by another journal. So, maintaining referencing style based upon citation managers can be a very useful task.

For screening we can also read the title or abstract of identified work. So, most work will not meet our inclusion and exclusion criteria. So, if title or abstract suggest that the work is potentially eligible for inclusion, that is it may pass our inclusion and exclusion criteria, we will need to obtain the full text version and read that carefully. And at this stage we continue err on the side of sensitivity, so that we do not miss on anything. For record keeping purposes during

the screening stage it is sufficient to make a list of the number of rejected articles rather than noting the reasons for excluding them from the study. So, this is referred to as the screening process. So, just to look up the number of processes that we have looked. First we began with the scoping process, then we went onto the scoping stage, the planning stage, the identification stage, and then the screening stage.

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5. Eligibility

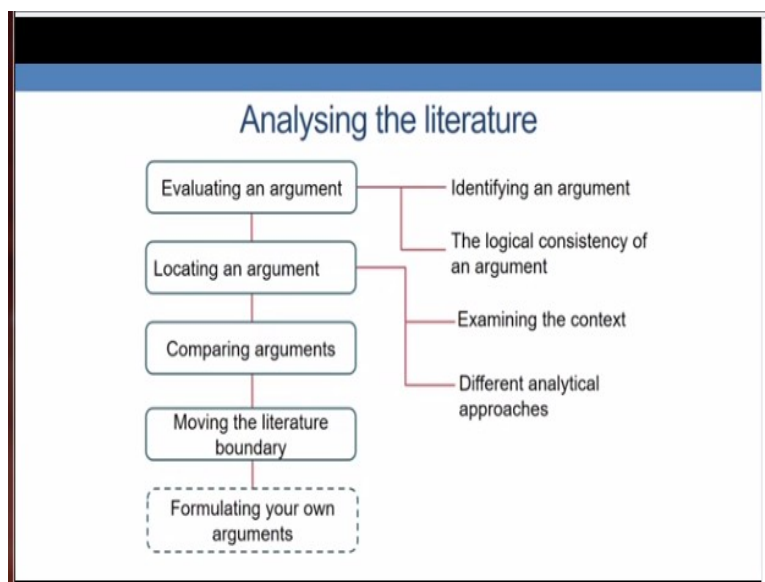
- Sift the full-text version of potentially eligible articles and extract relevant information to be included
 1. Focus shifts from sensitivity to specificity
 2. Focus on definition or conceptualization; measures/key variables; research design; participants; year of publication; data/results; study design, setting, etc.
 3. Record keeping (Notes on inclusion and exclusion reasons, quality of the work, etc.)

The final stage in the systematic review of literature is referred to as the eligibility stage. So, what do we do in this stage? We sift the full-text version of potentially eligible articles and extract relevant information to be included. Our focus now shifts from sensitivity to specificity. We carefully make sure potentially eligible studies are indeed relevant and appropriate for inclusion. So, we now need to sift the full-text version of potentially eligible articles to see if each is indeed suitable for inclusion. Even during this stage, we can rapidly reduce the pool of potential studies by focusing our reading on whether or not each published or unpublished work meets our inclusion and exclusion criteria. That is we can focus on methods and result section rather than on the introduction discussion. We can keep a record of why each piece of published or unpublished work was rejected during this stage and this can increase the transparency of the selection process. When we identify work for inclusion, we need to carefully and thoroughly extract all relevant information for potential inclusion, what is considered relevant information will depend on our research questions and topic and the information we extract will

predominantly relate to our inclusion and exclusion criteria. And therefore, it will likely cover definition or conceptualization, measures or key variables, research design, participants, year of publication, data or results, study designs, setting and so on.

Our inclusion and exclusion criteria is designed to ensure that high quality relevant work is included. But we may also additionally think that it would be constructive to make notes on the quality of each included study as it will be helpful to summarize methodological limitations which bias the literature. And there is no consensus on the best way to assess study quality but most methods encompass issues such as appropriateness of study design for variables, control of confounding, appropriate use of statistics, quality of reporting and so on. So, when we analyze the literature keeping in mind this flowchart may be of significance.

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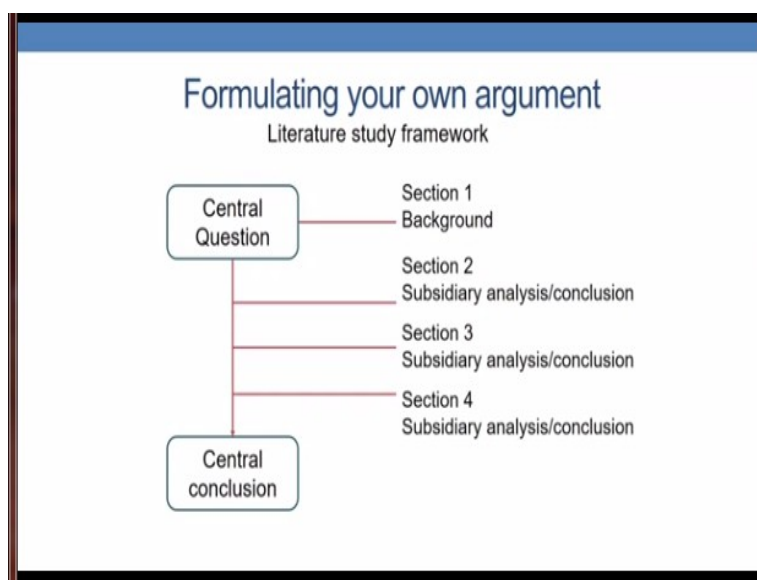


First is, we are trying to evaluate an argument. For evaluating an argument we identify an argument and look at the logical consistency of an argument. We also locate an argument. For locating an argument we look at the context of the argument or we examine the argument and look at the different analytical approaches that go to locating the argument. We can then compare the arguments. And then comparing of the arguments will help us move the literature boundary and formulate our own arguments. I took the example in the beginning of this lesson of study of food insecurity in rural India, let us say for example. There have been fierce contestations and

debates with regard to the political economy of food, the political landscape of food distribution in India right from the 1990s onwards. In the context of the structural adjustment program there are economists and social scientists on both sides of the debate. There are those who argue that food subsidies should be cut down, social sector subsidies should be cut down and privatization or private competition in social sector should be increased. And there are those others who say that food is an important merit good and it should not be left to the functioning of the private players but the government has to make provisions for effective distribution and redistribution of food.

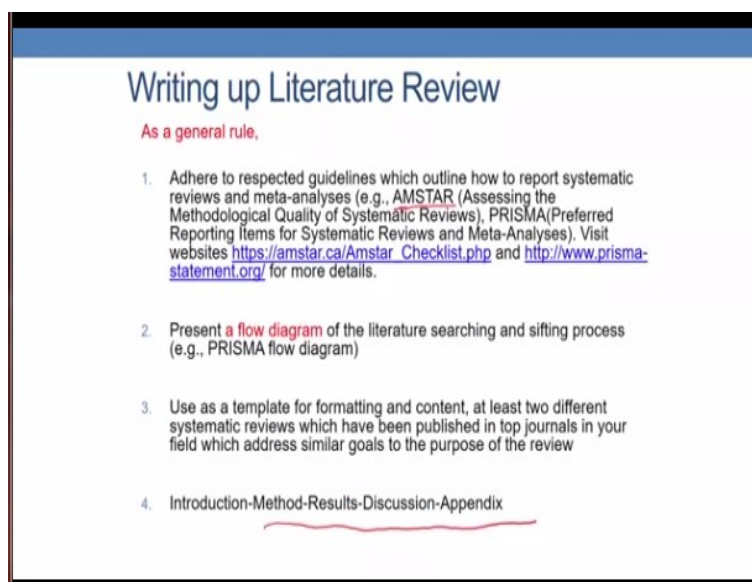
Now when we are trying to evaluate this argument of whether food subsidy should be cut down or should not be, we have to first locate the logical consistency of this argument and locate the argument by looking at the context in which this argument is being put forward. The context could be many things- the context could be the context of developing countries vis-a-vis developed countries. The context could be the issue of malnourishment, the context could be the issue of private competition and so on. So, different analytical approaches can be used locate the argument. We can compare both sides of the argument. And hence the literature boundary of this argument can keep on moving until we take sides or we formulate our own arguments based upon two or more sides to the research question that is being studied. And that is how we analyze the literature.

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When we are formulating our own argument there are certain things that need to be kept in mind. What is the central question and what is central conclusion that we are trying to put forth through our own argument based upon the formulation of our argument based upon the comparison of the arguments that we have done. So, the central question should contain the section 1 could contain the background, section 2 could be the subsidiary analysis and conclusion, section 3 and section 4 leading to the central conclusion of our argument.

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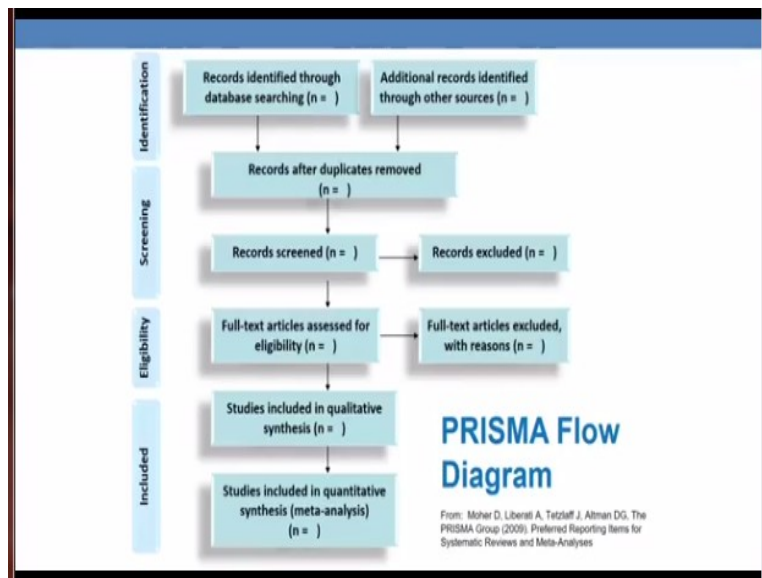
The slide is titled "Writing up Literature Review" in a blue header. Below the title, it says "As a general rule," in red. There are four numbered points in a list:

1. Adhere to respected guidelines which outline how to report systematic reviews and meta-analyses (e.g., AMSTAR (Assessing the Methodological Quality of Systematic Reviews), PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Visit websites https://amstar.ca/Amstar_Checklist.php and <http://www.prisma-statement.org/> for more details.
2. Present a **flow diagram** of the literature searching and sifting process (e.g., PRISMA flow diagram)
3. Use as a template for formatting and content, at least two different systematic reviews which have been published in top journals in your field which address similar goals to the purpose of the review
4. Introduction-Method-Results-Discussion-Appendix

A red wavy underline is drawn under the text of the fourth point.

Now writing up the literature review based upon the systematic review of literature is also extremely important. As a general rule we can if you adhere to respected guidelines which outline how to report systematic reviews and meta-analysis. For example, there is AMSTAR- Assessing the Methodological Quality of Systematic Review or PRISMA- Preferred Reporting Items for Systematic Reviews and Meta-Analysis. I would urge the students to visit the websites that I mentioned on the page for more details which provides checklists of how to ensure we have carried out a proper systematic review of literature. We can also a present a flow diagram of the literature searching and sifting process. In this lesson towards the end I have shown a PRISMA flow diagram. We can use as a template for formatting the content at least 2 different systematic reviews which have been published in top journals in the field which address similar goals in the purpose of the review.

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This is flow diagram of the PRISMA flow diagram which follows the systematic review of literature process. The first stage if you see is the identification stage, there are 2 parts to it. You can record identified through the database searching 'n' is equal to how much. So, how much literature we have collected, how many records we have identified through database searching. Additional records identified through other sources. So, we identify two major databases and what is the so the same example for food security. So, we can carry out search through two major databases. And then identify what is the 'n'- the total number of literature or the records that we have identified. After going through that process we have additional records identified through other sources. The screening process would include the records after duplicates removed, records screened and the records excluded. We record these items. Eligibility- full-text articles assessed for eligibility- 'n' is equal to how much. Full-text articles excluded with reasons- why are we not including them in our research project. So, what is the total number of them. And finally, the included studies- studies included in qualitative synthesis, studies included in quantitative synthesis- 'n' is equal to how many.

This PRISMA flow diagram is one of the examples of a checklist that can help us identify whether the systematic review of literature that we have carried out is a robust one or not. However, there are various others, for example, I suggest looking at the AMSTAR checklist also

by visiting this website amstar.ca which can help us identify whether our literature review process has been robust or not.

Let me end this lesson by focusing a little on this flow- the introduction, methods, results, discussion, and appendix flow. More specifically a systematic review should probably include most or all of the following depending on whether you are doing a qualitative or a quantitative review. With respect to introduction, the things that need to be kept in mind are whether we have provided a theoretical and empirical background to literature explaining key terms definitions and concepts, whether we have provided a theoretical or empirical rationale for carrying out systematic review. We can explicitly state what is the focus, goals, what are the perspectives, what is the coverage of the topic that we have taken up, and to be able to achieve this we can either start by presenting an existing or new theoretical conceptualization at the start of the review and then use a reminder of the manuscript to review the literature relevant to the theory or we can start by presenting a quick summary of an existing theoretical review of literature or conceptualization. And postponing its full elaboration until after the literature has been reviewed.

With respect to methods we can describe a comprehensive, objective, systematic literature search in detail. We can discuss border line or near miss cases which were excluded and which readers might have expected to see included. We can provide a flow diagram which I have just discussed like for example a PRISMA flow diagram to describe identifications, screening, eligibility, and inclusion of the final articles that we have included in the review.

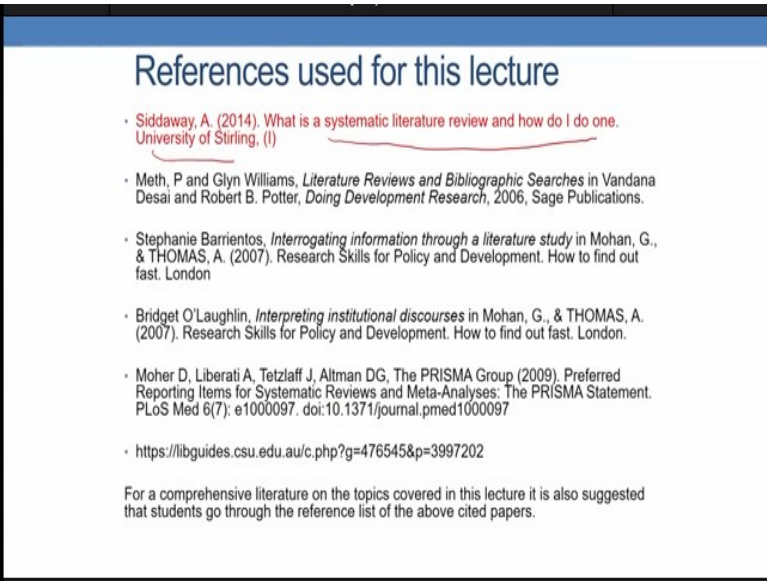
In the results stage we can describe the characteristics of included details in the form of a table. We can describe the assessment of scientific quality of included studies. We can also critically evaluate and integrate the results in an unbiased and systematic way and we can balance conflict resolution by identifying inconsistencies in the study results.

Discussion is an important part of the systematic review of literature process. What happens in discussion is usually we summarize and discuss the findings and conclusions of the review in a balanced and impartial way. We explicitly and intuitively link our conclusion to the evidence reviewed. We discuss the strengths and limitations of the literature, we establish to what extent existing research has progressed towards clarifying a particular problem or formulating general

statements, we can also comment on, evaluate, extend and develop theory and draw conclusions and make recommendations for practice.

Appendix can be considered including a detail list of studies excluded at the potentially eligible stage and for purpose for those who are working on a development research thesis, we may probably also want to include sample record keeping forms and completed records. These are some of the important things to keep in mind when we are writing up a literature review.

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- Meth, P and Glyn Williams, *Literature Reviews and Bibliographic Searches* in Vandana Desai and Robert B. Potter, *Doing Development Research*, 2006, Sage Publications.
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- Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097
- <https://libguides.csu.edu.au/c.php?g=476545&p=3997202>

For a comprehensive literature on the topics covered in this lecture it is also suggested that students go through the reference list of the above cited papers.

These are the references that I have used for this lesson. This is an important material that I have used extensively for today's lesson 'What Is the Systematic Literature Review and How Do I Do One'. And the other literature are mentioned here and for a comprehensive literature on the topics covered in this lesson it is also suggested that students go through the reference list of all the above cited papers that I have mentioned. So, with this I end the class on literature study. I will see you in the next class.

Thank you.