Accessing and Using Research Databases

Google is an excellent resource to use if you are looking for general information and an overview of your interest topic. However, Google is a search engine, which means it provides all the websites that contain the key terms you search. This becomes an issue when unreliable, and inaccurate sources are provided. Databases do not contain websites and instead consist of journal articles (sometimes books, thesis and news articles). The papers have been published, which means it has been reviewed and edited to ensure that the information is correct.[1]

Many research databases are available online. However, most of the databases have some access requirements, such as asking you to create an account to access the content. Some public libraries have databases that give access to anyone with a library card. Universities, colleges, and other institutions generally have a mix of different databases available to their students and staff.[2]

Below are some effective types of database searches:[3]

Keyword searching
The database searches all available fields for your search terms. "Fields" are pieces of information that the database keeps for each article.[4] In the example below, the keywords "video games" and "aggressive behaviour" are bolded in every field where they appear, including Titles, Subject Terms, and Abstracts.

M-Rated **Video Games** and **Aggressive** or Problem **Behavior** Among Young Adolescents.

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Document Type: Article

Subject Terms: *TEENAGERS
*VIDEO games
*REGRESSION analysis
*YOUTH & violence
*BULLYING
*AGGRESSION (Psychology)
*ELECTRONIC games
*YOUTH
*COGNITION

NAICS/Industry Codes: 423920 Toy and Hobby Goods and Supplies Merchant Wholesalers
339930 Doll, Toy, and Game Manufacturing
541515 Video game design and development services
414210 Home entertainment equipment merchant wholesalers
511212 Video game publishers

Abstract: This research examined the potential relationship between adolescent problem behaviors and amount of time spent with violent electronic games. Survey data were collected from 1,254 7th and 8th grade students in two states. A "dose" of exposure to Mature-rated games was calculated using Entertainment Software Rating Board ratings of titles children reported playing "a lot in the past six months," and average days per week of video game play. Analyses were conducted using simultaneous logistic regression for binary outcome variables, and simultaneous multiple linear regression for continuous outcome variables, controlling for a series of potential confounders. M-rated game dose predicted greater risk for bullying (p < .01) and physical fights (p < .001), but not for delinquent behaviors or being a victim of bullies. When analyzed separately, these associations became weaker for boys and stronger for girls. [ABSTRACT FROM AUTHOR]

Subject Searching

The database only searches subject heading fields for the search term. Many databases have a controlled vocabulary in a list of standardized subject headings, usually located in a section called **subject terms** or **thesaurus.**

- In the example below, when the term "adolescents" is searched under the section "Subject Terms", the database shows that the preferred term is "TEENAGERS"

Phrase Searching

To search for an exact phrase, place quotation marks around the phrase. An example is when searching for "United Nations" (with the quotation marks), the database will only show results where the two words appear together.

Boolean Operators

To search for combined terms, Boolean operators, or connectors, are used.There are three main Boolean operators:

1. **AND**
   Database will retrieve articles that mention both terms somewhere. The use of AND generally retrieves fewer but more focused results.
   Example: Childhood obesity AND exercise

2. **OR**
   Database will retrieve articles that mention either term. The use of OR generally retrieves a larger set of results. The OR operator is useful for terms that are synonyms or convey the same concept.
   Example: Cloning OR genetics OR reproduction

3. **NOT**

The use of NOT will remove search results that contain a specific term. The use of NOT generally retrieves fewer but more relevant results.

Example: Eating disorders NOT anorexia

Truncation

Truncation allows you to search for all variants of a root word. Enter the root word followed by the truncation symbol. Many databases use the asterisk (*), others use the question mark (?). Check the Help page for the database to determine the symbol for truncation.

Example: The search term plagiar* will return results that include terms:
- Plagiarism
- Plagiarize
- Plagiarizing
- Plagiarized
- Plagiarizer
- Plagiarizers
- Plagiarist

Summary of Types of Database Searches

Type of Database Searching	How to Search	Expected Results	Example
Keyword Searching	Usually the default search	All available fields searched, including titles, keywords, or abstracts	Keywords "video games" and "aggressive behavior" are bolded in every field where they appear, including Titles, Subject Terms, and Abstracts.
Subject Searching	Subject headings are usually located in a section called **subject terms** or **thesaurus**	Only searches subject heading fields, according to standardized vocabulary list	When the term "adolescents" is searched under the section "Subject Terms", the database shows that the preferred term is "TEENAGERS"
Phrase Searching	To search for an exact phrase, place quotation marks around the phrase	Only searches items containing the entire phrase	When searching for "United Nations" (with the quotation marks), the database will only show results where the two words appear together
Boolean	**AND**: Generally	Database will	Childhood obesity AND exercise

Operators	retrieves fewer but more focused results	retrieve articles that mention both terms somewhere	
	OR: Generally retrieves a larger set of results	Database will retrieve articles that mention either term.	Cloning OR genetics OR reproduction
	NOT: Generally retrieves fewer but more relevant results	The use of NOT will remove search results that contain a specific term	Eating disorders NOT anorexia
Truncation	Enter the root word followed by the truncation symbol, usually asterisk (*) or question mark (?)	Searches for all variants of a root word	The search term plagiar* will return results that include terms: Plagiarism Plagiarize Plagiarizing Plagiarized Plagiarizer Plagiarizers Plagiarist

Tips for effective use of databases:[5]
- Search multiple databases for articles related to your topic
- Find an article that is similar to your topic and look at the terms used to describe it then use them for your database search
- Use databases that provide full-text articles to save time searching for your articles elsewhere (some articles only provide abstracts or summaries)
- If you are unfamiliar with your topic, start with a broad search from sources such as overviews, summaries or review articles
- Start with the most recent issues of the journals and then work backwards in time
- Check the references section at the end of articles for additional sources
- Look for conference papers for reports on recent research developments
- Always check articles carefully for authenticity and quality, and be cautious about misinformation

References

1. Montgomery, J. (2020, November 9). Why Use Databases, Not Google? *Western Kentucky University Libraries*. Retrieved November 27, 2020, from https://libguides.wku.edu/c.php?g=946465&p=6891281

2. University of Washington. (2020, October 9). *Who can access databases, e-journals, e-books etc. and from where?* Retrieved November 27, 2020, from https://guides.lib.uw.edu/research/faq/access

3. Benedictine University. (2020, September 11). *Module 4: Searching a Database*. Retrieved November 27, 2020, from https://researchguides.ben.edu/general-research/searching

4. American Public University System. (2018, November 25). Q. *What is "field searching"?* Retrieved November 27, 2020, from https://apus.libanswers.com/faq/2420

5. Grewal, A., Kataria, H., & Dhawan, I. (2016). Literature search for research planning and identification of research problem. *Indian journal of anaesthesia*, 60(9), 635–639. https://doi.org/10.4103/0019-5049.190618