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Searching the Literature by Design

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Current nursing knowledge has been generated by studies whose designs range from exploratory to experimental. Searching the literature for a study illustrating a particular design can be a perplexing process. This article explains strategies that are useful in identifying research studies according to the designs used in their methods. The suggested search strategies assist in identifying the most relevant search results and can save time. Outcomes of such a search can be instructional about the implementation of a design in its classic form or some variation. They can provide practical illustrations of the advantages and limitations of a design when applied in a particular area of interest.

Keywords: *literature search strategy; research design; nursing research; bibliographic databases*

Nursing knowledge has been generated by studies whose designs range from exploratory to experimental. Studies using each type of study design have made important contributions to advancing nursing science. Fawcett, Watson, Neuman, Walker, and Fitzpatrick (2001) set forth that multiple patterns of inquiry and knowing produce different, but essential, kinds of evidence for nursing practice. The varied patterns of inquiry require appropriate research designs. A literature search using online bibliographic databases can identify studies that have implemented a specific research design. The studies yielded by such a search strategy can show how a design has been applied in one's particular area of interest. They provide practical illustrations of a design's advantages and limitations that are not always evident from the general theoretical descriptions of design characteristics available in many textbooks. Searching the literature by design can identify the type of study

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that is of primary interest to the researcher or clinician in an efficient and time-saving manner.

Those seeking to identify studies that use a particular research design through a literature search face several challenges. Gehlbach (2002) described the identification of study designs as a “perplexing business,” as jargon and ambiguity work together to cause confusion. Unless an optimal search strategy is used, it is difficult to capture the array of research designs encompassed by nursing research. Brink and Wood (1998) proposed a taxonomy of research designs that is useful in organizing a search for research designs. Guidance in the approach to this type of search will benefit novice and experienced literature searchers, as well as those, such as advanced practice clinicians, who often find they have limited time or skill for literature searching (Morrisey & DeBourgh, 2001). The purpose of this article is to explain literature search strategies that enable the identification of research studies according to the designs used in their methods. We have tested and refined the search strategies provided, which have not been previously published and that may not be readily known by library resource staff. The search strategies are comprehensive over the range of research designs in Brink and Wood’s taxonomy (1998) and are formulated for use with the three major databases of published health sciences literature: MEDLINE, the Cumulative Index to Allied Health Literature (CINAHL), and PsycINFO.

MAJOR DATABASES: MEDLINE, CINAHL, AND PsycINFO

Anatomy of MEDLINE, CINAHL and PsycINFO

MEDLINE, CINAHL, and PsycINFO are abstract databases whose contents range from almost 1 million (CINAHL) to 12 million (MEDLINE) records representing published journal articles, book chapters, books, technical reports, and dissertations in the medical, nursing, and psychological sciences.

MEDLINE, created and maintained by the National Library of Medicine, is the largest and most popular of the health science databases, containing entries that date back to 1966. Its index contains publications of interest to nurses, physicians, dentists, veterinarians, and allied health personnel. MEDLINE’s source of nursing literature is the International Nursing Index (INI). Because of the INI, MEDLINE provides an index to more than 270 nursing journals and nursing articles in approximately 3,000 journals of other disciplines. Unlike CINAHL and PsycINFO, MEDLINE does not

index books, chapters, or nonjournal literature, however, it does include general and research articles, review articles, letters, and editorials.

CINAHL is a comprehensive nursing literature database, whose electronic entries start in 1982. CINAHL's contents include citations to a large range of documents, including journal articles (from 1,400 journals), books, nursing dissertations, standards of practice, conference proceedings, educational software, and audiovisuals.

PsycINFO covers psychology, mental health, behavioral sciences, sociology, anthropology, education, pharmacology, linguistics, nursing, medicine, and psychiatry. PsycINFO indexes the research literature of mental health, substance abuse, stress, and counseling in more than 1,800 journals, including 30 peer-reviewed nursing journals. Other sources indexed include book chapters, technical and conference reports, and dissertations. PsycINFO has deep historical coverage dating to 1887.

These bibliographic records often include the citation, abstract, and other fields that describe the article. These records represent a myriad of article types, such as research, editorials, reviews, biographies, and so forth. In the databases, bibliographic records are generally no more than 300 words in length; these words exist in about a dozen searchable fields, such as Title, Author, Institution, Journal Title, Subject Headings, Publication Types, and Abstract. When searching for studies by research design, Title, Abstract, Subject Headings, and Publication Types are essential. This article describes how to best use these four fields to identify research designs. Techniques for conducting a general literature search have been described by others (Morrisey & DeBourgh, 2001). The instructions in this article build on knowledge of fundamental search processes.

REVIEW OF TERMS AND TOOLS

Searchers seeking information on research designs should note the distinctions between Keywords, Subject Headings, and Publication Types that may appear to overlap. Searchers should be familiar with the common search tools offered by the search interface they are using.

Keywords identify letter sequence patterns in the title and abstract fields of the bibliographic record. There are millions of keywords, and searchers must be aware of the need for an exact match of the letter sequence. It is important to remember that a keyword does not find a concept.

Subject Headings are from a thesaurus unique to a database and are concept based. When subject headings are assigned, they are located in the

subject heading field and identify content and concepts covered within the article. There are thousands of subject headings used to describe articles in each database. CINAHL has several subject headings that relate to research designs, such as “exploratory research” and “meta-analysis.” PsycINFO does not use subject headings to identify research designs.

Publication types broadly describe the type of article or study, without describing the content. An example of a publication type related to research design in MEDLINE is “Randomized Controlled Trial.” There are relatively few Publication Types in each database. Appendix A lists the publication types relevant to research designs for each database.

All examples and suggested search strategies proposed in this article have been created for the OVID Technologies, Inc.’s search interface but can easily be adapted to other interfaces. OVID Tools, which are used extensively in the recommended search strategies, include “exp,” “.pt.” “adj#,” and “\$.” Using “exp” before a term indicates that it is a Subject Heading that has been exploded. For example, in CINAHL, using “exp Clinical Trials” will retrieve not only records indexed with the single Subject Heading “Clinical Trials” but also automatically retrieve the more specific Subject Headings, such as Double-Blind Studies, Intervention Trials, Preventive Trials, Single-Blind Studies, Therapeutic Trials, and Triple-Blind Studies. Using “.pt.” after a term in CINAHL or MEDLINE indicates that the term is searched only in the Publication Type field. Similarly, in PsycINFO, “.fc.” searches the Form/Content Type field. The truncation symbol is “\$” and is useful in a keyword search when a word has several endings. For instance, searching for the word *nurse*, a keyword search of *nurs\$* would find articles using the words *nurse*, *nursing*, *nursed*, and *nurses*. The code “adj#” is an adjacency operator. Inserting a number after “adj” indicates the number of words next to which the keywords being searched must appear. For example, “experimental adj2 research” would retrieve records where the word “experimental” falls within two or fewer words of “research.” The code “.mp.” indicates a keyword search, which looks for the terms in different fields for each database: In CINAHL, keywords are searched for in the Title, Abstract, Subject Headings, and Instrumentation fields. In MEDLINE, the Title, Abstract, Subject Headings, and CAS name fields are searched. In PsycINFO, the Title, Abstract, Subject Heading, Key Phrase Identifiers, and Table of Contents are searched. The code “.fs.” looks for a designated sub-heading (by two-letter code) attached to an unspecified Subject Heading. For example, “ep.fs.” often finds articles reporting epidemiological study results. For example, the statement allows the searcher to find epidemiological articles without defining a specific disease. In MEDLINE, limiting

search results to articles only from nursing journals can be performed with “N.sb.”

CHALLENGES OF FINDING RESEARCH DESIGN TERMS IN THE HEALTH SCIENCES LITERATURE

Limitations of Subject Headings

Most methodology articles about searching the literature in the health sciences strongly recommend the use of conceptual subject headings (i.e., “neoplasms” for cancer) for health topics. Subject headings in MEDLINE, for example, are assigned to each bibliographic record by librarians at the National Library of Medicine, who match the pertinent concepts with terms from a thesaurus to reflect the topics covered in an article. MEDLINE, CINAHL, and PsycINFO each have their own thesaurus, in which subject headings ensure consistency and enable users to apply a single term to find articles that match the concept of interest. For instance, a searcher can search with one term from MEDLINE’s thesaurus to find articles that use many different terms representing the same concept: MEDLINE’s single subject heading “Breast Neoplasms” will find articles using other terms such as “breast cancer,” “breast lesions,” “breast carcinomas,” and “breast tumors.”

However, because research design concepts in MEDLINE and PsycINFO are generally not recognized as health topics, the majority have not been assigned subject headings. In the few cases where research designs do have an assigned subject heading, the subject heading is often used to identify articles about the research design, and not studies that used it as a part of their methods. Furthermore, in an analysis of subject heading assignment, those headings indicating specific research designs were in the most inconsistently applied category (Funk, Reid, & McGoogan, 1983).

Keyword Searching Pitfalls

Authors reporting their research results may, or may not, include design terms in the title of their study or among the keywords they submit to describe their study. Searching by keywords is limited when the bibliographic record lacks a detailed abstract. The recent push for more uniformly structured abstracts will enable searchers to more effectively find literature by research design (Haynes, Mulrow, Huth, Althan, & Gardner, 1996).

Structured abstracts typically require specification of the study design and include consistent research design terminology. The proliferation of online journals, with full-text searchability, enhances the effectiveness of keyword searching (Johnson, Sievert, & McKinin, 1995). A keyword search of the title or abstract fields may be one of the most effective ways to find a particular research design. That said, searchers of studies with a particular research design in mind should be conscious of the inherent disadvantages of keyword searching.

Unlike subject headings, keywords find only exact letter sequence matches and do not find articles based on concepts. Consequently, gross mismatches are often made. For example, a keyword search for "pilot studies" will correctly find articles using the pilot study research design, numerous irrelevant articles discussing the controversies and ethics of pilot studies, as well as articles about airplane or boat pilots and gas pilot lights. Likewise, search strategies by publication type limits are useful, however, their inherent problems include the almost certainty of some irrelevant results and the possibility of missing some articles that are highly relevant.

Unlike subject headings, keyword searching will find only exact spelling matches, so American spellings (e.g., anesthesiology, color, pediatric) will not be found when British spellings (anaesthesiology, colour, paediatric) are used in the title or abstract, and vice versa. MEDLINE, CINAHL, and PsycINFO's subject headings all use American spellings but will consistently find British and American terms.

To overcome keyword search pitfalls, our strategies show that sophisticated keyword searches should include synonyms (e.g., approach, design, method, methodology, research, study, trial) for each concept, along with plurals (e.g., methods), and other variations for each concept (e.g., methodology). The complexity of addressing these variations can be minimized by several techniques, including truncation (e.g., method\$) to find word stems with any ending, and adjacency searching (research adj2 design) to find words occurring within a designated proximity to each other.

Searching by a keyword phrase is useful but can be tedious. For example, searching for the phrase "double blind" as a keyword will fail to find "doubleblind" or "double blinded," even though their meanings are equivalent. Likewise, a search for the keyword "quasi experimental" will fail to find the term "quasiexperimental." Searching by keywords is recommended as a strategy primarily because subject headings for research designs are scarce and inconsistently applied.

How Publication Type Limits Can Help

Unlike subject headings, Publication Types are labels assigned to reflect what type of publication the article is, rather than what the article is about, that is, publication types describe the article as a whole. Although some of these labels reflect general article types (e.g., review, biography, and editorial), a few others reflect research methodologies (e.g., randomized controlled trial or meta-analysis). Where available, labels may be used to restrict a search on a health topic to studies with a specific research methodology. Publication Type limits are important because the citations they yield are exclusively empirical studies using specific research designs. The most useful publication type in CINAHL for identifying a research design is "Research," which indicates a research study containing data collection, methodology, and discussion of results. We recommend that searchers use keywords, subject headings, and publication type limits to maximize relevant results.

RECOMMENDED STRATEGIES

Combining Subject Headings With Keywords

Although cumbersome because of variations in spelling and phrasing, if done well, this strategy will find the largest number of citations possible and is highly recommended when the clinical subject is rare, uncommon, or new. In bibliographic databases, well-prepared keyword searches will identify those articles that list the research design in the title or abstract, as well as in the subject headings and publication types. In online resources, well-prepared keyword searches will find those articles that use the research design terms in their titles and texts. Here is an example: Finding articles on pilot studies regarding the measurement of pain.

(Note: this example uses OVID's search interface for CINAHL; "exp" indicates an exploded Subject Heading, "\$" is the truncation symbol. ".mp." indicates that the search is a keyword string; in OVID CINAHL, the keywords are searched for in the Title, Subject Headings, Abstract, and Instrumentation fields.)

- Search on subject of study, using Subject Headings when possible for specificity: The Subject Heading in CINAHL for the measurement of pain is "Pain Measurement"—"exp pain measurement/"

- Identify any subject heading assigned to the research design: In CINAHL, the Subject Heading for pilot studies is Pilot Studies—“exp Pilot Studies”
- Identify the keyword variations used to indicate the research design. Incorporate synonyms and spelling variations, truncating when possible, use the logical operator “or” to combine terms and place parenthesis around the set: (i.e., Pilot study or pilot studies or pilot project\$ or feasibility study or feasibility studies).mp.
- Use the logical operator “or” to combine the Subject Heading and keywords: exp Pilot Studies or (i.e., pilot study or pilot studies or pilot project\$ or feasibility study or feasibility studies).mp.
- Using the logical operator “and” combine the research design phrase with the clinical subject of the search.

Set 1 “exp Pain Measurement”

Set 2 “exp Pilot Studies or (i.e., pilot study or pilot studies or pilot project\$ or feasibility study or feasibility studies).mp.”

Set 3 “1 and 2” (citations in this set include relevant research and irrelevant nonresearch articles)

Focusing With Publication Type Limits

Often, a shorter, more relevant list of citations can be found by limiting a clinical topic search with one of the options available in a database’s Publication Type Limits. These Publication Type Limits are usually the option with highest specificity for focusing search results to studies that include the narrowly defined research design (Appendix A). Although the results will probably be few, they should be right on target. In OVID, Publication Types can be searched by using the “Limit” command, or by searching specifically on the Publication Type field (e.g., Research.PT.).

Although the concept of Publication Types is similar across all three databases, they use different names for the Limit category. Field codes may also vary in different vendor platforms. In OVID,

MEDLINE uses the term “Publication Type” and uses the field code “.pt.”

The CINAHL thesaurus uses the term “Document Type”; in the OVID interface, however, they are labeled “Publication Type” and use the field code “.pt.”

PsycINFO uses “Form/Content Type” and the field code “.fc.”

Continuing our example from earlier:

Search the publication field for a valid publication type:

Set 4 “Research.pt.”

Limit your search by combining with the operator “and”

Set 5 “3 and 4” (citations in Set 5 include only relevant research studies)

Appendix B comprises search statements recommended for finding individual research designs (i.e., Step B for keywords and subject headings, and Set 4 for Publication Type Limits from the earlier example). These statements consist of a combination of keywords, subject headings, and publication types, to best find studies using particular research designs in bibliographic databases.

Each strategy combines keywords, database-specific Subject Headings, and Publication Types. The suggested strategies are part of an overall search strategy and should be combined with the health-related topics of interest (see the example in the previous section, Combining Subject Headings with Keywords). The keywords will work in all three databases (as well as in most online journals and texts); the Subject Headings and Publication Types are specific to their respective databases and, therefore, recommended strategies are listed by database. Because of the nature of keyword searching and subject heading mapping, the recommended statement should be typed in exactly as indicated (Appendix B).

The suggested strategies are not exhaustive. Searching is a complex and dynamic skill, and a simpler or more complex strategy may be needed depending on individual needs, and the extent of the literature. These strategies will serve as a guide that can be edited as appropriate to your topic. Reference librarians at your institution can be a good resource in helping you to refine your search strategy.

APPENDIX A

Publication Types for CINAHL, MEDLINE, and PsycINFO Databases

CINAHL Methodology Document Types

Clinical Trial
Protocol, Research
Research
Systematic Review

MEDLINE Methodology Publication Types

Clinical Trial (Refinable to Phase I, II, III, or IV)
Controlled Clinical Trial

Evaluation Studies
 Randomized Controlled Trial
 Meta-Analysis
 Multicenter Study
 Twin Study
 Validation Studies

PsycINFO Methodology Form/Content Types

Clinical Trial	Retrospective Study
Empirical Study	Treatment Outcome Study
Followup Study	
Meta-Analysis	
Program Evaluation	
Prospective Study	

APPENDIX B Strategies for Individual Research Designs

EXPERIMENTAL DESIGNS

A. CLASSIC EXPERIMENTAL DESIGN

Studies that involve planned manipulation of factors suspected of altering the phenomenon under study use random assignment to groups and have the greatest control of variability.

Suggested strategy in CINAHL:

exp Experimental Studies/

To refine results to research only, limit above set to: Publication Type: Research

Suggested Strategy in MEDLINE:

We recommend relying on the Publication Type strategy: Controlled Clinical Trial.pt.

For nursing journals only, combine set number with n.sb. (e.g., 1 and n.sb.)

To increase results, use instead: Clinical Trial.pt.

To increase results, one or more of the following Subject Headings may be useful:
(exp Follow-up Studies/ or exp Evaluation Studies/ or exp Comparative Study/
or exp Treatment Outcome/ or exp Survival Analysis/ or exp Survival Rate/)

Suggested Strategy in PsycINFO:

We recommend using the Publication Type strategy: Clinical Trial.fc.
To increase results, use Empirical Study.fc. or Treatment Outcome Study.fc.

Randomized Controlled Trial

A term used frequently for experimental designs involving human subjects.

CINAHL

rct.mp. or ((random\$ adj2 (allocat\$ or assign\$)).mp. and ((study or studies or
exper\$ or trial\$ or design\$ or approach).mp. or exp Nursing Outcomes/ or exp
Treatment Outcomes/) and (placebo or control\$).mp.)

To refine results to research only, limit above set to: Publication Type: Research
To further refine results, limit to: Publication Type: Clinical Trial

MEDLINE

Randomized Controlled Trial.pt. or exp Randomized Controlled Trials/ or rct.mp.
or ((random\$ adj2 (allocat\$ or assign\$)).mp. and ((study or studies or exper\$ or
trial\$ or design\$ or approach).mp.) and (placebo or control\$).mp.)

For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)

PsycINFO

((((random\$ adj2 (allocat\$ or assign\$ or control\$)) and (study or studies or exper\$
or trial\$ or design\$ or approach or trial\$)) or rct).mp.

To refine results, limit to one or more of the Publication Types: Empirical Study,
Treatment Outcome Study, Clinical Trial

Quasi-Experimental Design

Studies that lack one of the characteristics of a true experiment — usually random
assignment of subjects to treatment groups or have limited control of study variables.

CINAHL

exp Quasi-Experimental Studies/ or exp Nursing Outcomes/ or exp Treatment
Outcomes/ or ((quasi experim\$ or quasiexperim\$ or retrospective or time
series) adj3 (approach or design\$ or method\$ or research or studies or study) or
nonequivalent control group\$).mp.

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

((quasi experim\$ or quasiexperim\$ or repeated measure\$ or retrospective or time series) adj3 (approach or design\$ or method\$ or research or studies or study or trial\$) or nonequivalent control group\$).mp. or Controlled Clinical Trial.pt. or exp Comparative Study/ or exp Evaluation Studies/ or exp Treatment Outcome/

For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)

If results are too few, consider searching for (quasi experim\$ or quasiexperim\$ or repeated measure\$ or retrospective or time series) adj2 (studies).mp., to find articles citing relevant research.

PsycINFO

((quasi experim\$ or quasiexperim\$ or retrospective or time series) adj3 (approach or design\$ or method\$ or research or studies or study)).mp. or nonequivalent control group\$.mp.

Limit above set to: Form Content Type: Empirical Study

Within-Subjects Design*

Studies where the variable is controlled within the same subject group, so that each subject acts as his or her own control.

Within-subject design introduces what is known as a “stopword,” a word that is so common that it is not indexed. In the OVID version of all three databases “within” is a stopword and therefore cannot be specifically searched for. However, in the Pubmed version of MEDLINE, <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>, one can successfully search for this design by entering “within-subject” in the search form.

CINAHL

exp Repeated measures/or (own control or crossover or correlated groups or split plots or randomized block design or intra subject or intrasubject).mp.

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

(Repeated measures or own control or crossover or correlated groups or split plots or randomized block design or intra subject or intrasubject).mp.

To refine results, limit to: Clinical Trial.pt.

For articles from nursing journals, combine set number with n.sb.(1 and n.sb.)

PsycINFO

exp Repeated Measures/ or (own control or crossover or correlated groups or split plots or randomized block design or intra subject or intrasubject).mp.
Limit above set to Form Content Type: Empirical Study

Evaluative Designs

Research that measures the effects of a program, such as an educational offering or change process, or the effects of a product, such as a medical device or an educational package, against the goals it set out to accomplish as a means of contributing to subsequent decision making about the program/product and improve future programs/products.

In MEDLINE, the publication type Evaluation Studies is defined as determining the effectiveness of utility of processes, personnel, and equipment, but not a therapy. Indexing, however, is uneven so it should be searched as a keyword as well as a Subject Heading. Other appropriate Subject Headings may include Treatment Outcome, Survival Analysis, Survival Rate, Prognosis, or Follow-Up Studies.

CINAHL

exp Evaluation Research/ or exp Program Evaluation/or ev.fs. or (evaluation adj (study or studies or design\$ or research)).mp
To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

exp Evaluation Studies/ or Evaluation Studies.pt. or (evaluat\$ adj2 (study or studies or design\$ or research)).mp. or exp Treatment Outcome/
To refine results, limit above set to: Publication Type: Clinical Trial
For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.). If results are too few, consider searching for ((evaluat\$ adj2 study).mp., to find articles citing relevant research.

PsycINFO

(exp Evaluation/or exp Program Evaluation/) or (Evaluation adj (approach or design or studies or study or research)).mp. or Program Evaluation.fc.
Limit above set to Form Content Type: Empirical Study

B. SURVEY DESIGNS

Comparative Designs

Designs that examine two or more groups to determine similarities or differences on a given variable, or criteria, when manipulation of the independent variable is not possible or ethical.

CINAHL

exp Comparative Studies/ or (compar\$ adj (analysis or study or design\$ or approach or method\$ or trial)).mp.

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

exp Comparative Study/ or (comparative adj (analysis or study or design\$ or approach or method\$ or trial)).mp.

For articles from nursing journals, combine set number with: n.sb. (1 and n.sb.)

If results are too few, consider searching for ((comparative adj2 studies).mp., to find articles citing relevant research.

PsycINFO

(comparative adj (analysis or study or design\$ or approach or method\$ or trial)).mp.

Limit above set to: Form Content Type: Empirical Study

Correlational Designs

Studies that examine the relationships between variables but do not actively manipulate the independent variables. Cause-and-effect relationships are therefore difficult to establish.

CINAHL

exp Correlational Studies/ or (correlation\$ adj2 (approach or design or research or studies or study)).mp.

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

(correlation\$ adj2 (approach or design or research or study)).mp.

For articles from nursing journals, combine set number with n.sb.(1 and n.sb.)

If results are too few, consider searching for ((correlation# adj2 studies).mp., to find articles citing relevant research.

PsycINFO

(correlation\$ adj2 (approach or design or research or studies or study)).mp.
Limit above set to: Form Content Type: Empirical Study

Epidemiological Designs

Studies designed to examine associations, commonly hypothesized causal relations. They are usually concerned with identifying or measuring the effects of risk factors or exposures in a large population.

CINAHL

exp Case-Control Studies/ or exp Prospective Studies/ or exp Retrospective Design/ or exp Cross Sectional Studies/ or exp Epidemiological Research/ or exp Incidence/ or exp Prevalence/ or ep.fs. or ((incidence or prevalence or retrospective or cohort or longitudinal or follow-up or prospective or cross-sectional) adj2 (approach or design or research or studies or study or method\$))

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

exp Epidemiologic Studies/ or exp Incidence/ or exp Prevalence/ or ep.fs. or ((case control or epidemiologic\$ or incidence or retrospective or cohort or longitudinal or follow-up or prospective or cross-sectional) adj2 (approach or design\$ or research or study)).mp.

For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)

PsycINFO

We recommend relying on the Publication Types: Followup Study.fc. or Longitudinal Study.fc. or Prospective Study.fc. or Retrospective Study.fc.

Or try: ((case control or epidemiologic\$ or incidence or retrospective or cohort or longitudinal or follow-up or prospective or cross-sectional) adj2 (approach or design\$ or research or study)).mp. and to reduce results to studies add "and Empirical Study.fc."

C. DESCRIPTIVE/EXPLORATORY DESIGNS**Descriptive Design**

Research studies that have as their main objective the accurate portrayal of the characteristics of persons, situations, or groups, and the frequency with which certain phenomena occur.

CINAHL

exp Descriptive Research/ or exp Phenomenological Research/ or ((phenomenon\$ or descriptive) adj2 (analysis or approach or design\$ or method\$ or study)).mp.
 To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

((phenomenon\$ or descriptive) adj2 (analysis or approach\$ or design\$ or method\$ or study or research)).mp.
 For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)
 If results are too few, consider searching for ((phenomenon\$ or descriptive) adj2 studies).mp., to find articles citing relevant research.

PsycINFO

((phenomenon\$ or descriptive) adj2 (analysis or approach\$ or design\$ or method\$ or study or studies or research)).mp.
 Limit above set to: Form Content Type: Empirical Study

Exploratory Design

Preliminary research whose purpose is to learn enough about the phenomenon of interest so that a specific hypothesis can be suggested and sufficiently supported to justify a detailed investigation.

CINAHL

exp Exploratory Research/ or (explora\$ adj2 (approach or design\$ or method\$ or research or study or studies)).mp.
 To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

(explora\$ adj2 (approach or design\$ or method\$ or research or study)).mp.
 For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)
 If results are too few, consider searching for (explora\$ adj2 studies) to find articles that cite relevant research.

PsycINFO

(explorato\$ adj2 (approach or design\$ or method\$ or research or study or studies)).mp.
 To refine results to research only, limit set to: Publication Type: Empirical Study

Qualitative Research Design

Investigations that use sensory methods such as listening or observing to gather and organize data into patterns or themes.

CINAHL

exp Qualitative Studies/ or exp Phenomenological Research/ or ((qualitative or phenomenol\$) adj2 (approach or design\$ or method\$ or research or study or studies))

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

((qualitative or phenomenol\$) adj2 (approach or design\$ or method\$ or research or study)).mp.

For articles from nursing journals, combine set number with: n.sb.(1 and n.sb.)

If results are too few, consider searching for ((qualitative or phenomenol\$) adj2 studies).mp., to find articles citing relevant research.

PsycINFO

((qualitative or phenomenol\$) adj2 (approach or design\$ or method\$ or research or study or studies)).mp.

Limit above set to: Form Content Type: Empirical Study

Pilot Study

A small-scale version, or trial run, of a major study for the purpose of obtaining information to improve the methods of project or assess the study's feasibility.

CINAHL

exp Pilot Studies/ or ((small scale or exploratory or feasibility or pilot) adj2 (project\$ or study or studies or evaluation or design or research)).mp.

To refine results to research only, limit above set to: Publication Type: Research

MEDLINE

exp Pilot projects/ or ((small scale or exploratory or feasibility or pilot) adj2 (project\$ or study or evaluation or design or research)).mp.

For articles from nursing journals, combine set number with n.sb.(1 and n.sb.)

PsycINFO

((small scale or exploratory or feasibility or pilot) adj2 (project\$ or studies or study or evaluation or design or research)).mp.

However, limit above set to: Form Content Type: Empirical Study

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