



YOU CAN'T JUST GOOGLE IT

by Kristine Condic

Need to find information? Well, just do a quick search on Google (*www.google.com*), and you're all set. Is it really that easy? It depends.

Google was an above average search engine at its inception in 1998 but is a giant in the information world today. Users can type practically anything into that Google search bar and find useful results. In fact, Google has grown beyond its search engine roots; now users can view houses from the sky, check on cited references, and find images on just about anything. Google has grown, and users have flocked to it. What an incredible find!

Well, again, it depends. Let's say you're looking for the website of the American Counseling Association. Go to Google, type in American Counseling Association, and browse through the results. One of the first items you retrieved will point to *http://www.counseling.org*, click that, and, bingo, you're there. You can also test Google's accuracy (to read your mind) by clicking on the infamous "I'm feeling lucky" link which takes you to the first item retrieved from your search. Yes, Google has an attitude, but that's what makes it so cute.

Now for a something a little harder

Try to find information on the psychological effects of dog-bites. Typing that phrase (*psychological effects of dogbites*) into the

Google search bar retrieves some intriguing results: a Phoenix attorney peddling his wares (a la Sam Bernstein), a glossary of legal terms, the psychological side effects of Accutane (maybe Google mistook “drug” for “dog”), a Denver attorney claiming to be the “Denver dog bite lawyer”, and a paper presented at the Southeastern Psychological Association meeting - “The effects of dog ownership on judgments of dog bite likelihood.” Well, looks like this calls for Plan B.

Plan B involves getting into a database that is unlikely to be covered by Google, namely the subscribed databases found on the Kresge Library website. Publishers appreciate the copyright protection provided to them by the U.S. government. In turn, these publishers provide their databases to libraries for a fee. These databases are available on a subscription basis much like the magazines you receive at home. Each year the library renews access to the databases, and users can search them from the Kresge Library website.

Let’s try looking in the database from the American Psychological Association (APA) called PsycINFO. To access PsycINFO:

- go to the library’s website at <http://www.kl.oakland.edu>
- click “Find Articles”
- click “By Title”
- select “P”
- then find PsycINFO and click

If you’re logging in from home, you’ll need to enter your name and the last five digits of your Grizzly ID to access the database. After all, this is a subscribed service. OU faculty, staff, and currently registered students have remote access to the library’s databases.

How do you describe what you want?

One of the most fundamental aspects of successful searching is identifying the right words and phrases to describe your topic.

In classes, I usually ask students to think of their topics in the following manner: if you are writing a term paper on your topic, what would be the title of that paper? Once you have a title in mind, pull out the most important words, ideas, or concepts. Group these major ideas into two or more distinct topic areas, come up with synonyms, combine the synonyms with OR, combine the major topics with AND, enter your search strategy, and presto, you have results.

But let's describe the search topic: the psychological effects of dogbites. Or better yet, how does PsycINFO describes it? Let's go fishing and just search the phrase "*psychological effects of dogbites*". Sometimes it's easier to use terms from the database than to re-invent the wheel.

To search for a phrase, it's best to enclose the phrase in quotes. Upon doing so, PsycINFO will search for that phrase as it stands "psychological effects of dogbites" instead of words scattered all about. For example, instead of finding articles on the psychological effects of dogbites, you could come up with articles on the effect of a dog's bite on its psychology. Not quite the same thing!

So, go to PsycINFO, and type in the search phrase "*psychological effects of dogbites*". Press ENTER. And you retrieve zero results. OK, let's try the same phrase with a space between dog and bites. Go back to the search screen, type in "*psychological effects of dog bites*." Click ENTER. Still no results.

If too many items are retrieved from a search, it's easy to reduce results by limiting to English, reducing the publication date, or restricting format (articles, chapters, dissertations, books). However, if too few items are retrieved, then the searcher needs to be a bit more creative.

OK, it's a psychology database after all, so let's just throw in *dog bites*, press ENTER, and 14 items are retrieved. This result set includes illuminating titles such as:

- *The epidemiology of dog bite injuries in Switzerland - Characteristics of victims, biting dogs and circumstances*

- *A case series of biting dogs: Characteristics of the dogs, their behaviour, and their victims.*
- *When bad things happen to good sports: The consequences of overuse.*
- *Barking mad? Another lunatic hypothesis bites the dust.*

Those psychologists are always up to something! Take a look at the last two results. Authors don't realize that cute, trendy titles may cause their articles to be retrieved under rather strange circumstances. How did these results turn up from our search?

To clarify the search process, *dog bites* entered as a keyword search (the default search in PsycINFO) will find any occurrences of the words in the title, abstract, or subject descriptors. Therefore, many irrelevant results can be retrieved because an article may contain *dog* in the title and *bites* in the abstract. In the case of the 3rd title, *When bad things happen to good sports: The consequences of overuse*, both words, *dog* and *bites*, appear in the abstract describing a rare, or "man bites dog" incident. This article is not very helpful to us.

To make sure the words *dog* and *bites* appear closer together, let's search for *dog bites* as a phrase by putting quote marks around the two words. So, back to the search screen, enter "*dog bites*" and click ENTER. This search produces 12 results . . . the first three being:

- *The epidemiology of dog bite injuries in Switzerland - Characteristics of victims, biting dogs and circumstances.*
- *Modelling risk factors for injuries from dog bites in Greece: A case-only design and analysis.*
- *Prevention of dog bites: Evaluation of a brief educational intervention program for preschool children.*

Even though the third title wins on practicality, the first title actually hits closer to the mark. Let's take a look at some information about this first title to find a few clues.

Upon clicking on the title of the desired item, you find a description of the article including journal name, author,

pages, volume, abstract, and subject descriptors. When the PsycINFO people receive an article to put into the database, they browse through the item and slap a couple of subject descriptors to the end of the article. That way, a uniform way of describing a condition, event, or behavior is achieved, and this can help searchers find relevant articles. Looking at the descriptors of our Switzerland article we find that these words are used:

- Major Descriptors: Dogs, Injuries, Pets, Prevention, Risk Factors
- Minor Descriptor: Public Health

Try to describe the topic using PsycINFO's terminology. Another word for *dogs* is *pets*, and another way to describe *bites* is *injuries*. Good. Hold that thought.

Let's digress a bit into the singular world

Just for kicks, try the search "*dog bite*". This search differs from the previous search by the use of the singular *bite*. After all, one bite would probably be enough to cause psychological change. The *dog bite* search retrieves 14 items, including this very interesting title and its accompanying descriptors:

Dog bite in infancy: Trauma and personality development

Major Descriptors: Early Experience, Emotional Trauma, Injuries, Personality Change, Personality Development

Now we've found some phrases that describe the psychological aspect, namely Emotional Trauma, Personality Change, and Personality Development.

Are these 14 articles from the "*dog bite*" search the same 14 articles retrieved from the first *dog bites* search? Probably not. Let's combine these two searches and check. To accomplish this, use OR to separate the two searches:

dog bites or “dog bite”

Click ENTER, and 25 results are retrieved, so there are many unique items within these two searches. If both searches found the same items, we would have retrieved 14 results. On the other hand, complete uniqueness between the two searches would be illustrated with 28 results. As it is, it looks like there are three duplicate titles between the two searches. This makes the *dog bite* (singular) search worthwhile. It’s fascinating to see how minor changes in search terms can drastically change the list of results. Librarians enjoy these things!

Another way around this is to search with a wildcard at the end of bite. In PsycINFO, the wildcard symbol is asterisk (*), so the search *dog bite** would pick up bite and bites.

Back to PsycINFO terminology

What are some synonyms of *dog*? We have *pets*. OR is the connecting word to combine synonyms. OR will find any item with *dog* as a keyword and any item with *pets* as a keyword. Therefore, the resulting search strategy to link our dog terms is:

dog or pets

What are some synonyms for *bites*? *Injuries*. So the search is:

bites or injuries

Let’s try that entire search:

(dog or pets) and (bite or injuries)*

This search retrieves 50 results.

Note: if you try the wildcard trick at the end of ALL of the search terms, you retrieve about 325 items! Notice that *pet** retrieves articles about PET or positron emission tomography. Be careful when using wildcards!

These 50 results are manageable and easily browseable,

but if you wanted to narrow the results even further, you could add another concept: “psychological effects” or “emotional trauma” or “personality development” or to make it simpler, just use the words *psychological* (you don’t want to add a wildcard to the word *psychology* in a psychological database!), *personalit** or *emotion**.

So our final search is:

(dog or pets)

and (bite or injuries)*

and (psychological or personalit or emotion*)*

This search retrieves 15 results, some of the titles being:

- *Processes of trauma management in group music therapy with children*
- *Clinical round table: A case of trauma to a 21-month-old girl.*
- *The inheritance of shyness in dogs.* (I couldn’t resist including this one!)

Just by glancing at the remaining 35 titles (those without *psychological or personalit* or emotion**), we find more promising titles:

- *Symptomatology and adaptive functioning for children exposed to normative stressors, dog attack, and parental violence.*
- *A behavioral analysis of dog bites to children.*
- *Life events changes, stress related illness, injury, and hospitalization in six- through eleven-year-olds and stress related illness and behavior changes in companion animals.*
- *Lyssophobia: First crisis following a dog bite.*

These articles and their references are good starting points for information on the psychological effects of dog bites. There is no perfect way to form a search strategy, so another searcher may have found equally useful titles using a completely differ-

ent strategy. However, these hints can be used in PsycINFO, Google, and other search products. Below is a summary of the searches performed for this topic:

**PsycINFO search results
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Search Strategy	Number of Results
“psychological effects of dogbites”	0
“psychological effects of dog bites”	0
dog bites	14
“dog bites”	12
“dog bite”	14
(dog bites) or “dog bite”	25
(dog or pets) and (bite* or injuries)	50
(dog or pets) and (bite* or injuries) and (psychological or emotion* or personalit*)	15

Information is power

PsycINFO is one of the approximately hundred databases to which Oakland University subscribes. However, many students bypass these and go straight to Google. Which is the best tool?

Google works well when searching for some types of information but not so well for others. If you need to find the height of Mt. Everest or the population of Singapore, Google is a quick and successful stop. However, if you need a body of literature on a certain topic for a research paper, thesis, or dissertation, I’d use something other than Google, namely, the databases available from “Find Articles” found on library’s website. Limiting oneself to Google in this case is similar to comparing the Encyclopaedia Britannica with the Wikipedia (<http://wikipedia.com>); one is scholarly, dependable, and reli-

able while the other is haphazard, skewed, and inconsistent (but a ton of fun to browse!)

What kind of results do you get from a Google search? You're likely to retrieve all sorts of items from the "free web" including cute advertisements, family trees, Amazon products, interesting blogs, not-so-interesting blogs, cool images, article pre-prints, and countless other goodies. But Google doesn't contain all of the world's knowledge, though that may be their goal. Google is venturing into the book content arena with their attempt to digitize collections from major academic libraries including Harvard, Stanford, and the University of Michigan.

Even then, can all of the ideas, facts, concepts, experiments, accomplishments, intelligence, doctrine, philosophy, and bits of trivia be accessible from one place? It's a mind-boggling idea, and one that could be mesmerizing for a group of people wishing to develop a society in which absolute control and ultimate power is desired. Yikes, I don't want to go there.

GoogleScholar

Google is branching out in many different directions, and one area of particular interest to OU students and faculty is GoogleScholar. A 2006 Google publicity brochure touts this as "a simple way to search across numerous disciplines and sources to find a wide range of scholarly literature, including peer-reviewed papers . . . and determine via citations how authoritative each of them is." OK, sounds good, but what's the catch?

The catch is in the contents. Have you ever explored what's actually in GoogleScholar? What you'll find are a collection of papers, most of which are not protected by copyright. You may be able to link to some full-text articles that are available from Open Access. In fact, you might happen to link to a full-text version of an article protected by copyright, but chances are that GoogleScholar linked to that article by match-

ing your IP address with the library's subscription databases and e-journal packages which are accessible via specific IP's. Our GET IT link does a similar thing—matches databases with full-text articles within our subscribed services.

Now some publishers are getting quite greedy. They package their products, develop a pricing structure, add a content fee, add an online access fee, and then offer these high priced packages to libraries. Did I mention that electronic journals increase at an average, annual inflation rate of 9–10%? And then the library's still not guaranteed archival rights. Yes, these publishers could use a wake-up call, and that's exactly what GoogleScholar is doing. We're in the midst of rapid changes in the publishing world. Unfortunately, many students treat GoogleScholar as if it's the pinnacle of information when it's really the tip of the iceberg. This is also true for some scholars doing cited reference searching.

Who has cited your articles?

Many researchers turn to GoogleScholar to find who has cited their works. Again, this is the tip of the iceberg. Cited reference searching was originally provided by the Institute of Scientific Information (ISI) in the form of *Science Citation Index*, *Social Sciences Citation Index*, and *Arts & Humanities Citation Index*. OU subscribes to the first two titles through the Web of Science which is accessible from **Express Links** from the library's website. Our subscription to the Arts & Humanities portion is available through FirstSearch.

Others vendors see the wisdom of providing cited reference searching, and are now enabling this type of search from within their own products. For example, if a paper is indexed in Elsevier's ScienceDirect, then a quick click on the "Cited By" link retrieves other papers within ScienceDirect that have cited that work. Additionally, other databases such as CINAHL and PsycINFO provide the same service. You can find a list of services that provide cited reference searching at: <http://www.kl.oakland.edu/services/instruction/pathfinders/CitationSearching.htm>

GoogleScholar is but one of many services that provide cited reference searching. Indeed, sometimes the Google Scholar links are invalid. When I run cited reference searches, I always look in the Web of Science, ScienceDirect, and other databases first, then I search GoogleScholar. GoogleScholar provides some duplication but it also has some unique cites, however, you may not be able to verify the cited reference. I use GoogleScholar only to supplement the search.

How to look like a genius!

However, given these forewarnings, Google is neat! Sometimes on the reference desk I just ‘Google’ it and end up looking like a genius! It just depends on the topic, terms, and content. But who doesn’t want to look like a genius!