

A Guide to a Literature Search Strategy

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**Meghan Forestell, LRIA Research Assistant
Ellery Veerman, LRIA Research Associate
Bruce Oddson PhD, LRIA and School of Human Kinetics**

Introduction

When conducting a literature search, you may already have your topic/research question selected, or you may be in a position where a preliminary search is necessary to gather ideas and assess what literature is available. Regardless of your situation, this search strategy can be used throughout the research process. It has been designed to help researchers efficiently and effectively find academic literature relevant to their topic and/or research question.

This search strategy uses two methods systematically to enable a comprehensive review of the literature. The two methods include a content/concept search and an author search. It is recommended to complete the content/concept search first because it allows the researcher to find a main publication. This search addresses key variables and identifiers (keywords) for the researcher, and subsequently leads to the author search. The author search allows the researcher to identify authors who have published literature in the topic area of his or her interest. Identifying an author in the same research field enables the researcher to find relevant publications efficiently and relatively quickly. Though it is recommended to start with the content/concept search, eventually you will move back and forth between the two search methods. This Guide will outline both strategies in further detail.

Content/Concept Search

The content/concept search is the first step of the strategy. The purpose of the content/concept search is to find a main publication that is relevant to your search topic. The publication should have similar research interests, key variables and identifiers to your topic of interest. The main publication will introduce you to new authors and literature specific to your research question, which is discussed further in the author search section of this Guide. If you have already found a main publication you wish to use for your research, you may skip ahead to the author search section.

The search strategy requires the researcher to begin by finding a relevant and authoritative publication. To determine if a publication is relevant and authoritative, it may be evaluated based on the following five scientific criteria: accuracy, authority, objectivity, currency and coverage. The following chart outlines questions to consider when appraising a publication for each criterion. The chart should be reviewed before beginning your search and as you find literature. It is important to ensure that the publication meets all five criteria.

Criterion	Questions to ask:
Accuracy	<ul style="list-style-type: none">● Is the information reliable?● Is the information error-free?● Is the information based on proven facts?● Can the information be verified against other reliable sources?

Authority	<ul style="list-style-type: none"> • Who is the author? • Does he or she have the qualifications to speak/write on the topic? • Is the author affiliated with a reputable university or organization in this subject field?
Objectivity	<ul style="list-style-type: none"> • What is the intended purpose of the information? • Is the information biased? • Is the information factual or opinion? • Is it a scholarly article?
Currency	<ul style="list-style-type: none"> • When was the information published? • Has the information on this topic changed since it was published? • Is the information current or out-dated? • Does currency matter for this topic?
Coverage	<ul style="list-style-type: none"> • Does the information covered meet your information needs? • Does it provide basic or in depth coverage?

Now that the appraisal criteria have been reviewed, you should begin to brainstorm about your research area or question. Identify key variables and concepts (topics, word identifiers, etc.) that you will use to find literature. For example, if the research topic was “social identity of older adults”, key identifiers would include “older adults”, “elderly”, “social identity”, “social integration”, “social participation”, and “social support”.

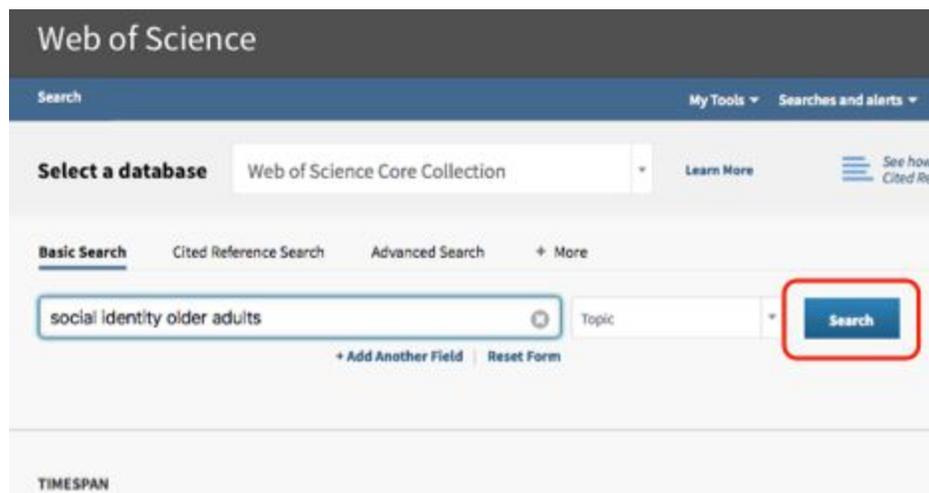
With the key identifiers of your research topic established, you can now begin the content/concept search to find your main publication. In this Guide, the database Web of Science will be used. However, this search strategy can be adapted to fit any database if you prefer an alternative.

Open the [Web of Science](#) database. Locate the search bar and type in one of your key identifiers. It does not have to be a single word; generally being as specific as possible reaps better search results. Click the “Search” button to the right of the search bar. Depending on the identifier used, you will likely see thousands of search results appear. To narrow the search results to your specific research area, click “Analyze Results” located on the right hand side of the screen. This will categorize the results by their separate disciplines of study. When selecting a discipline think about both your target population (i.e. older adults, children, etc.) and your research interest. For example, when studying older adults, it may be useful to select “geriatrics gerontology” as a discipline to filter the results to this population only. More than one discipline may be selected by scrolling down the page to the list of categories, selecting those you wish to include, and clicking the “View Selected” button at the bottom of the page.

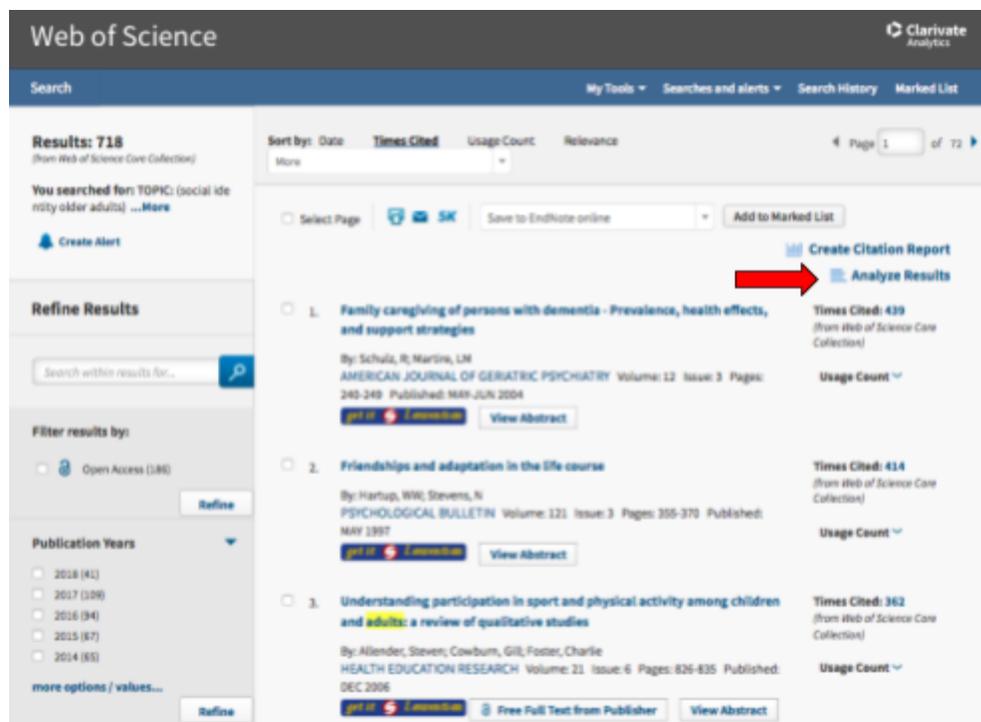
Once you have analyzed your results to the selected discipline(s), you need to assess if further refinement is necessary. If your results list is still quite large, you can filter the results further by using the options in the “Refine Results” column on the left hand side. There is a search bar in this column that allows you to add another layer to the search by entering other

keywords you identified earlier. There are also options to filter by publication year, document type, etc. Continue to refine results and explore the different disciplines. Once you have found an article of interest, refer back to the chart above to ensure it meets the five basic criterion.

The following is an example of a content/concept search using Web of Science, in which the keywords are “social identity” and “older adults”.



Click “Search”



Click “Analyze Results”

Select	Field: Web of Science Categories	Record Count	% of 718	Bar Chart
<input checked="" type="checkbox"/>	GERONTOLOGY	286	39.83%	
<input type="checkbox"/>	PUBLIC ENVIRONMENTAL OCCUPATIONAL HEALTH	69	9.61%	
<input checked="" type="checkbox"/>	PSYCHOLOGY MULTIDISCIPLINARY	66	9.21%	
<input checked="" type="checkbox"/>	PSYCHOLOGY DEVELOPMENTAL	56	7.80%	
<input checked="" type="checkbox"/>	GERIATRICS GERONTOLOGY	30	4.18%	
<input type="checkbox"/>	PSYCHIATRY	44	6.13%	
<input type="checkbox"/>	PSYCHOLOGY	42	5.85%	
<input type="checkbox"/>	SOCIOLOGY	42	5.85%	
<input type="checkbox"/>	SOCIAL SCIENCES INTERDISCIPLINARY	33	4.59%	
<input type="checkbox"/>	PSYCHOLOGY SOCIAL	32	4.45%	
<input type="checkbox"/>	SOCIAL SCIENCES BIOMEDICAL	28	3.89%	
<input type="checkbox"/>	EDUCATION EDUCATIONAL RESEARCH	23	3.20%	
<input type="checkbox"/>	SOCIAL WORK	22	3.06%	
<input type="checkbox"/>	NURSING	21	2.92%	
<input type="checkbox"/>	REHABILITATION	21	2.92%	
<input type="checkbox"/>	PSYCHOLOGY CLINICAL	20	2.78%	
<input type="checkbox"/>	PSYCHOLOGY EXPERIMENTAL	20	2.78%	
<input type="checkbox"/>	HOSPITALITY LEISURE SPORT TOURISM	18	2.51%	
<input type="checkbox"/>	SPORT SCIENCES	16	2.23%	
<input type="checkbox"/>	HEALTH POLICY SERVICES	13	1.81%	
<input type="checkbox"/>	PSYCHOLOGY APPLIED	13	1.81%	
<input type="checkbox"/>	COMMUNICATION	12	1.67%	
<input type="checkbox"/>	ONCOLOGY	11	1.53%	
<input type="checkbox"/>	FAMILY STUDIES	9	1.25%	
<input type="checkbox"/>	HEALTH CARE SCIENCES SERVICES	9	1.25%	

(79 Web of Science Categories value(s) outside display options.)

Select the disciplines you would like to include and click “View Selected”

The screenshot shows a search results interface. On the left, a sidebar titled 'Refine Results' contains a search input field with the text 'social support' and a magnifying glass icon. Below the input field, there are filter options, including 'Open Access (173)'. A red arrow points to the 'Refine Results' header, and another red arrow points to the search input field. The main content area shows a list of search results. The first result is titled 'Identity, Semiotics, and Use of Symbols in Adult Day Services' by Black, Helen K.; Rubinstein, Robert L.; Frankowski, Ann Christine; et al. The second result is 'Gay and Gray Sessions: An Interdisciplinary Approach to Transgender Aging' by Johnson, Kevin; Yarns, Brandon C.; Abrams, Janet M.; et al. The interface includes navigation options like 'Sort by: Date', 'Times Cited', 'Usage Count', and 'Relevance'. There are also buttons for 'Select Page', 'Save to EndNote online', 'Add to Marked List', 'Create Citation Report', and 'Analyze Results'.

Use the “Refine Results” column to filter the results. Explore the remaining results until you find a main publication to use in the author search. Once you are confident your selected article is relevant and authoritative (meets all five criterion), you are ready to continue on to the next step, which is the author search.

Review

In review, the content/concept search consists of the following steps:

1. Brainstorm about your topic, developing key variables and identifiers.
2. Open your database.

3. Input your key words.
4. Explore the database with your keywords by inputting your discipline and analyzing the articles until you find one that meets your search criteria.
5. Continue to author search.

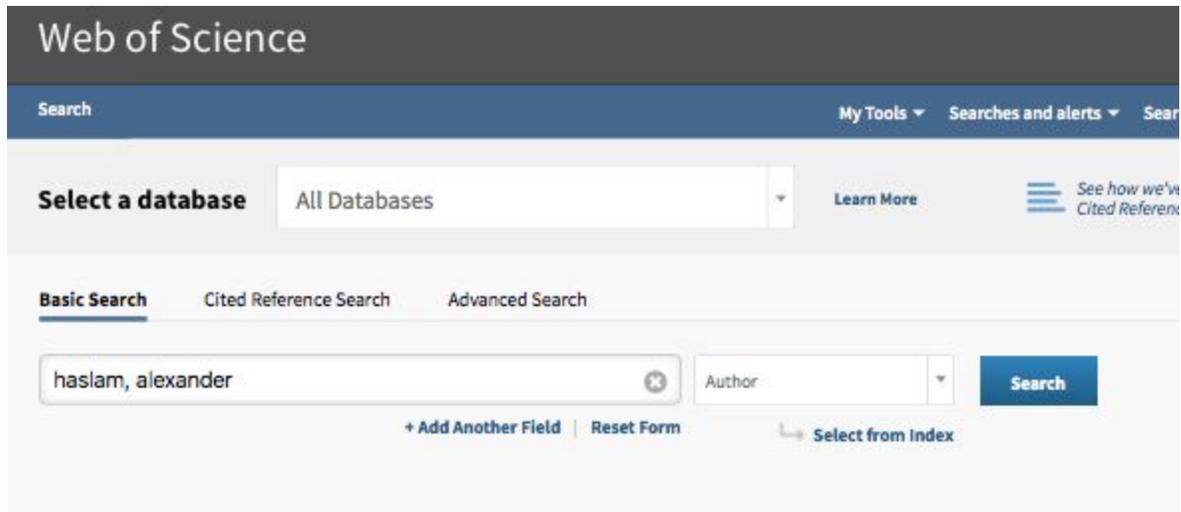
Author Search

In this section, you will search for specific authors who conduct research in the same field as your topic of interest. The authors you will search are the authors of the main publication you found in the content/concept search in the previous section. By conducting a search in this manner, you will be able to identify published literature by the authors in your research field, making it tailored to your topic of interest.

Begin this step by creating an authors list. This will help you to keep track of authors that are relevant to your research. To create this list, open a Word document and create three columns. The columns should be labeled as follows; author, topic, and institution. See the example below:

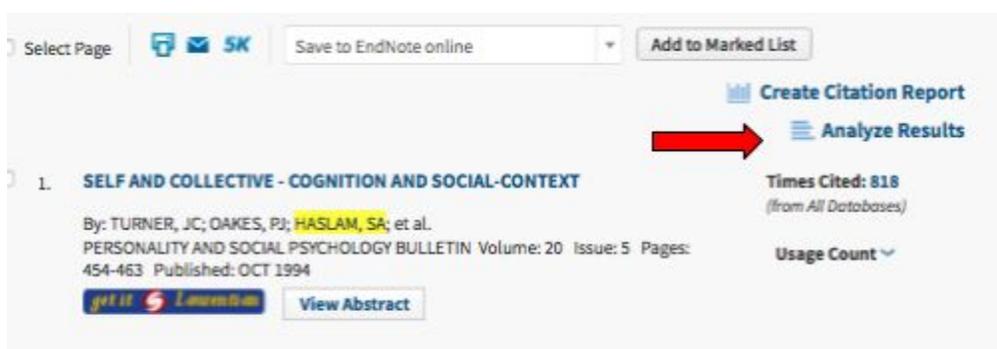
Author	Topic	Institution
Haslam, Alexander	Social identity	University of Queensland, Australia
McMahon, Charlotte	Psychology	University of Exeter, England
Cruwys, Tegan	Social identity	University of Queensland, Australia
Haslam, Catherine	Epidemiology & public health	University of Queensland, Australia
Jetten, Jolanda	Public health	University of Queensland, Australia
Steddens, Niklas	Social identity	University of Queensland, Australia

Once the Word document has been created you are ready to begin your author search. Using your main article from the content/concept search, add all authors of the publication to the author column of your Word document. Then start by searching the publication's lead author. This is done by first changing the index box (to the immediate right of the search bar) to "Author" using the drop down menu, then searching the author's name via the search bar.

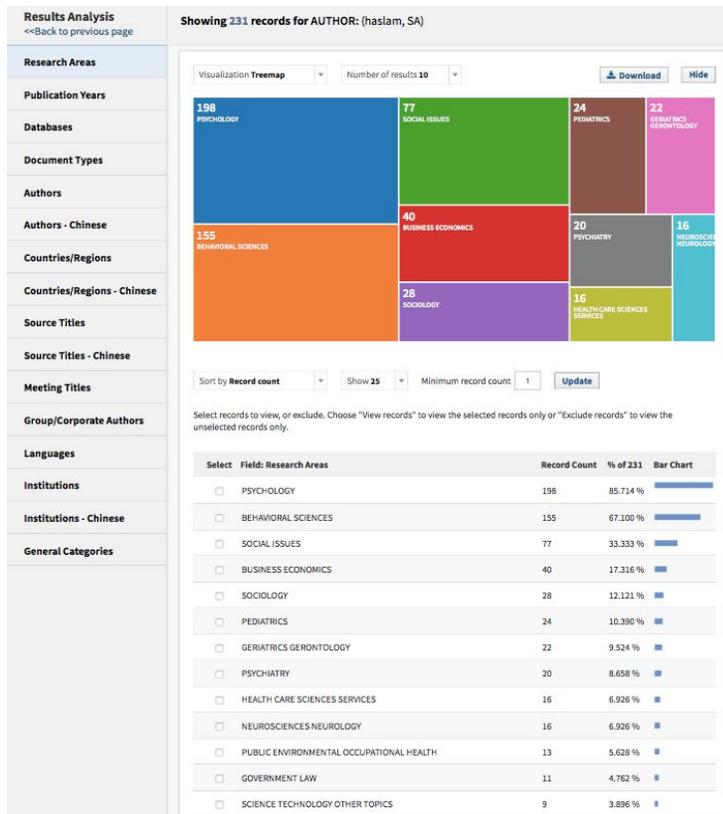


Published articles by this author will appear organized by date of publication. Scroll through the articles and evaluate if any suit your area of interest. If you identify articles that are relevant to your topic, click the “Add to Marked List” button in the top right hand corner of the screen to save them. These can be accessed later by clicking the “Marked List” button, also located in the top right hand corner. As you find new publications that are suitable for your research, add the respective authors to your Word document. Continue to search each author on your list using the same protocol.

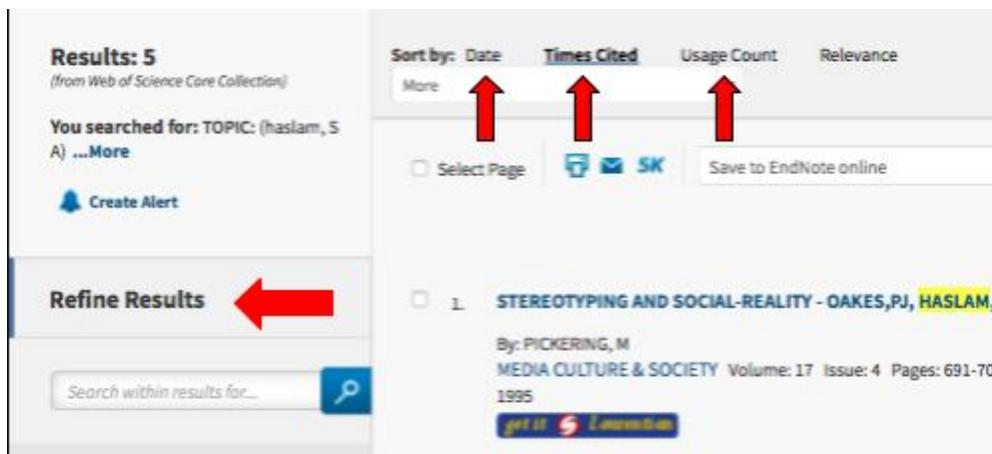
For authors who have too many publications to go through efficiently, use the following guideline to strategically find appropriate publications and save time. Enter the author’s name in the search bar as you have done previously and click “Search”. Then click “Analyze Results” located in the top right hand corner of the page. See the example below:



The author’s publications will now be sorted by research area, publication year, databases, and authors, among other options. In this Guide, it is recommended to sort the results by research area. Click on the discipline(s) relative to your research and then click “View Selected”, as done in the previous section. The results will show all of the publications in the selected discipline(s) by that author.



Web of Science has a "Sort by" function located above the result list that can be a useful tool to aid in examining the author's publications. Using this function, organizing the literature by "Times Cited" shows the most frequently cited papers first. By clicking on the number beside "Times Cited" for a particular publication, a list will appear of other articles that have cited the publication. Sorting in this manner will help direct you to additional content and authors relative to your topic area. Alternatively, organizing the literature by date published allows you to see which publications are most recent, and which are older.



Another useful tool is the “Refine Results” search section, which allows you to further narrow your search results. Even after using the “Analyze Results” function, you may still have a relatively large volume of literature in your search results. In the “Refine Results” search bar, conduct searches of your key identifiers. This will direct you to the author’s papers that contain the key identifiers.

The author search is a time-intensive process and will require more of your time than the content/concept search. Before conducting another content/concept search, it is recommended that you have a strong list of authors and for each an author search has been completed. This should result in a collection of literature related to your research topic of interest, from both your original author list and additional literature found during the author searches.

You will come to a point in your author search when you feel you have exhausted the literature, meaning you are no longer finding new articles or new authors. If this happens, it does not mean that your search is complete. Rather, you should try switching back to a content/concept search to find new articles and authors, and then resume an author search with your new findings. The content/concept search is important to reveal new literature that will further your search.

Refer to the Content/Concept Search at the beginning of this Guide to perform a new search.

Review

In review, the author search consists of the following steps:

1. Create an author list comprised of the authors who published your main article found in the content/concept search.
2. Search all authors in the database.
3. Examine the publications of each author.
4. Continue to add new authors to your list as you find relevant literature, and conduct a separate author search for each.
5. When you reach the point where you feel you have exhausted the literature, switch back to a content/concept search.

Final Steps

Now that you know how to perform your searches and gather your publications, you may be wondering if you are finished. This will depend on many factors for each individual researcher, but generally you want to ensure that:

1. All authors in your author list have been explored thoroughly and you have come full circle. This means a publication you are looking at now (be it a new or earlier reference) has already been consulted or referred to during the search process.

2. You have (more or less) exhausted the collection of literature relative your research question and hypothesis. Make sure to go through your collected publications and see if there is enough information to answer your questions and that nothing is missing.

Your search may not be complete if:

1. You continue to find new (general) themes for the basic idea and important references and sources that you have yet to see during the search process.
2. Your research question is suggested by authors in many other completed reports.
3. You do not have enough information to answer all aspects of your research question or hypothesis.