METHODOS Research Methods in Social Communication

v. 2, n. 1 | December 2021

OpenTextbook: An introduction to design a communication research study

Javier Díaz-Noci (coord.)

Universitat
Pompeu Fabra
Barcelona

Faculty
of Communication

METHODOS Research Methods in
Social Communication

OpenTextbook: An introduction
to design a communication research study

|

Designing a research project
In communication

METHODOS Research Methods in Social Communication

v. 2, n. 1 December 2021

Faculty of Communication
Pompeu Fabra University (Barcelona)
08018 Barcelona
Contact: +34 93 5421220 | javier.diaz@upf.edu

This edition has been possible thanks to the teaching innovation project Ref: 46 PlaCLIK 2019-2020 2, Plan to Support Quality and Innovation in Learning and Knowledge 2019/2021 (UPF)

This work is distributed under this Creative Commons license

For any other request and use of the intellectual property rights on this work, please contact the authors.

Recommended citation form:

Díaz-Noci, J. (ed.) (2021). *OpenTextbook: An introduction to design a communication research. Methodos. Research Methods in Social Communication*, 2(1). Barcelona: Faculty of Communication. DOI <http://dx.doi.org/10.31009/methodos.2021.i02.01>

Acceso: <https://repositori.upf.edu/>

Foreword

THE AIM OF THIS BOOK, and of the teaching project it is a result of, is to explore the possibilities of which is known as a *living handbook*, or an interactive, ongoing handbook accessible online to be edited by authors and for consult for the scholarly community. It is also our goal to explore the ways of obtaining an *open textbook* out of some advanced versions of the living handbook – a more static output from a more dynamic one. We continue this way the production of materials to be used in the teaching of master programs on communication research, an effort initiated by producing a first output called *Methodos. Anuario de Métodos de Investigación en Comunicación Social* [*Methodos. Yearbook on Research Methods in Social Communication*], intended as a product of our concern on how to teach such courses.

This volume is an Open Textbook, in pdf format, which offers the initial contents to be provided as well in the living handbook online. The first issue is devoted to the general aspects regarding the design of a research project in communication and to the main publication and transference strategies.

Contents

v. 2, n. 1: Designing a research project in communication

<i>How to design a research project in communication</i>	
Javier Díaz-Noci	11
<i>States of the art: their role in academic work and their rationale through systematised reviews</i>	
Lluís Codina	37
<i>Practices and recommendations for writing and submitting papers to scientific journals</i>	
Rafael Pedraza	55
<i>Knowledge transfer and publication of results</i>	
Javier Díaz-Noci, Rafael Pedraza	73
<i>Ethical aspects of researching on communication</i>	
Javier Díaz-Noci	87

December 2021

How to design a research project in communication

JAVIER DÍAZ-NOCI*Pompeu Fabra University (Barcelona)*

javier.diaz@upf.edu

ORCID: 0000-0001-9559-4283

DOI: 10.31009/methodos.2021.i02.01

Díaz-Noci, J. (2021). How to design a research project in communication.
OpenTexbook: An introduction to design a communication research.
Methodos. Research Methods in Social Communication Handbook, v.2.
Barcelona: Universitat Pompeu Fabra (p. 11-33)

This work is distributed under this Creative Commons license

For any other request and use of the intellectual property rights
on this work, please contact the authors.

How to design a research project in communication

1. Introduction

Scientific research is a systematized process and obeys specific rules, we list below the steps that the researcher must follow when carrying out the project of scientific work. These are the parts of proper design:

1. Choosing the topic
2. Object of study
3. Universe and samples
4. Research problem
5. Goals
6. Research questions
8. Hypothesis and Variables
7. Theoretical Framework

As for the type of research, it must be established according to the topic and the objectives set. The typology presented below is not exclusive:

- 1) Exploratory research corresponds to an unknown, little studied, or novel topic. It is the most widespread type of research.

- 2) Descriptive research is that whose purpose is to define or detail the topic in question (behavioral indices, states of the issue).

- 3) The explanatory research has as fundamental purpose to discover the causes that give rise to certain facts, circumstances, behaviors, etc..

- 4) Correlational research aims to establish relationships between different phenomena.

- 5) Projective: They are projected towards the future and aim to advance what will happen. For example, this type of research includes techniques that detect trends, such as the Delphi method.

- 6) Propositive: Proposes changes to the current state of affairs.

The scientific process has definite phases that must be followed to achieve the objectives that have been proposed.

Our research activity should be driven by four quality indicators, whether the research design is based on quantitative or qualitative methods, as shown in this table:

Quantitative Research	Qualitative Research
Internal validity	Credibility
External validity	Transferability
Reliability	Dependability
Objectivity	Conformability

Credibility refers to the fact that we will approach our research design through consistent observation, triangulation of methods and control of all operations, both in data collection and analysis.

Transferability is the second of these four indicators, and refers, for example, to the fact that the research design must propose a system for defining the universe, case study or sample, if necessary and indicating the reasons, in order to propose an in-depth description of the object of study.

The reliability of the study depends, to a large extent, on the existence of mechanisms that allow the entire process to be examined.

Conformability means that the methods will be discussed and evaluated and the results can be compared with other similar studies.

The basic structure of the execution of the research has the following phases:

1. Determination of the object of study.

2. Observation.

Data can be collected directly (“primary” techniques or procedures) or indirectly or “secondary”, through data collected by other researchers, companies or institutions. Empirical research is fieldwork designed to obtain original data.

3. Data analysis.

The data can be analyzed and / or synthesized. From or without a previous model, the data is broken down into parts for separate examination and reassembly.

4. Interpretation of results.

The data obtained are synthesized by a common explanation or meaning. The data give an image of the reality of the studied object to which the interpretative task must be added.

5. Evaluation of results.

It is carried out taking into account: to what extent it represents scientific advances; what limitations and defects our research has, how it could

improve and what are the new research problems based on the results obtained.

Previously oriented research may exist in the quantitative methodology, although all research can be created *ex novo* because each topic requires its research design.

Scientific work can be a synthesis of discoveries on a topic and its interpretation, and evaluation of such discoveries. It must be original, it can be based on several sources, as long as they are explicitly recognized, and it belongs to the scientific and academic community, while showing that the researcher belongs to that community (insofar as he accepts the rules and

procedures to investigate). Here we insist on what cannot be an academic work. Taking into account the contemporary problem of plagiarism, in journalism, but also in the university community (the ease of which in all areas is undeniable thanks to ICT), we recall the summaries, repetitions of ideas, quotes, personal opinions and Unrecognized copies are plagiarism, not academic research.

The research process consists of two main parts:

- the elaboration of the project and
- the realization of the research.

A proper research design should include the following aspects:

2.Choosing the topic

The topic must be timely and current: correspond to topics that are unknown to society or that resolve contemporary interests or curiosities. Those topics that are inappropriate (excess or lack of information; lack of means or sufficient time) should be discarded. It must have practical implications, that is, some utility for some sector of society; affect a large sector of the population (normally, everyday life is of interest to the Social Sciences), or it can also affect a special sector of the population (influence groups, marginalized sectors or elites). It must meet current research demands (topics that have not been sufficiently researched, or that have been researched in other countries and we find interesting, topics that are the product of social change, such as mobile phone use in children or addictions to ICT). Research may aim to clarify an ambiguous or complex concept (such as "identity", for example), may refine research tools, may provide theoretical advances (reveal new data) and may apply techniques from other fields, enriching the methodological proposal.

Umberto Eco (1977) highlights the characteristics that the subject must have, that can be a task and that must be feasible: the researcher must be able to do it, making contributions,

must be manageable, must provide enough information and at the same time be able to show the skills of the researcher. Eco advises rejecting issues in which a single source of information is available, which may lead to irrelevant conclusions, which are too topical or which the researcher has an emotional or ideological implication. In the book *Come si fa una tesi di laurea* it establishes four rules, focused on the feasibility of the study:

1. That the topic corresponds to the interests of the researcher
2. That the sources are affordable
3. That the sources are manageable
4. That the methodology is manageable for the researcher

On the contrary, it would be better not to define topics:

1. For which only one source of information is available.
2. In which an individual researcher cannot do all the work.
3. Too broad, overflowing the boundaries of a research paper or a doctoral research.
4. About which the researcher's own conclusions and contributions will be irrelevant.
5. That they are not able to maintain the researcher's interest throughout the research process.

6. So neutral that the researcher is unable to express a personal [academic] stance about him.
7. So complex that they lead nowhere.
8. Too popular, so our contribution might be none.
9. In which the researcher is so emotionally involved, or so controversial, that a personal scientific contribution from the researcher will be hampered.
10. Inappropriate for the [academic] public.

Once the topic is decided, what we recommend is:

1. Examine or analyze that topic from several points of view, until deciding which one is right for us. In this way we can move forward in formulating the research problem.
2. Evaluate and critique the topic: It will help us to read the relevant scientific literature on the issue.
3. Compare and contrast things and ideas, similarities and differences.
4. Establish relationships between ideas.
5. Argue for and against.

3. Approaching the research problem

The problem must be formulated in a "specific, precise and operational" way (Ander-Egg, 1993: 139) in order

to investigate. Ander-Egg (1993: 139) recommends subdividing the problem into "issues involved (subproblems)". Quantitative methodology often uses the aggregation and disaggregation of concepts. To transfer this methodological mechanism of the social sciences (aggregated and disaggregated) to the conceptualization of the object of study aims to raise the problem in an operational, easy-to-handle way. In the delimitation phases of the problem, Ander-Egg emphasizes that the problem must be identified and detailed in a clear and precise way "by means of the dimensional decomposition, establishing its constituents, variables or dimensions" (1993: 141). In addition to reviewing the existing literature and related data and issues, a task of defining the relevant terms should be performed, to establish what their scope is in the work to be performed.

The problem must be formulated in a "specific, precise and operational" way (Ander-Egg, 1993: 139) in order to investigate. Ander-Egg (1993: 139) recommends subdividing the problem into "issues involved (subproblems)". Quantitative methodology often uses the aggregation and disaggregation of concepts. To transfer this methodological mechanism of the social sciences (aggregated and disaggregated) to the conceptualization of the object of study aims to raise the problem in an operational, manipulable way. In

the delimitation phases of the problem, Ander-Egg emphasizes that the problem must be identified and detailed in a clear and precise way “by means of the dimensional decomposition, establishing its constituents, variables or dimensions” (1993: 141). In addition to reviewing the existing literature and related data and issues, a task of defining the relevant terms should be performed, to establish what their scope is in the work to be performed.

The objectives determine what you want to achieve with the research.

They need to be clear and acceptable, and must be present throughout the research process, as they lead and guide research. It is recommended to write them in infinitive (describe, identify, analyze, study, size, propose). A general goal is usually planned, linked to the question and the general hypothesis. The specific objectives have a higher level of concretion and make it possible to disaggregate the issues raised. They must be consistent with the hypotheses and research questions.

This is summarized in this table:

Goals
<ul style="list-style-type: none">• The problem is the core part of the research design, especially from an Anglo-Saxon, empirical, data-driven research approach.• Concepts: It is extremely important to define them using bibliography, not to invent them.• Hypothesis are few, hierarchized, linked to dependent-independent variables that can be<ul style="list-style-type: none">– Isolated, define, delimited– Measured• Please remember the type of hypothesis before writing them, and link to the approach and to the goals of your research.

The research questions (research questions, are usually marked and numbered: RQ1, RQ2 ...) are those that the researcher intends to answer through his research. They must be accurate. They are formulated in re-

lation to the objectives. Once the research is completed, the answers obtained can determine the analysis of results.

Research questions are related to hypothesis, according to this table:

Research Problem and Hypothesis

- The problem is the core part of the research design, especially from an Anglo-Saxon, empirical, data-driven research approach.
- Concepts: It is extremely important to define them using bibliography, not to invent them.
- Hypothesis are few, hierarchized, linked to dependent-independent variables that can be
 - Isolated, define, delimited
 - Measured
- Please remember the type of hypothesis before writing them, and link to the approach and to the goals of your research.

In relation to the justification of the research and its feasibility, it must be clearly stated that the research is feasible, that is, that it can be done, either by the possibilities of the researcher, necessary financial resources, etc. Its convenience and social projection, theoretical and methodological contributions and practical implications must also be justified. That is: to assure that human and economic resources will be used to investigate a topic relevant to society, which will later be disseminated and will make a contribution to scientific knowledge. The topic and period to be analyzed must be justified, as well as the relevance of the research based on its social projection.

4. Theoretical framework

Theory is needed to provide a general interpretation framework, as explained by John Creswell:

[Theory] is used as a broad explanation for behavior and attitudes, and it may be complete with variables, constructs, and hypotheses. Researchers increasingly use a theoretical lens or perspective in qualitative research, and advocacy perspective that shapes the types of questions asked, informs how data are collected and analyzed, and provides a call for action or change (Creswell, J. H. *Research design. Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles etc.: Sage, 2009).

The theoretical framework is constructed by locating, reviewing, expanding and selecting the information, which must be systematized in the form of summaries and fact sheets, either by topics or by authors. Since this is a fundamental aspect of all research, and it is a novel procedure, it is a very useful practice in which they begin to build the theoretical framework, looking for research centers and publications relevant to their object of study. Information gathering consists of searching for information on the subject in scientific

journals, professional journals, non-specialized journals and publications, summaries of researchers' associations, databases and newspaper archives. Once the collection is complete, the materials are evaluated and the ideas (topics, subtopics, authors, etc.) are organized.

We recommend three possible approaches of this type: grounded theory, Action-Network Research and mixed methods.

Grounded theory, following Creswell, *op. cit.* consists of a series of methods "suitable for studying individual processes, interpersonal relations and the reciprocal effects between individuals and larger social processes". Its objective is to generate inductive theories applied to a specific object of study, it is based on the systematic collection of data, while at the same time analyzing them through an iterative design and the collection of samples until reaching a moment of theoretical saturation, when they are no longer productive, which are analyzed on the basis of previously defined categories of analysis that are adjusted during the research process until the central ones are discerned.

Action-Network Research "leads to better research because the practical and theoretical outcomes of the research process are grounded in the perspective and interests of those immediately concerned, and not filtered

through an outside researcher's preconceptions and interests" (Reason and Bradbury, 2001: 4). It is collaborative, it is based on considering the interests of the community being studied, therefore the participants help in the design of the research itself to produce practical knowledge. In a way, it is said to democratize the research process, and places the emphasis on decision making.

Finally, a mixed methods approach employs quantitative and qualitative methods to address the different objectives, questions and hypotheses posed in the research, and is especially useful for answering complex research questions and problems.

5. Hypothesis

Hypotheses must be stated unequivocally, since the researcher's task is to prove (ratify, verify) or refute them, as this is an essential quality of any hypothesis. It must be a probable solution, it has to be tried. Hypotheses are "basic statements that are tested in research," a conjecture, an assumption or inference, "an assumption, an initial suspicion." It is also "an outline of sociological law; if the hypothesis is verified by experience it becomes law, and if it is otherwise abandoned, a new hypothesis is formulated which in turn will be investigated" (Duverger, 1996: 385).

The hypotheses usually expose a relationship between two variables, although they could be more. The hypotheses "contain predictions about the relationships between the two variables." The variables that are present in the hypothesis will be those that the researcher uses to measure it. Variables must be defined conceptually and operationally

The first operation is to decide whether a hypothesis is central or secondary, that is, to prioritize it. If we think that age influences the direction of voting (H1), a secondary hypothesis would be that during youth there is a greater tendency to vote left-wing parties (H1.1), than in the range between 35 and 55 the tendency to vote for liberal parties is higher (H1.2), while in the age group between 56 and 70 the tendency is to vote for conservative parties (H1.3). In turn, the hypotheses can be positive, negative (null) or alternative: it is positive when there is a relationship between variables that occurs in this way (when a cause X occurs a consequence Y occurs, for example), and negative when a cause does not lead to a consequence or, directly, there is no relationship between variables. Alternative is when it proposes a different explanation to the positive or negative hypothesis (null).

5.1. Types of hypothesis

1) Descriptive: It is limited to raise that there is a single variable. In turn, descriptive hypotheses can be divided into simple and comparative.

1.1. Simple descriptive hypotheses: In turn, they can be mere description, classification or measurement (accuracy).

1.2. Comparative descriptive hypotheses: Time periods, places, strata, social groups can be compared.

2) Relational: Relational hypotheses suggest that there is some kind of relationship between variables, whether causal or otherwise, so the type of relationship is also important and must be verified when testing the hypotheses. They can be analytical or programmatic, and in any case simple or causal. The latter, in turn, can be:

2.1. Reversible-Irreversible: When one variable influences another, and vice versa, it is reversible. If only one influences the other but there is no reciprocal relationship, it is irreversible.

2.2. Deterministic-Stochastic: Depending on whether the influence of one variable on another is inevitable or there is simply the possibility of that happening (stochastics).

2.3. Sequential-Coexisting: If one variable follows the other or they occur simultaneously.

2.4. Sufficient-Contingent. If the influence of the independent variable is sufficient to produce the dependent (sufficient), or if the influence comes from a subsequent condition (contingent).

2.5. Necessary-Substitutable: If a variable occurs only when that other variable occurs or the relationship (for example, cause-effect) can occur in the presence of another variable.

2.6. Instant-Interdependent: When the effect of one variable on another is immediate or not.

5.2. Variables

The variable is a property that can be observed and that can vary, acquire different values and can be measured.

The dependent variable is the "probable effect"; while the independent variable is the "probable cause." The hypothesis arises from theoretical knowledge, not before. It is recommended that the hypothesis be raised when the theoretical framework and methodological design are already defined.

Taking into account the differentiation according to the number of variables that are worked on simultaneously, priority is given to univariates (a single variable) or bivariates (contingency tables, dispersion). Hypothesis are related to variables.

Types of variables may include:

Categorical or Nominal variable

The studied property can only be grouped into exhaustive and exclusive categories. Genres, Sections of a newspaper, television channels,... Each category is assigned different attributes (names or numbers). The numeric assignment does not involve a hierarchy. Television channels are an example of nominal variables.

Example: sex (M / F).

Ordinal variable

In addition to including the characteristics of the nominal ones, they allow to be ordered from major to minor or vice versa. It can be, for example, the perception of the television channel by the audience.

Example: status (high / low / medium).

Reason variable

The difference with the rest is that they have a true absolute zero point. It can be monthly income, watching hours of TV or Internet consultation per week.

Ex: Hours of exposure to TV

Interval variable

It allows the interpretation of the difference between two measures. The intervals or distances between two categories can be known, since these

are real numbers not assigned arbitrarily. Allows you to perform arithmetic operations. There is no zero.

Example: Level of studies (EI / EP / ESO / Baccalaureate / Degree / Master / Doctorate)

5.3. Validity

A well-designed hypothesis should meet the following conditions. We recommend - the process of writing the hypotheses is not a simple task, but it is very logical - that, once the hypotheses are outlined, they are subjected to this test to see to what extent the formulation is correct:

Quality conditions of a good hypothesis
Probable answer
Conceptual clarity
Operational
Generality and specificity
Empirical reference, verifiable and refutable
Source: Own elaboration

6. Universe and samples

6.1. Universe

Another important decision is what is our universe or population, composed of people (in a study of electoral behavior, for example, the set of voters; in a study of audiences, people who

follow a particular medium or program) or objects (the set of episodes of a television series that constitutes our object of study, or of the news on a specific subject that we must analyze). In the technique of content analysis it is also called corpus and its manufacture requires a series of steps that we will explain in due course. Once the problem has been defined, the hypotheses have been formulated and the variables have been identified, it is necessary to delimit what is part of the universe or population. If we can observe all the units that make up the universe (= a census) or if it is a part of the universe (= the sample). The census is a feasible option for small universes. "The process of conducting a census would involve measuring all elements of the population" (Wimmer and Dominick, 1996: 67).

The hypothetical universe is the totality of the set of elements, beings or objects that are tried to investigate. It includes all existing populations on which research could be conducted.

The population is the set of all cases coinciding with a series of specifications. Your units must be of the same nature as the sample. The sample, therefore, is a subgroup of the population.

6.2. Samples

It may be the case, and it is very common, that the universe is very large or

difficult to delimit. For example, it is very difficult and costly, in time and money, to interview or survey each and every voter in a given constituency, because it is about millions of people in a wide geographical area, although through the population census we can know exactly how many and who they are. It can also be difficult to delimit. In these cases, sampling is used. We propose the following table to understand when a sample is needed and when it is recommended, to help decide if we choose to analyze the universe or the sample:

Sample required	Recommended sample
The universe is limitless or immense.	It's faster.
The universe is not accessible.	Lower costs.
Experiments	It makes control easier.
Pre-tests	It is safer
When we have a limited time	

Source: Own elaboration.

The sample is a part of a set, population or universe correctly selected that is submitted to scientific observation on behalf of the set, in order to obtain results valid also for the universe of research, since it is intended to be representative; the subgroup (sample) is considered representative to be able to extrapolate the results to the whole population or universe.

Sample (n) = units to be observed

Universe or population (N) (finite) = units that could have been observed

Among the conditions required by the sample, we emphasize that it must contain part of the population, not its entirety. The amplitude must be statistically proportional to the size of the population. It has to be representative or a faithful reflection of the population.

Sampling is a widespread practice in the social sciences due to the following reasons: the universe is unlimited or unfathomable; it is not accessible; available time or resources are not enough. The sampling technique is also necessarily used in experiments (it is practically impossible to practice an experiment if it is not in small groups and representative of the population or universe) and in pre-tests, i. e. when the goal is not so much to obtain results. but to prove the usefulness of research design, methods and techniques. It is worth working

with samples for speed, decreased research costs, reliability and controls. On the other hand, making a sample is a difficult task.

On the other hand, the samples present two difficulties that must be considered: it is not easy to elaborate a good sample, especially that it is representative, and it does not always collect well the complex variability of the universe to study.

6.2.1.Types of samples

In general terms, samples can be probabilistic or non-probabilistic samples.

6.2.1.1. Probabilistic samples

Probabilistic samples are those in which all elements of the population have the same probability of being chosen or selected. Non-probabilistic samples involve the choice of elements, not based on probability but on causes related to the characteristics of the researcher or research. They allow you to measure the level of error in predictions. All elements of the population have the same option of being elected. The sample is obtained by means of a calculation of probabilities that allows to eliminate arbitrariness with a random or random determination. A systematic selection procedure (tables of random

numbers, for example) is used to ensure that the entire population has had the same opportunities to be elected. The sounding base (list from which the sample is selected) is essential. They are usually used for surveys, content analysis (quantitative methodology).

The probabilistic samples can be:

- Simple random samples
- Systematic random samples
- Stratified samples
- Aggregated samples

Simple random samples

All elements have the same probability of being chosen directly as part of the sample. It can be with replacement or without replacement, depending on whether the selected units will be able to be re-elected, becoming part of the population again. The procedure for selecting the random sample is to choose the desired amount (for example, 20 television programs), number the universe or population to be studied from 0 to 500, for example, all television programs broadcast in one week in generalist television in Spain) and choose the corresponding numbers from the table of random numbers: first by pointing to a random number and following in any direction until completing the next 19, in this case (Wimmer

and Dominick, 1996: 71). The final selection (for example: 44, 16, 82, 3,...) must be applied to the mentioned numbering of the programs.

The two requirements for random number formation are that each unit or component of the sample must have the same opportunity as the rest to be chosen and the procedure must be free of any subjective intervention by the researcher (Wimmer and Dominick, 1996: 72).

Among its advantages, it is said that this type of sample does not require a detailed knowledge of the composition of the population. External validity can be inferred statistically. A representative group can be easily obtained (though not in all cases). As disadvantages, it is necessary to prepare a complete list of the population and it is a more expensive procedure than others.

Systematic random samples

Used when universes are very large. It consists of applying a stricter and more systematic methodology in the selection of the sample. After a first random choice, the rest are performed according to established regular intervals, from k to k (elevation coefficient, number of samples contained in the same universe). If the universe is 900 units, for a sample of 30 units, the

coefficient $k = 30$ ($30 \times 30 = 900$)” (Gaitán and Piñuel, 1998: 152).

Stratified random samples

It is used when the characteristics of the universe or population are already known, and this is heterogeneous and diverse. Homogeneous units of analysis are grouped together by strata, categories or classes (age, sex, income, academic level; always in line with the research topic). Within each of the strata, a random selection (simple random) is subsequently performed. It is used to improve the representativeness of the sample, and not to lose its “singularity” with respect to the total sample (Gaitán and Piñuel, 1998: 153). The strata or segments can include a wide range of variables: age, sex, religion, income level, media consumption... The homogeneity of the subgroup contributes to reducing the sampling error. It is more likely to be representative. Stratified sampling can be proportional, disproportionate, and controlled (or uniform). The composition of the final sample can be selected respecting the proportionality of the strata in the original universe (proportional) or each stratum has the same quota of representation (fixed), regardless of its distribution in the original universe.

Sample of aggregates or random by conglomerates

Conglomerates can be geographical areas, institutions or organizations (cf. Berganza, 2005: 188-189). It is not individuals who are extracted as basic units but the groups or conglomerates of individuals, such as families, neighborhoods, urban centers, etc. They can be:

- Area or surface sample: It is a geographical sample and refers to all those physical units located in a given territory.
- Successive samples: In turn, they are divided into: 1) "before after" and 2) trends. "Before-after" samples are those in which the measure is used to test the effects of an action, fact, or changes introduced between the two successive measures. Trend samples are those that are obtained by conducting more than two surveys without being determined by a specific fact.
- Samples by stages: They are similar to the successive samples, they are made from a large sample on which a smaller sample is extracted, in order to perform an in-depth study. If it is done in two stages it is two-stage and if it is done in several stages it is multi-stage. Units are selected in different stages to form a sample of individuals.

6.2.1.2. Non-probabilistic samples

Non-probabilistic samples can be adequate when there is no pretension to generalize the results, to avoid the cost of the probabilistic one, for lack of time or in "pilot" or preliminary tests. They are usually used in an exploratory way or for a qualitative methodology (Delphi technique, focus group, discussion groups, life stories, interviews). Intentionally, controlled by the researchers, the participants are chosen for their suitability.

Non-probabilistic samples can be:

- Convenience samples
- Strategic samples
- Other types of samples

Accessible or convenience samples are those in which the subjects have been chosen for the convenience of the researcher. It provides indicative data and has as its main advantage accessibility. The voluntary sample also presents representativeness problems. Its components have also not been mathematically selected. Some research shows that volunteer groups often provide results that confirm researchers' hypotheses to a greater extent than non-volunteers.

The strategic sample brings together participants with a common feature that excludes the rest. The sample of quotas is selected based on a percentage known a priori. For example: if 30% of the population does not read

newspapers, it is established that in the sample only 70% of the subjects read newspapers and the rest do not (Wimmer and Dominick, 1996).

Some authors extend the typology of non-probabilistic samples, which they consider suitable for qualitative research. They are as follows:

- ▶ Various samples or of maximum variation. Its aim is to show different perspectives of the phenomenon studied.
- ▶ Homogeneous samples (people with the same level of education).
- ▶ Snowball sampling (samples are selected based on the above).
- ▶ Sample of extreme cases (for example, extremely violent people).
- ▶ Samples for opportunity or convenience (presented to the researcher at a time, or is the most accessible).
- ▶ Theoretical or conceptual samples (selected cases to test these theories).
- ▶ Confirmatory samples (when in the analyzed cases some controversy arises, doubt... and more cases of different type are chosen to confirm or not).
- ▶ Samples of extremely important cases (for example, testimony of survivors of a shipwreck, or of newspaper editors who have faced extremely serious cases, for example the one represented on the so-called "Pentagon papers" by the *Washington Post*).

▶ Intentional, directed or reasoned sample: the researcher selects the sample trying to be representative, but according to his intention or opinion.

▶ Erratic or circumstantial sample: selection of cases arbitrarily (see "fortuitous or accidental" sample).

6.2.2. Sampling size

Three elements are used to determine the sample size:

1. The margin of error.
2. The level of confidence.
3. The variance of the universe or population.

They must be joined by the size of the universe, because it is in relation to that measure that we will establish the representativeness of the sample. Usually it is recommended to distinguish between finite populations and infinite populations. The former are those in which there are less than 500,000 units or individuals, while the latter are those that exceed that number. A different formula is used for each of them.

6.2.3. Avoiding biases

When the sample is not representative, it is said to be "biased." There are two types of bias, according to Wimmer and Dominick (1996):

1. Non-response bias: only a part of the population enters the sample, which is self-elected.

For example: The company's sales manager wants to know the level of satisfaction of his customers with the computers purchased. It is decided to send a questionnaire to all last year's buyers asking them to return the answer by mail with their opinion on their computer. You receive 4% of responses, of which 78% are dissatisfied with your computer. The sample has been selected by the voluntary response of the population and there has been a non-response bias: those who answer the survey are the most dissatisfied with their purchase and those who have no problems often ignore the survey. If there is a very high rate of non-response, it is necessary to investigate the causes, because people who do not respond may have a very different opinion than those who respond.

2. Selection bias: only selected elements with some "arbitrary" criteria enter the sample

For example: To find out the Internet interest of the inhabitants of a city, a survey is sent by e-mail. The way the sample is chosen will lead to answers in favor of the interest on the Internet and does not represent the entire population: there has been a selection bias.

Needless to say, any bias should be scrupulously avoided.

7. Working plan, periodization and schedule

One of the fundamental characteristics of scientific work is planning. For this reason, it is considered necessary to visualize the importance of a working plan and periodization, a schedule. A detailed description of the steps to be followed to carry out, as well as detailing the activities and contents according to the different stages foreseen in the research project. This planning must also be reflected in a calendar, depending on the duration of each of the phases and in correspondence with the contents of the stages and the type of study to be carried out in each step, with the corresponding adequacy and temporal segmentation. A research budget needs to be developed to reflect the cost of research, funding, and the need to justify its convenience and social projection.

Once the research project has been drawn up, it should also have a timetable detailing the tasks assigned and the period in which they will be carried out, in the form of a Gantt chart.

A Gantt diagram

Source: Prepared by the authors

This is called a research report, and it is the first document to be produced. It includes the definition of the topic and the concepts associated with it, the formulation of the research problem, the goals, the research questions, the variables, the relationship between them and the formulation of hypotheses, the methodology to be applied and the bibliography to be used initially.

A research report details who the members of the group are, who is the

main researcher, what is the trajectory and curriculum vitae of each one of them and the group as a whole, and mentions whether they have worked together on other occasions. The role of each member is explained. The relationship with other research groups, national or international, is also mentioned, if necessary.

The structure of this research report could be the following:

Research proposal report:

TITLE OF THE PROPOSAL:

ACRONYM:

SUMMARY (Maximum 2000 characters, including spaces):

KEY WORDS:

CONTENTS

1. RESEARCH PROJECT

1.1 Executive summary of the project

1.2 Scientific report of the project

1.3 Summary of the work plan

2. HUMAN TEAM

3. BUDGET

1. RESEARCH PROJECT

In order to evaluate the project, the following sections should be completed:

- Executive summary of the project (1/2 page)
- Scientific report of the project (4 pages)
- Summary of the work plan (2 pages)

1. Executive summary of the project

Summary of the goals and motivations of the project. The methodology to be used and the expectations of the research results will also be explained [this aspect can be done later] in a brief way (maximum length 1/2 page).

Research topic and problem

Goals

Research questions

Hypotheses and variables

Methods considered

Expected results

1.2. Scientific report

These items will be explained in more detail, an orderly manner and dedicating a section to each item:

Topic election and formulation or the research problem

Interpretative theories to be applied.

State of the art and literature revision.

Goals, research questions. Variables an hypothesis.

Methods.

Expected results.

References.

1.3. Working pkan

It is necessary to explain the organization of the research Project, the Schedule and a chron-ogram.

	T1	T2	T3	T4	T5	T6	T7	T8
A1								
A2								
A3								
A4								
A5								
A6								
A7								
A8								
A9								
A10								
A11								

Creation

Time period

Actions:

A1: Coordination

Goals:

Period time

Expected results

Researcher in charge:

Participants:

2. TEAM

It is necessary to explain the member of the team and their tasks.

1. Main researcher's name:

Presentation and trajectory. Why this research topic. What is to be learned. Which are their tasks in the project.

2. Name of the other members of the team:

Presentation and trajectory. Why this research topic. What is to be learned. Which are their tasks in the project.

All the teammates contributions are to be systematized:

Contributions/Researcher (by tipology)

Resear- cher	A	State of the art	Conceptual mo- del	Met- hods	Empirical stu- dies
Resear- cher	1				
	2				
	3				
Resear- cher	1				
	2				
	3				
Resear- cher	1				
	2				
	3				

3. BUDGET

Explain the economic resources need to complete the research Project, as clearest as possible.

Consumables	Product	Unit/Price	Final import	Subtotal
				
.....				
.....				
Inventoriable material				
...				
				X €
Travels and expenses				
Travels	Price of the ticket/person	Total tickets	x €	
Destiny	...	...	x €	
Accommodation	Price per day and person	Total	x €	
	x €		x €	
Subtotal				x €
Other expenses (7% of the total amount)				x €
TOTAL				x €

References

- Ander-Ëgg, E. (2011). *Aprender a investigar: nociones básicas para la investigación social*. Córdoba: Brujas.
- Creswell, J. H. Research design. *Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles etc.: Sage, 2009.
- Duverger, Maurice. *Métodos de las ciencias sociales*. Barcelona, Ariel, 1996.
- Eco, U. (1989). *Come si fa una tesi di laurea*. Milano: Bompiani.
- Gaitán, Juan A. y Piñuel, J.L., *Técnicas de investigación social*. Elaboración y registro de datos. Madrid, Síntesis, 1998.
- Reason, P.; Bradbury, H. (2008). *The SAGE Handbook of Action Research Participative Inquiry and Practice*. London etc.: SAGE.
- Wimmer, R.; Dominick, J. (2010). *Mass-media research. An introduction* (9th edition). London etc.: SAGE.

States of the art: their role in academic work and their rationale through systematised reviews

LLUÍS CODINA

Pompeu Fabra University (Barcelona)

lluis.codina@upf.edu

ORCID: 0000-0001-7020-1631

DOI: 10.31009/methodos.2021.i02.01

Codina, L. (2021). States of the art: their role in academic work and their rationale through systematized reviews.

OpenTexbook: An introduction to design a communication research.

Methodos. Research Methods in Social Communication Handbook, v.2.

Barcelona: Universitat Pompeu Fabra (p. 11-33)

This work is distributed under this Creative Commons license

For any other request and use of the intellectual property rights
on this work, please contact the authors.

States of the art: their role in academic work and their rationale through systematised reviews

1. Introduction

Qualitative methodologies have gained enormous development and parallel recognition in top international universities at least since the 1960s. Moreover, if anything, this development has been characterised by the enormous creativity of such methodologies. However, in our country it is easy to detect an insufficient knowledge of some methodological aspects on the part of academics who carry out evaluation work, whether in government agencies, in doctoral thesis tribunals or in academic journals governed by the so-called peer review principle.

The role of states of affairs is truly paradigmatic of the problems that a not only narrow, but methodologically misguided conception causes in the evaluation of science.

This chapter will present a discussion of the fundamental role of state-

ments of the question in first-level academic works such as doctoral theses and research reports. Of course, it also has a relevant role in other genres such as research articles, as well as constituting a scientific genre in itself if they are carried out by adopting protocols and observing certain guarantees of rigour, transparency and traceability.

In this chapter, after identifying the canonical structure of academic papers, a proposal will be presented on the methodological bases on which to base statements of the question in research in the Human and Social Sciences, so that these not only acquire the status of a rigorous contribution, but can be considered a component of the research in itself, and not a mere support or something that can be considered apart from the researcher's contribution.

2. Canonical structure of a research paper

If we carefully analyse a significant group of academic papers in the field of the Humanities and Social Sciences, whether they are doctoral theses or Master's theses, and if we disregard the specific titles of each chapter, we could arrive at what we could call the canonical structure of an academic paper.

In other words, we would be looking at a kind of canon generated partly by prescription, due to the numerous works that deal with the development of academic papers and academic regulations, and partly by decantation, as it is a structure that we can find again and again in successful papers, that is, those that have passed the academic examination that has corresponded to them.

However, if we give a functional name to each of the sections, one of the most frequent structures that we tend to find, and which we call the Canonical Functional Structure (CFS) in order to be able to call it in what follows with a certain degree of convenience, is the one shown below:

1. Introduction
2. **State(s) of the art**
3. Object of study
4. System of analysis
5. Results
6. Discussion
7. Conclusions
8. Bibliography

9. Annexes

We have highlighted in bold the section we will deal with in this chapter. But, first of all, it should be said that we do not claim that all academic work is obliged to be like this, since a canon is a model, not a contract or a legal obligation. On the other hand, deviating from a canon needs more justification than remaining faithful to it.

On the other hand, this structure can be presented in a wide number of varieties while remaining faithful to the scheme presented. For example, there are three components that can appear either separately or linked together in various ways. These are the following:

- Results
- Discussion
- Conclusions

The above three components can be found unified in a single Results section or in one called Discussion and Results, or even in two, as in Results + Discussion and Conclusions. At other times, we may even find a section on Conclusions and Future Research. Something similar can happen with the System of analysis chapter, which often appears as Methodology, with the State of the question, which can appear as part or substratum of the Theoretical-conceptual framework, etc. The following table attempts to reflect these variations:

ECF Denominations	Variations
Introduction	NA
State of the question	State of the art, Theoretical framework, Conceptual framework, [Specific names of the domain studied], etc.
Object of study	Case study, [Specific names of the domains studied], etc.
System of analysis	Methodological framework, Methodology, Analysis protocol, Data collection, Analysis, Results (if the method and the results are combined in a single section)
Results	Results, Findings, Conclusions, Discussion and conclusions, Conclusions and future research, etc.
Discussion	
Conclusions	
Bibliography	Sources, references
Annexes	NA

2. State of the art and literature

We have presented a canonical structure of doctoral theses and Master's theses and have highlighted the component of the state of the question. This component, in fact, is almost universal because it is also found, on a different scale, in academic articles.

The reasons why the state of the question is such a necessary component are as follows:

- Firstly, it is something that is actually expected by evaluators, whether it is a Master's thesis, a doctoral thesis or a scientific article. Without this part, the evaluators would not have

the proof that the author(s) have examined what has been published before.

- Secondly, it is a guarantee for the entire scientific community that research is not repeated, and that journals do not publish outdated research or that doctoral degrees are not awarded for repeated research.

- Thirdly, it has an important methodological role, forcing the author to review what has been done before in his or her field of study. In this way, the author not only avoids repeating previous work, but also acquires essential knowledge in order to be sophisticated in his or her field and make valuable contributions.

- Fourthly and finally, although the list of contributions of the state of the art does not really end here, it helps to detect strengths and weaknesses in the field of study, including research gaps and research opportunities.

The point is that sometimes the outcome (state of the art) is confused with the procedure (literature review) and all are called the same. However, it is easy to see that by reserving separate names for each (as we do here) we can be more rigorous in examining these issues.

- A state of the art is a synthesis of the most significant precedents in a given field of study. The state of the art is sometimes understood to refer to a treatment and a population. Or to

a programme of action and its implementation. However, in much research in the Human and Social Sciences, it is not necessarily about a programme or a treatment, but is exploratory of a particular field. It is clearly an academic product, which may be part of a work, such as a thesis or a research proposal, or it may be an independent product in its own right.

- A literary review is a process, which should be as systematised as possible, by which a series of operations are carried out to identify, select and analyse the set of studies and information that will form part of a state of the art. As this set of studies has typically been published in the form of journal articles, conference papers and, eventually, monographs, this review has the qualification of bibliographic (or literary for its English equivalent). This, of course, is a synecdoche, because what we review is not the bibliographical references, but the contents of the documents.

So, we can see that the literature review, or more precisely, the review of scholarly output in a given field can provide, where appropriate, a state of the art.

We say this because it is perfectly possible, though not advisable, for a researcher to carry out a literature review without then proceeding to write any synthesis of it. Carrying out such a review will undoubtedly bring cognitive benefits, since he/she will

be a wiser person and capable of having a more sophisticated discourse on his/her field, but this will not materialise in any external product.

Of course, as much as we can conceptually separate the two, it is advisable that they go together. If a researcher has had to carry out a literature review in order to tackle a certain task, for example, to present the report of a research project, the logical thing to do would be to add a synthesis, in the form of a state of the question to that report. Your proposal will be much more convincing and will reassure the evaluators that the request for funding is backed up by an author who is familiar with the field in which he or she is working.

The same can be said if you are submitting an article for review to a scientific journal. Reviewers, as we will argue later, expect to find a background section as an initial part of the article. And, of course, all the more so, a well-developed state of the art will provide a potentially fundamental part of a doctoral thesis.

When the state of the art has been produced by means of a protocol that accounts for the steps followed and demonstrates that possible biases have been avoided, while allowing replication by other interested researchers, it can be said to have been carried out by means of a systematic or systematised review (Grant and Blooht, 2009).

Again, by separating the procedure from its outcome, we can point out that the state of the art can be found in at least two different forms:

- As part of an academic work
- As a product in itself

When the state of the question is part of a scholarly work, it usually appears as:

- Part of the Introduction, or as one of the sections in academic papers.
- One or more chapters in Master's theses and doctoral dissertations.
- One of the sections in reports to apply for project funding.

On the other hand, when it is a product in itself, we can find it under these formats:

- Review article. Some academic journals include review articles among the accepted formats, as they are considered a scientific genre in themselves.
- Report on the situation of an area of knowledge, an action programme, a treatment, etc.
- Master's or doctoral thesis, as it is considered a scientific genre, it can consist of a thesis, not just a part of it.

For a state of the art to be considered an academic-scientific product in its own right, either as part of a larger work or as a product in its own right, it is necessary that the review has been carried out in a way that is comparable to that of a scientific research.

As we know, what differentiates a scientific research from other kinds of studies, from an essay, for example, is that in a research, in addition to an object of study, there is always a data work that has been carried out under a well-established method.

In the state of the art, the data are academic articles and the methodology for their search, selection and analysis comes from the so-called systematised reviews, which are discussed below.

4. Systematised reviews and SALSA framework

We have pointed out that systematic or systematised reviews are one of the best procedures for conducting literature reviews, since, in such a case, a literature review can be considered a research result in its own right.

The main difference between traditional literature reviews and systematised reviews is that the latter follow two very important principles in all research: the use of a well-established protocol and the transparency of the whole process. In more detail, a systematised review is characterised by the following features:

- Systematic
- Comprehensive
- Explicit
- Reproducible

Let's look at this in a little more detail:

- Systematic means that it is not arbitrary: neither biased nor subjective, but on the contrary, we have examined the best available scientific output using the best sources of information.

- Comprehensive means that we have used information systems that are presumed to facilitate virtual access to the entirety of the quality output of a discipline. That we have not discarded or included anything without following criteria other than those we have made explicit, which connects with the following two points.

- Explicit implies that both the sources used and the criteria for searching and including and (where appropriate) excluding articles are disclosed.

- Reproducible is actually a consequence of the above: since we have been systematic and explicit, we allow other researchers to check our work and, if they wish, to follow the steps and contrast our results to determine their accuracy or correctness.

The protocol for the development of systematised reviews that we are going to propose in this chapter comes from the SALSA framework.

The SALSA framework (Grant and Booth, 2009) is a framework for identifying and characterising the different phases and components of a systematic (or systematised) review, the observation of which facilitates the

rigour of the review. The acronym corresponds to the following terms:

- Search
- Appraisal
- Synthesis
- Analysis

These phases tell us that the documents that form the bank of articles to carry out the systematised review and, therefore, the state of the question must come from a well-planned search.

It then states that the documents thus obtained should be evaluated and, where appropriate, those that do not meet both the inclusion criteria, for example, that they deal with a specific country or geographical area, and the quality criteria, for example, that they make explicit the methodology used, that they include empirical data, or that they use formal models, etc., should be rejected.

The framework then states that the results of each article will be synthesised according to some common scheme. In the case of qualitative research, tables are often used for this purpose. For example, the table may use aspects such as keywords, geographic scope, type of media considered, etc.

Finally, we need some form of presentation of the overall results analysed. In the case of academic works such as the ones we are focusing on here (remember, doctoral or Master's

theses), this takes the form of a narrative synthesis, preferably of a critical and evaluative type, which can also be supported by tables or diagrams.

However, before proceeding, and for a better understanding of this chapter, the following glossary of terms is

proposed. Although the proposal is intended to be based on a broad consensus (see bibliography), it does not claim validity beyond the scope of this paper.

Term	Explanation
Academic work	The original term can refer to a wide range of types of work, but in this chapter we refer specifically to Master's theses, doctoral dissertations and project application reports. However, most of what is outlined in this chapter can be extrapolated to other academic genres, such as journal articles.
State of the art	The result of carrying out a literature review of scientific production in a given subject area and within a given date range. The state of the art is a form of synthesis on the specified area of focus. This synthesis can take various forms, but in the context of academic work it usually takes the form of a narrative synthesis. In the Anglo-Saxon context it is called state of the art.
Literature reviews	A literature review is both a process and an outcome. As a process, it consists of some more or less systematised form of analysis of the scientific production in a given area. As a product, it is usually identified with a state of the art. In the English-speaking world, there is a tendency to call both things by the same name: literary review.
Systematised reviews	A systematised review is a literature review that adopts a rigorous and transparent protocol for carrying out the different phases of the review, sometimes identified by the acronym SALSA. In the field of quantitative studies, they are often referred to as systematic reviews, and in the field of qualitative studies, they are often referred to as systematised reviews.
SALSA Framework	SALSA is an acronym made up of the words: Search, Appraisal, Synthesis, Analysis. They correspond to the different phases of a systematised review. Reviews in which each of these phases has been applied in a rigorous and transparent way deserve the name of systematic or systematised reviews. If we adapt the terms of the framework to English, then it states that a systematised review is composed of the following phases: Search, Evaluation, Analysis and Synthesis. However, although SALSA proposes the phases, which is really very important, it does not propose detailed procedures, which is where the Resiste-SCH Metaframework comes in.

Metaframework Resiste-SCH	Resiste-SCH is the acronym for Systematic Reviews in the Human and Social Sciences. It is composed of the SALSA Framework, as a starting point, since it is the one that marks the phases of the review in Search, Evaluation, Analysis and Synthesis; the FDC Framework for the Search and Evaluation phase and a series of additional components for the Analysis and Synthesis phases.
Theoretical framework	This is the framework used by an author (or a team) to carry out their research. It comprises the main theories from which he or she starts and the specific approach with which he or she approaches the research. The state of the art can help to establish this theoretical framework.
Bank of articles	In the context of a systematised review, it is necessary to precisely define the articles or documents on which the state of the art will be based. The set of documents finally selected for this purpose is known as the article bank.

This is the starting point for a broader metaframework, which we call Resiste-CHS, for Systematised Reviews in Human and Social Sciences.

5. Resiste-CSH Metaframework

Since the Resiste-CSH metaframework uses the SALSA framework as a starting point, in what follows, we will use the same four phases, namely Search, Evaluation, Analysis and Synthesis.

Having presented the context of systematic reviews, we return to the two aspects we want to discuss in more detail here:

- The optimal databases for social communication research.
- A protocol or framework for deriving keywords and equations for the

rigorous and systematic exploitation of databases.

As we have already pointed out, but it is very important to repeat here, we take Social Communication research as a general context to consider the candidate databases in which to carry out the search phase of a systematised review.

In order to identify this so-called optimal group, we have started from the analysis of the set of databases that are accessible in the Spanish university system which, according to our estimates, corresponds to what we can consider the international standard.

After reviewing the thematic coverage of these databases according to the description of their own collections, we have arrived at the pragmatic proposal of which are the best candidates to form part of these databases.

We have also been guided by the experience of the last three years of teaching an empirical workshop course on the use of databases in a Master's programme in which students have to identify the best databases for their research projects.

Finally, before presenting the list of candidate databases.

The idea starts from the following consideration: in the case of social communication (unlike, for example, medicine or physics) we do not have the optimal database (in medicine it is probably Medline, in physics WoS, etc.).

Instead, the most we have in the case of Social Communication research is an optimal group (not an optimal database).

Which databases can be part of such a group? Here we have to differentiate between two subgroups:

- That of multidisciplinary databases with a special science legitimising role. This is the case of Web of Science and Scopus at the international level, and of the CSIC and Dialnet Plus databases in Spain.

- That of the databases specialised in Human and Social Sciences or multidisciplinary but with broad coverage of Social Communication and Human and Social Sciences, which is the field to which we refer in this chapter. In this case, databases such as Communication and Humanities

Source or International Bibliography of Art should be considered.

The concept of the optimal group is variable and dynamic. The proposal we present here corresponds to the mapping of academic databases available in the Spanish university system at the end of 2017. It is not foreseeable that it will change radically in the coming years, but of course, it could happen, so in other thematic or temporal contexts this list should be revised.

In addition, we use the background of research projects that should support Master's theses or doctoral dissertations in which the main component is Social Communication. For other kinds of research or where Social Communication is only one of the components, the members of the specific SubGroup should be reviewed.

At the time of this work (we have already said that new databases may be added in the future) the optimal group of academic databases for Social Communication research had this composition:

Generalist subgroup

- Scopus
- Web of Science
- Google Scholar
- Microsoft Academic

In the case of Spain it is also recommended to use:

- Dialnet Plus
- CSIC databases

Specific subgroup: Humanities, Social Sciences and Communication

- Communication and Humanities

Source

- International Bibliography of Art
- Project MUSE
- Sage Journals
- Taylor and Francis Online
- Wiley Online Library

Lest there be any misunderstanding: the concept of the optimal cluster does not exclude other databases. Databases on business and economics, psychology, law, etc., can provide results on research that has one of these components in a prominent way.

Consultation of a good database guide, such as those offered by the best university libraries, will be necessary for researchers in these areas. In this paper, we focus on Social Communication research and therefore we focus on the databases mentioned above.

From the above, we can ask ourselves how many databases we should use. Each project is unique, and the answer is therefore project-specific. We will need just those databases that provide relevant results for our research.

However, in case we need something like a general recommendation, we believe that the following approach can serve as a rule of thumb:

- Always use Web of Science + Scopus from the general group, as well as Dialnet Plus and the CSIC databases

if the research will be presented at a Spanish university.

- Test the six databases of the specific subgroup and select the two that provide the best results based on the search equations of the research.

- As an added precaution, consult Google Scholar to identify relevant academic papers that may have been published as work in progress, white papers, reports, etc.

- Any other source appropriate to the type of research, e.g. an economics database if the research has a strong economics component. For this, you should consult the subject guides of your university library.

5.1. Search equations

In this section we will present the protocol or framework that we call FDC and that serves to ensure that the search phase of our review responds appropriately to the adjective of systematic.

The acronym FDC stands for the three phases recommended by this procedure for planning a search:

- Faceted
- Derive
- Combine

Recall that a framework is a standardised set of practices or criteria for approaching a recurrent type of problem. When we use the concept of systematic reviews, the idea of frameworks as well-established procedures is important.

The foundations of the FDC Framework are, among others, and as we have already pointed out, the studies on systematic reviews (see bibliography), but also our own work in the field.

5.2. Phases

As the acronym for our Framework corresponds to three successive phases (which can be repeated if necessary), they can also be represented as follows:

The three phases, represented as rectangles, which give the FDC Framework its name. The diagram shows that in view of the results, and after an analysis of the results, it is often necessary to reconsider the derivation of keywords.

Table 3: The components of the FDC Framework

Term/Phase	Explanation
Facet	It consists of considering all the characteristic facets of an academic research, such as the object of study, the theoretical framework, the methodological framework, etc., as we will see in detail in the corresponding table below.
Derive	From each facet it is appropriate to derive the key words that represent it, including synonyms and variations in the working language and in English.

Combine	Once we have a group of keywords obtained in the two previous phases, we can proceed to combine them in a group of search equations.
---------	--

Faceting

To be sure that we do not miss any key aspects of our research, we need to consider a number of facets, each of which will provide us with a way of deriving a set of keywords. Where have we obtained these facets from?

They correspond to the examination of the following kinds of documents and sources with which, on the other hand, a researcher must become accustomed:

- The components of a typical research project, such as those that must be submitted to apply for a competitively funded project.
- The parts into which it is recommended to articulate the assessment rubric of a Master's thesis or a doctoral thesis.
- The parts of a doctoral thesis project recommended for approval in most doctoral programmes.
- The components of research according to most academic treatises on the subject (see bibliography at the end).
- The usual practice of communicating scientific results in the Introduction and Conclusions sections.

However, in our procedural proposal, the components of these facets are those indicated in the following table.

Faceting	Explanation and Examples (from the field of Social Communication)
Object of	Identifies the material or conceptual object on which we focus the research. Examples: Television, websites, twitter, cyber media, political communication, thematic networks, web positioning, etc.
Type of Action	What kind of research activity best identifies our project. Examples: Analysis, Synthesis, Testing, Comparison, Evaluation, etc.
Theoretical Framework	Theories or disciplines that inform and provide the main conceptual constructs of our approach. Examples: Communication theory, Semiotics, Sociology, Psychology, Anthropology.
Data Collection	Techniques Specific techniques with which we plan to obtain data for our research. Examples: Focus group, Delphi, Interviews, Surveys, Data mining, Case studies, Comparative analysis, Expert analysis, Heuristic analysis, Systematic reviews, Participant observation, User studies, Tests, etc.

Methodological Strategies	Identify which of the three main methodological strategies we will use: quantitative, qualitative, conceptual.
Place names	Name of places, regions or countries involved in the study. Spain, Catalonia, Europe, Portugal, Brazil, Mexico, etc.
	Names of prominent authors or representatives of theoretical currents involved in the study. Proper names of companies or corporations that have some relation with the study.
Software or Tools	Software or Tools Names of software packages or instruments or tools that we plan to use in our research. Examples: NVivo, Eyetracker, Card sorting, Personas and scenarios, wireframes, etc.

By using a matrix like the one above, we are ensuring that we have the set of keywords that will allow us to find the best scientific production prior to our research. Without this matrix we could easily focus "only" on the object of study, and lose, for example, good previous work on the methodology we want to use.

This loss could play a key negative role in our research if, for example, there is a history of a certain very important use and someone evaluating our work considers that we have been negligent in ignoring that history.

Of course, not all facets need to be used in all investigations. On the contrary, some facets may not make sense in some investigations. The function of the table is to serve as a checklist that helps us to be systematic.

Derive

If we try to characterise our research project with the Table above, we will get something like the following.

Example: let it be a systematic review on interactivity in cybermedia (digital or web media). The resulting Facets/Keywords Matrix could be as follows:

Facets	Key words
Subject of Study	Cybermedia, electronic press, digital newspapers, interactivity, interaction
Type of Action	Analysis, Comparison, Evaluation
Theoretical Framework	Usability, Interface Design, User Experience
Data Collection	Techniques Case Study, Comparative Analysis, Expert Analysis
Methodological Strategies	Methodological Strategies Conceptual Research
Place names	Place names Not applicable in this case
Not applicable in this case	Not applicable in this case

Software or Tools	Software or Tools
	Sistrix, SemRUSH

As an important observation, it should be noted that in this table we use the working language of the research (we have assumed that in this case it is Spanish).

Therefore, we will also need to obtain the equivalent keywords in English (the working language of the international databases), which is not always easy, by the way, as there is not usually a direct correspondence between specialised terms.

For example, we cannot translate cybermedia into cybermediums, or electronic press into electronic press, etc.

Combine

The last part of this procedure consists of combining groups of keywords using Boolean operators in order to have search equations with which to carry out the exploration in the databases. The logic with which we combine keywords will be determined by the relational nature of the keywords.

For example, with keywords that are real or functional synonyms (such as the pair television, audiovisual) we will combine them by means of a Boolean OR, while those that represent different concepts but with the capacity to cross-reference each other

to form synthetic themes (such as journalism, interactivity), we will combine them with a Boolean AND.

Finally, when we want to exclude articles based on some undesired concept, as in the case of wanting to find articles about interactivity, but not about games, we will use NOT.

In addition, we should consider using parameterised searches, almost certainly (and at the very least) to set date ranges. For example, we will probably be interested in finding articles published in the last 6 or 7 years. Another common parameterisation may be, to avoid noise, to restrict the results to a group of fields (title, abstract and keywords, typically).

Example of one of the possible equations (in pseudo code, without including parameterisation and assuming a database with the working language in Spanish):

(interactividad OR interacción) AND
(cibermedios OR "prensa electrónica"
OR "diarios digitales") AND (análisis
OR "análisis comparativo" OR "estudio de caso")

How many equations like the one above we will need is a question we can only answer by trial and error.

At this stage of the framework there are no fixed recipes (or if there are, we don't know them). It is a matter of starting with a more or less ambitious

equation like the one we have used as examples and examining and assessing the quality of the results.

Only from the result of such an inspection will we be able to deduce whether we have been lucky with our choice of keywords and operators or whether we need to revise and modify them.

How many articles or research papers are supposed to form a sufficient corpus for a systematised review to enable us to write a good synthesis or a good state of the art? In other words, how many papers do we need for our article bank?

The number varies quite a lot, but at the same time it must remain within manageable parameters in a research that always has a time limit. Carefully reading scientific articles in order to extract from them the information that we then want to synthesise or compare is a time-consuming activity.

The point is that this number also depends on the scope and objective of the review. It is not the same to prepare a systematic review to prepare a communication for a conference or a journal article as it is to prepare a doctoral thesis.

Taking into account the above, this number can vary between, at least, a few tens of articles, say between 15 and 20 for a Master's thesis, and around 50 for a doctoral thesis.

Conclusions

We can use to our advantage, and in a particularly useful way, the need to develop a state of the art for our thesis if we apply accepted procedures and standards such as those provided by systematised reviews.

In addition to carrying out such a study in a much safer way, we will be able to invoke the very development of such a state of the question as part of the methodologies applied in our research, which will help in the necessary factors of credibility and persuadability that every author of research that is to be evaluated must take especially careful care of.

In this lesson we have seen a procedure that guarantees the effectiveness of an essential part of systematic reviews, namely the search (the Search of the SALSA framework) in academic databases and which is not coincidentally the first phase in a systematic review, for the simple reason that it is the part that will absolutely determine the following steps.

The main point is that the idea that this S for Search that we are referring to corresponds to the search should not confuse us. Searching is neither easy nor intuitive, and even less so if we want to invoke methodological guarantees and want to benefit from the extra solvency and persuasiveness provided by following a framework or a well-established model.

In other words, only if we are able to identify and analyse the best previous research do we have the right to expect to surpass it.

Note: this chapter is a revision, merger and adaptation of two previous works by the author (Codina, 2017, and others). Several parts of what has been presented here also come from entries that the author has published in previous versions on his personal website (lluiscodina.com).

References

- Alana James E; H. Slater, Tracesea. *Writing your Doctoral Dissertation or Thesis Faster*. London: Sage, 2014.
- Bell, Judith; Waters, Stephen. *Doing your Research Project: A Guide for first-time Researchers*. Berkshire: McGraw Hill, 2014.
- Blaxter, Loraine; Hugues, Christina ; Tight, Malcolm. *How to Research*. Berkshire: McGraw Hill, 2010.
- Boland, Angela; Cherry, M. Gemma; Dickson, Rumona. *Doing a Systematic Review: A Student's Guide*. London: Sage, 2014.
- Booth, Andrew; Papaionnou; Sutton, Anthea. *Systematic Approaches to a Successful Literature Review*. London: Sage, 2012.
- Codina, Lluís (2017). "Bases de datos académicas para investigar en Comunicación Social: revisiones sistematizadas, grupo óptimo y protocolo

- de búsqueda”. *Portal de la Comunicación InCom-UAB*, Julio 2017.
- Fink, Arlene. *Conducting Research Literature Review*. London: Sage, 2014.
- Gouch, David et al. *An Introduction to Systematics Reviews*. London: Sage, 2012.
- Grant, Maria J.; Booth, Andrew. “A typology of reviews: an analysis of 14 review types and associated methodologies”. *Health Information and Libraries Journal*, 26, pp.91–108, 2009.
- Jesson, Jill K.; Matheson, Lydia; Lacey, Fiona M. *Doing your Literature Review: Traditional and Systematic Techniques*. London: Sage, 2011.
- Machi, Lawrence A.; McEvoy, Brenda T. *The Literature Review: Six Steps to Success*. Thousand Oaks, California: Corwin, 2012.
- Oliver, Paul. *Writing your Thesis*. London: Sage, 2014.
- Ridley, Diana. *The Literature Review*. London: Sage, 2012.
- Rodríguez, Maria Luisa; Llanes, Juan (coords.) *Cómo Elaborar, Tutorizar y Evaluar un Trabajo de Fin de Máster*. Barcelona: Agència per a la Qualitat del Sistema Universitari de Catalunya, 2013
- Sandelowski, Margarete; Barroso, Julie. *Handbook for Synthesizing Qualitative Research*. New York: Springer, 2007

Practices and recommendations for writing and submitting papers to scientific journals

RAFAEL PEDRAZA

Pompeu Fabra University (Barcelona)

rafael.pedraza@upf.edu

ORCID: 0000-0002-6918-6910

DOI: 10.31009/methodos.2021.i02.01

Pedraza, R. (2021). Practices and recommendations
for writing and submitting papers to scientific journals.

OpenTexbook: An introduction to design a communication research.

Methodos. Research Methods in Social Communication Handbook, 2(1).

Barcelona: Universitat Pompeu Fabra (p. 55-69)

This work is distributed under this Creative Commons license

For any other request and use of the intellectual property rights
on this work, please contact the authors.

Practices and recommendations for writing and submitting papers to scientific journals

1. Introduction

In the current academic context, the publication of research articles in scientific journals has become a requirement, not only to develop an academic career, but also to overcome different postgraduate studies. Despite this, the resources that guide people who must tackle the arduous task of publishing remain scarce. This article aims to contribute to filling this gap. To this end, it presents recommendations and good practices that are useful, mainly –although not exclusively–, to new researchers to maximize their chances of successfully publishing in a scientific journal. In this way, this work addresses aspects related to: the writing of scientific articles; the selection of appropriate journals for publication; the process of sending the article to scientific journals; the article evaluation process by a scientific journal; and

the procedure for responding to the comments of the journal reviewers.

2. Considerations prior to writing the article

Before writing an article, the researcher, especially if he/she is a new researcher, should reflect on the following questions:

a) What is more convenient, to publish individually or in a team with other researchers?

A researcher can choose to publish either individually or with other authors. However, in the early stages of an academic career, publishing with other researchers can be very instructive and useful.

Instructive because collaborating with more experienced researchers will allow you to get to know and learn their working methods. In addition, these researchers will help to

highlight the most novel and valuable contributions of the article. This task, which is complex when you lack research experience, is essential to successfully pass the review process of an academic journal and publish your work.

But there are many other advantages to working collaboratively. First of all, the workload will be lighter, both during the development of the research and its subsequent dissemination (in the form of articles, communications to conferences, etc.). In addition, junior researchers collaborating with more experienced researchers will also benefit from the visibility of the latter.

That is, the reputation of more established researchers is likely to help the published work to be more likely to be read by their followers and colleagues.

Thus, working and publishing as a team offers new researchers advantages and opportunities that should be kept in mind. However, if one chooses to co-author a paper....

b) How many researchers can sign an article?

There is no maximum number of co-authors. As many authors can sign as are necessary for the publication. In fact, the number of authors varies from one discipline to another. For example, in the humanities, the number of co-authors is smaller than in the experimental and health sciences.

Note that some scientific communities sometimes set a recommended number of signatories. Such practices are often motivated by administrative reasons. For example, in the past in Spain, it was recommended that the maximum number of signatories to an article should be three. There was no objective reason for this recommendation. It had been established because the national agencies for the evaluation and accreditation of researchers valued papers with more than three authors less highly. Nowadays, this type of practice is disappearing.

At this point, if you decide to work in a team...

c) Who is considered the author of the article?

The COPE (Committee on Publication Ethics) guidelines are very clear in this regard. They establish that authors are those who participate in the development of the research and the writing of the article (Codina, 2018).

A person is considered to participate in the research when they contribute to:

The conception and design of the research, or...

The acquisition of data, or...

Analysis and interpretation.

Note that a person only needs to meet one of the above three requirements (and not all of them) to participate in the research. In addition, he/she must contribute to the writing

of the article by satisfying at least one of the following conditions:

Participate in writing the article, or....

Participate in the revision of the article.

3. Writing an academic article

Once it has been decided to work in a team, the planning and writing of the paper will proceed.

3.1. Planning the article

It will be very important to decide who will write the first version of the article. The fact that a single author takes on the writing of a first draft of the article has several advantages:

It speeds up the writing: having the first version of the paper available will depend solely on the agenda of one of the authors.

It makes the writing and presentation of ideas more coherent and uniform: this avoids the creation of "Frankenstein-type documents", i.e. documents made up of fragments from different authors and, consequently, with different styles in terms of both writing and structure.

The role of the other authors will also have to be determined:

Data extraction and/or processing

In-depth revision of the text, etc.

Finally, a realistic timetable will have to be established.

3.2. Structure of the article

When writing our first articles, it is often useful to draw up an initial outline. One of the most common structures (although not the only one) in research articles is:

Title, abstract and keywords

Introduction

Objectives

Methodology

Results

Discussion and Conclusions

References

However, it is recommended that the order in which these sections are written is not sequential. It is usually easier to write an article when we start with the objectives, i.e., by first stating what our research aims to achieve.

The objectives section usually details both the general objective of the research and the different specific objectives in which the general objective is specified in order to achieve it. It should also be remembered that these objectives are usually written using the infinitive, for example: this work aims to know / study / identify / find / explore / etc. Also, the objectives section often introduces information on the scope and limitations of the work. A sub-section on scope and limitations allows the researcher to record, for example, aspects that the

researcher has chosen not to address in the study.

After the objectives, it is advisable to write the methodology. This explains how the proposed objectives are to be achieved, i.e. with what materials, schedule, research methods, etc. It should also include aspects such as the procedure for selecting the object of study or the dates of analysis. It should also include aspects such as the procedure for the selection of the object of study or the dates of analysis. Ideally, the methodology section should allow third party researchers to know the exact conditions under which our research was carried out and, in some cases, even allow them to reproduce and contrast our results if they so wish. As in the previous case, this section can also include a sub-section on the limitations of the work. In this section, methodological problems that have arisen during the research can be detailed.

Here you can detail any methodological problems that have arisen during the research.

A good summary includes a sentence presenting the general objective of the work, adds one or two sentences specifying the object of study addressed and the methodologies used for its analysis, explains in one sentence the most important results obtained.

It is advisable to finish the summary with one or two sentences explaining

the relevance of the result and whether the objective proposed in the research has been achieved.

It should be noted that this structure, although widely used, may vary - usually slightly - depending on the type of research carried out, and also on the format preferences of the journal in which it is decided to publish.

3.3. Writing the article

Once the basic structure of a research article has been detailed, some recommendations for writing the article are listed below:

1. Write short sentences: ideally no more than two lines in length. Writing in short sentences is not natural. Therefore, we advise first-time researchers to write the first version of their article naturally, without controlling the length of the sentences they use. Once finished, the researcher can easily revise and reduce the length of the sentences they have written. Often, in this revision process, it is sufficient to identify sentences that are too long and replace the commas in them with full stops. The application of this practice will train the researcher in this type of writing and will progressively help him/her to internalise it.

2. Use connectors between paragraphs: another problem that is usually detected in the first works of a researcher is the lack of coherence and

relationship between the different paragraphs of the text. One solution to this problem is the use of connectors at the beginning - or end - of each paragraph. In fact, creating and maintaining a list of connectors for reference during the writing process will help to solve this problem. Some examples of connectors frequently used in academic articles are: therefore, thus, likewise, on the other hand, furthermore, nevertheless, etc.

3. Relate the different sections of the article to each other: the lack of connection between the different sections of an article (for example, between the introduction and the objectives, or between the objectives and the methodology, etc.) can make it difficult to understand. For this reason, ending - or beginning - the different sections with a brief reference to the content that follows - or precedes, as the case may be - will facilitate the continuous reading of our texts. In this sense, expressions such as:

Having specified the objectives of this work, we now proceed to detail the methods used to achieve them."

Or also:

"The results achieved after the application of the methods described are presented below."

4. Writing in impersonal style: impersonal verb forms should normally be used in academic articles. The use of the first person singular should be avoided. However, the first person

plural can be used, even when the article is signed by a single author. In any case, it is recommended not to abuse this verb form and to use impersonal sentences whenever possible.

5. Avoid repetition of content: new researchers often repeat their ideas in the different sections of their articles. This practice should be avoided. The presentation of content and ideas in an academic text should be sequential and, consequently, without repetition. Only the discussion and conclusion sections should recover ideas already presented in the text, with the aim of completing them through interpretation or reflection.

6. Avoid unsubstantiated opinions and categorical statements: a text that introduces unverifiable opinions or statements is unlikely to pass the reviewers' evaluation. Therefore, it is recommended to avoid their use in academic articles or, in any case, to accompany them with data or references that support their veracity.

7. Note the limitations of the research carried out: if the research carried out has limitations, it is advisable to declare them. Hiding them in the hope that they will go unnoticed by the reviewers is not good practice. On the one hand, because an expert reviewer will probably detect them, and could sense that they have been hidden on purpose (which would not favour their opinion of our work). On

the other hand, because omitting the limitations makes it difficult to interpret and reproduce the work, and could also lead our readers to erroneous conclusions.

8. Introduce tables, figures and lists when the text requires it: an article should present information as clearly and concisely as possible. The use of tables, figures and lists contributes to this end. If the comprehension of certain paragraphs of our text is complex, we should reflect on the suitability of presenting their content in an alternative way. For example, sometimes the enumeration of various numerical quantities (percentages, etc.) in a paragraph could be replaced by a table. Also, it will often be clearer for a reader to present various items in the form of a list, rather than using a colon (:) followed by several sentences separated by a semicolon (;).

9. Use descriptive and well-numbered captions or headings for tables and figures: all tables and figures in the text should be accompanied by descriptive text to help the reader understand their contents.

10. Beware of "cause-effect" relationships that are difficult to demonstrate: sometimes the results obtained in our research may lead us to formulate cause-effect relationships. If we do so, our text should demonstrate this relationship with data or information obtained in our research.

However, what happens if our results point to a probable cause-effect relationship that is difficult to prove? In these cases, we can opt for a sequential statement of facts.

11. Check and correct typos: typos and misspellings denote sloppiness and haste on the part of the authors. A text with this type of error is unlikely to be accepted by the editor or reviewers of a journal.

12. Present references in a homogeneous way: academic journals provide authors with instructions on the format that articles submitted to them should have. These instructions detail the specific format of the references included in the article. It is usually easy to standardise and adapt the references in a paper to the requirements of a journal, especially if the authors have used reference managers such as Mendeley or RefWorks.

4. Selecting an academic journal for publication

Choosing a journal in which to publish your research is not a simple task. The following are some of the aspects that should be considered before submitting your work:

1. Subject matter: it is essential that the researcher consults the subject of interest for the journal. This information is usually available on the journal's website. Normally, it is

specified in sections that may have titles such as: "Focus"; "Thematic"; "Scope"; etc. Sometimes this information appears directly in the "Information for authors" section.

For a junior researcher, who is not yet familiar with the journals in his or her field, it is essential to check the focus of a journal before submitting an article. Otherwise, the author may receive, weeks or months after submission, a reply from the editor rejecting the article and indicating that the work does not fit with the journal's lines of interest.

Avoiding this type of delay in the publication of a work is always positive, especially if the authors are researchers who are working on a thesis by compendium, as they are often subject to severe time restrictions in order to meet the deadlines established in their doctoral programmes.

Finally, in addition to consulting the section or section specifying the subject matter of the journal, it is very useful to look at the latest issues published by the journal in which you wish to publish. In this way, we will find out about the topics, and even some of the methodological approaches, which are currently of interest for the publication.

Indexes and databases: one of the most widely used indicators to assess the quality of a journal is its presence in different databases or indexes. Currently, Web of Sciences (WoS) and

Scopus are considered the two main international scientific databases. In other words, the scientific community considers that, in general terms, the highest quality scientific journals are indexed in these two databases.

Therefore, one criterion we can use when choosing a journal to publish is whether it is present in one of these databases. It should also be borne in mind that both WoS and Scopus use indexes that in turn provide information on the quality of each journal within the database itself. In other words, both databases establish a ranking of the journals they index. The quality of the journal according to these databases can also be taken into account when choosing the journal in which to publish.

However, a junior researcher should be realistic, and be aware that the higher the quality and/or impact of a journal, the more difficult it is to publish in it. Therefore, it will normally be very difficult for our first research to be accepted for publication in prestigious international journals.

On the other hand, it is also important to note that publication in journals that are not indexed in the main databases is by no means discouraged. On the one hand, because in some disciplines there are journals with a more humanistic and/or informative focus that are not of interest to the aforementioned databases. On the other hand, because many

journals not indexed in these databases enjoy great popularity and prestige in small geographical or thematic areas. So much so that it is easy to find journals that are not indexed in WoS or Scopus but whose quality is recognised in the quality indexes drawn up by specific scientific bodies and/or communities, at the level of country, region, discipline, etc.

4. Length of articles: the maximum length of articles accepted by a journal is another criterion to take into account before submitting your article. Certainly, the fact that there are more and more online publications is helping to put an end to these restrictions. However, there are still many print and even strictly digital journals that set a maximum number of words or pages. Therefore, we need to be sure that our text complies with this requirement before submission. Furthermore, if the text to be submitted is long, and the acceptance of the article requires a severe reduction in length, it may be worth considering the possibility of submitting the article to another journal.

5. Type of publications: the journals' websites will provide information on the type of articles they publish, such as research articles, review articles, etc. It is advisable not to submit articles to a journal that do not match the type of publication they accept, as the paper will have a high chance of being rejected.

6. Copyright restrictions: another aspect that journals report on is the type of licence under which their content is distributed. Currently, there are journals that distribute their content in Open Access (OA), journals that are copyrighted but allow some articles to be published in Open Access (for a fee), and journals that only publish copyrighted articles. As authors, we need to be aware of these differences and decide to which type of journal we will submit our work. In addition, if the research being presented has been funded by a public institution, there may be a condition to disseminate it through open access journals.

7. Periodicity of the journal and average time of the review process: the periodicity of a journal varies greatly from one title to another. The same is true for the review times of each title. Fortunately, journals usually make both information available to potential authors through their websites. Although a priori both times may not seem a very important factor in choosing the journal in which to publish, sometimes it is a relevant (and even critical) criterion. Think, for example, of a PhD student who is working on his or her thesis for a compendium of publications, or a researcher who must present the results of a research or project within a very tight timeframe.

8. Special issues: Finally, journals also report on their website the special issues they have scheduled. Special issues are volumes dedicated to a specific topic.

If our research corresponds to the theme of a special issue, it is a good idea to submit it for publication in that issue.

5. Submitting an article to an academic journal

Once you have decided which journal to submit your article to, the following checks should be carried out:

The text will be checked to ensure that it is correctly adapted to the format requested by the journal.

The references will be checked to ensure that the citation rules required by the journal have been followed.

In addition, it will be necessary to decide which of the authors will act as contact during the review process, i.e. the author who will take on the role of corresponding author will be chosen. This author is usually responsible for sending a cover letter for the article. He or she is also usually responsible for agreeing, on behalf of all authors, to the journal's copyright conditions. He or she is also the author who interacts with the reviewers during the review process.

A cover letter as an example should contain three pieces of information: the presentation and highlighting of

the research carried out; the declaration of the originality of the work and the authors' willingness to accept the journal's copyright conditions; and, finally, the corresponding author's contact information.

It is very important to decide what our "standard authorship" will be, and always use it to sign our papers. Authors who do not standardise their name run the risk of not being properly identified by databases, which in turn can lead to citation problems for these authors. The *IRIS* initiative (International Registry for Authors: Links to Identify Scientists) helps authors and advises them in the process of standardising their names. Also, during the submission process, the journal will most likely ask for the authors' ORCID code. The ORCID code (Open Researcher and Contribution ID) helps to uniquely identify a researcher and his or her scientific output. Researchers who do not have an ORCID often have to register and obtain one in order to submit their work.

Finally, we would like to highlight a very important issue regarding the submission of articles that new researchers should bear in mind. Authors should not submit their work to more than one journal at a time. Doing so is considered malpractice as well as unethical. Authors should therefore choose the journal they con-

sider most relevant for the publication of their paper, submit it to that journal, and wait for a response before submitting the same paper to another journal.

6. Evaluation process of an academic article

Once the article has been submitted, the evaluation process will begin. This process consists of two phases:

Editorial evaluation

Peer review

In the editorial evaluation, the editor of the journal will carry out an initial assessment of the article. In this phase it is normally checked whether the subject matter of the article fits in with the journal's lines of interest, whether the writing of the article is appropriate, and whether the article is original. If the editorial evaluation is favourable, the editor proceeds to send the paper to the reviewers (usually two or three) so that they can analyse the submitted paper in greater depth. If the submitted paper does not pass the editorial evaluation, the editor will write to the corresponding author informing him/her of the rejection of the publication and the reasons for it.

Peer review can be open, single-blind or double-blind. In open peer review, the authors and reviewers know each other's identities. In single-blind review, the reviewers know

the identity of the authors, but the authors do not know the reviewers. Finally, in the double-blind review, all authors and reviewers are anonymous. At present, single and double-blind peer reviews are the most common. In these, highly experienced researchers evaluate the articles they receive in depth. On the one hand, these evaluations focus on such generic aspects as:

Quality of the work

Relevance of the subject of the journal

Originality

Clarity of expression

On the other hand, the reviewers also focus their evaluation on very specific aspects of the work, such as:

That the article has an informative title.

Appropriate keywords and abstract.

The adequacy and completeness of the state of the art.

A clear and adequate explanation of the methodology.

An appropriate presentation of the results, discussion and conclusions of the paper.

The relevance of the bibliography

The adequacy of the text and figures to the journal's formatting standards.

The adequacy of the bibliography to the journal's formatting standards.

Taking all these aspects into consideration, the reviewers will issue a result of the evaluation, which means that the work can be:

Accepted

Not accepted

Accepted with minor changes

Accepted with major changes

In all cases, the reviewers will accompany their judgement with comments on the work, which may be addressed to the editor, the authors or both. Taking these evaluations and comments into consideration, the editor will communicate to the authors of the paper the favourable or negative decision to publish the paper in the journal. In addition, the decision will be accompanied by the comments and evaluations issued by the reviewers.

It is very important for authors to bear in mind that the acceptance of an article subject to minor or major changes does not ensure its publication. In these cases, until the reviewers consider that the article has been suitably modified for publication, the authors will not receive definitive confirmation of acceptance of the article for publication.

7. Responding to reviewers of an academic journal

Once the article has been reviewed, the editor will inform us whether or not the journal is interested in publishing it. If the reviewers' assessment is positive, the editor will inform us that the paper has been accepted without changes:

It has been accepted without changes - which is rarely the case;

It requires minor changes for publication -which happens frequently-; or that it needs significant changes for publication.

It requires significant changes for publication. In this case we will have to weigh up whether it is more convenient to introduce these changes, or to decline the journal's proposal and send the paper to another publication.

If the editor informs us that the article submitted has been accepted subject to modifications and we decide to accept them and go ahead with publication, authors should follow the following guidelines or premises for responding to the reviewers:

1. Show appreciation to the reviewers for their comments and suggestions for improvement of the article. Keep in mind that reviewers' comments almost always contribute to a substantial improvement of the paper. In addition, review is a task carried out by experts in a disinterested manner.

2. All comments made by each reviewer must be responded to.

3. You may disagree with the reviewers, but you must rigorously justify your position.

If the journal does not provide a format or a response form, a good option would be to respond to the reviewers using a table that collects, in

one column, the reviewers' comments, and in the adjacent column, the response to each of those comments. In addition, the response should state whether or not the reviewer's proposed change is accepted and, if so, what changes have been made to the paper as a result of the reviewer's comment or suggestion. Figure 4 shows an example table that follows this response dynamic.

When completed, the response document will be sent to the editor, who in turn will forward it to the reviewers of the paper. From this point on, three circumstances may arise:

1. The paper is accepted: because the reviewers consider that the modifications introduced provide the paper with the necessary quality for publication.

2. The paper is rejected: because the reviewers consider that the authors have not succeeded in providing the paper with the appropriate quality or approach for publication.

3. A new round of comments or suggestions is initiated, which must be responded to again by the authors.

In any case, this process will culminate in the acceptance or rejection of the evaluated article.

8. Acceptance and promotion of the article

Once the article has been accepted, the journal will proceed to its layout

and publication. It is usual for the journal to ask authors for a brief biography and, in some cases, an updated photograph, which will be included in the final version of the article.

After publication, authors have the arduous task of promoting their work. This can be done in a number of ways. If it has been published in Open Access mode, the work can be distributed through different repositories and platforms. If not, authors will have to ask the journal if they can disseminate the pre-print or post-print of their article.

If we have a document that we can distribute freely, the following are perfect spaces to publicise and promote our work: the repositories of academic institutions -especially our own-, academic social networks, document hosting services with academic or technical content, or our personal website.

If we do not have the possibility of distributing the article, we can always make it known by referencing it -and linking it to the website of the journal in which it appears- on the aforementioned platforms.

Other additional strategies are, for example, sending the document to all the authors who have been cited in our article and, of course, announcing its publication on the social platforms we usually use.

In the case of other types of documents, such as internal documents, it is advisable to protect them by means of a legal notice. The easiest and most accessible is to opt for a Creative Commons licence, which is based on a combination of four variables:

Attribution: Material created by a researcher can be distributed, copied and exhibited by third parties if it is shown in the credits. In reality, Spanish law makes this right, which is technically called paternity, and therefore inalienable, non-transferable and unwaivable, mandatory, so this condition would be redundant. It is not, however, in Anglo-Saxon or Common Law, so it is never superfluous to mention it.

Non Commercial: Original material and derivative works may be distributed, copied and exhibited as long as their use is non-commercial.

No Derivative Works: Material created by a researcher may be distributed, copied and exhibited but may not be used to create a derivative work of the original.

Share alike: The material created may be modified and distributed but under the same licence as the original material.

The combination of these conditions gives rise to six licences:

Attribution: The created material may be distributed, copied and exhibited by third parties if it is shown in the credits.

Attribution - No Derivative Works: The created material may be distributed, copied and exhibited by third parties if shown in the credits. Derivative works may not be made.

Attribution - No Derivative Works - Non-commercial: The created material may be distributed, copied and exhibited by third parties if shown in the credits. No commercial gain may be made. No derivative works may be made.

Attribution - Non-commercial: The created material may be distributed, copied and exhibited by third parties if shown in the credits. No commercial gain may be made.

Attribution - Non-commercial - Share Alike: The created material may be distributed, copied and exhibited by third parties if shown in the credits. No commercial gain may be made and derivative works must be under the same licensing terms as the original work.

Attribution - Share Alike: The created material may be distributed, copied and exhibited by third parties if shown in the credits. Derivative works must be under the same conditions.

In principle, our recommendation is that our works should be acknowledged, non-derivative and non-commercial. We make our work available, but we will not allow any operation that modifies it, nor, of course, any

commercial use that we do not authorise.

An increasingly widespread trend in the academic world is to encourage open and immediate access to scholarly, scientific or educational digital material. This even affects academic journals themselves, many of which already have OA policies (sometimes authors have to pay for allowing open access to the scientific community, so this expense must be included in the budget of the project's report).

The main texts that regulate open access are the Budapest Open Access Initiative (2002), the Bethesda Declaration on Open Access Publishing (2003), the Berlin Declaration on Open Access to Knowledge in the Science and Humanities (2003) and The Hague declaration (2015).

OA journals are listed in the Directory of Open Access Journals (DOAJ). Spanish OA journals are listed in Dulcinea, and international OA journals are listed in SHERPA/RoMEO. There are, on the other hand, different types of Open Access journals:

Gold: the author pays for the article to be made available to the whole world online, and not only through the university catalogues, which can only be accessed by members of each university, since the centre pays the subscription for these publications.

Green: allows the author to make the pre-print and post-print (sometimes the published version) available online.

Blue: only the post-print or the final version can be uploaded to the Web.

Yellow: only the pre-print can be uploaded to the Web.

White: nothing can be uploaded to the Web.

There are other social platforms for the dissemination of academic content, networks formed by people in the same academic field or discipline, which serve as an instrument of visibility and informal accreditation and promotion of our research, while improving our capacity for collaboration and serving as a tool for contact and information. The best known are Academia.edu (<http://www.academia.edu>), ResearchGate (<http://www.researchgate.net>) and Mendeley (<http://www.mendeley.com>). The most widespread is Academia.edu, which has almost 57 million users and 19 million freely accessible documents, although in this respect it is surpassed by ResearchGate, which makes 19 million documents available, although the number of users is considerably lower, at around 14 million users. However, if we look at the number of documents, Mendeley is the platform that provides access to the largest number, no less than 351 million documents.

Other platforms and services to consider are the following:

Services for hosting scientific/technical content (e.g. Slideshare).

Multimedia content hosting services (e.g. Youtube, Vimeo, etc.).

Tools for the creation of concept maps (e.g. Mindomo).

There are other platforms specialised in the field of communication, or in which scientists in this field are included:

H-Net: Humanities and Social Sciences Online

SSRN: Social Sciences Research Network

ECREA: European Communication Research and Education Association

NECS: European Network for Cinema and Media Studies

We have also mentioned digital institutional repositories, which provide high visibility, as search engines, such as Google, turn to these repositories to index the references they find. Almost every university or research centre has its own repository.

December 2021

Knowledge transfer and publication of results.

Communication, publication and dissemination strategies

JAVIER DÍAZ-NOCI*Pompeu Fabra University (Barcelona)*

javier.diaz@upf.edu

ORCID: 0000-0001-9559-4283

RAFAEL PEDRAZA*Pompeu Fabra University (Barcelona)*

rafael.pedraza@upf.edu

ORCID: 0000-0002-6918-6910

DOI: 10.31009/methodos.2021.i02.01

Díaz-Noci, J. (2021). Knowledge transfer and publication of results.

Communication, publication and dissemination strategies.

*OpenTexbook: An introduction to design a communication research.**Methodos. Research Methods in Social Communication Handbook*, 2(1).

Barcelona: Universitat Pompeu Fabra (p. 73-84)

This work is distributed under this Creative Commons license

For any other request and use of the intellectual property rights
on this work, please contact the authors.

Knowledge transfer and publication of results.

Communication, publication and dissemination strategies

1. Introduction to knowledge transfer

Once a research project has been designed in all phases, and everything is ready to apply certain research methods and techniques so that we can solve a research problem posed around a topic of social relevance, with certain objectives, to answer research questions, solve variables and thus validate certain hypotheses, it is also necessary to design a plan for knowledge transfer, publication of results and communication. Science is a social activity, which to a large extent, either through competitive public research projects or through agreements and contracts with companies, must revert to society. Not only in the form of books, chapters, articles or communications in scientific congresses aimed exclusively at the scientific community.

In this field, journalists and communication researchers have a great ad-

vantage: our profession as social researchers provides us with research results, and our profession as communicators helps us to offer them to society at all levels, from the most specialized to the most informative. Digital technology helps us: today, the WWW and social networks are fundamental allies in the process of disseminating research results, knowledge and information quickly and effectively.

2. Objectives of knowledge transfer

The objectives of knowledge transfer can be described as:

1) The first objective is to make a real and effective transfer of our knowledge and results to society.

To this end, we design a plan before we even begin to obtain research results. The objective is not to have to wait to obtain definitive results of our research project, but to make it

known in each and every one of its phases.

2) The second objective is to make our work known to the scientific and professional community. Both aspects are important, especially when our research results refer to communication itself. Such contents should be of interest not only to academics in the field, but also to the media.

3) The third objective of our strategy is to improve visibility and accredit researchers, i.e., to recognize their contribution to the research project and, through it, to science. In this sense, issues such as authorship of papers, academic citations and mentioning the work carried out by the members of the group must always be respected, as well as being respected by third parties.

3) The fourth objective is to foster future opportunities for collaborative work and to encourage the establishment of stable working teams.

3. Knowledge transfer: Events to attend

A researcher or research group should plan to attend scientific events (congresses, meetings, seminars) or even organize them, an aspect that should be expressed in the research report or project. A congress is a major event, which aims to gather contributions in the form of invited papers from lead-

ing specialists in the field and communications open to the entire scientific community and subject to prior evaluation processes, so that only the best papers are accepted.

There are other events that are no less interesting or productive for having fewer participants. Seminars, which focus on very specific aspects, are a smaller format, as are workshops, in which participation is by invitation. So are the meetings of the research group itself, to discuss strategies, tools or concepts, which can give rise to interesting documents, as we will see later. It should be remembered that in these latter formats consensus methods can be applied, such as expert panels or nominal group techniques.

4. Knowledge transfer: Documents

A research group or a researcher produces, or is likely to produce, various documents during the life of a research project. These internal documents include, among other possible ones:

4.1. The memoir

This is the first document of a research group or a researcher. It is the one that contains the definition of the topic and the concepts associated with it, the formulation of the re-

search problem, the objectives, the research questions, the variables, the relationship between them and the formulation of hypotheses, the methodology to be applied and the bibliography, which is a starting point.

A schedule detailing the tasks assigned and the period in which they will be performed is usually also included, generally in the form of a Gantt chart (see these two models).

A report details who are the members of the group, who is the principal investigator, what is the trajectory and curriculum vitae of each member and of the group as a whole, if they have worked together on other occasions. The task of each member is explained. The relationship with other national or international research groups is

specified. When it is a doctoral research, therefore individual, these contents are adapted.

The expected research results are detailed, in the form of attendance at congresses and other academic events, submission of communications (or papers, if invited).

A report contains a detailed budget, divided into expenditures on consumables, inventories (purchase of computers, laboratory equipment, scanners, audio or video recorders, or other devices necessary to carry out the research, as well as computer programs or licenses), contracts with associated personnel or companies that will carry out part of the work (for example, digitalization of documents), expenses for holding scientific events (congresses, seminars, meetings), and also for field work, including travel and accommodation, per diem, and other items.

4.2. Memoranda

These are documents that cover partial actions to be carried out, and describe the objectives, who will carry them out, when and what results can be expected. They describe tasks to be performed and may include previous achievements. This is a model with assignment of tasks to the different components of the group. In the case of an individual investigation, the structure should be maintained as far as possible:

Memorandum

1. Updating and maintenance of the project website 2.

Team:
Responsible:
Methodology:
Resources required:
Deadlines:
Outputs:

2. Preparation of a seminar

Team:
Responsible:
Methodology:
Resources needed:
Deadlines:
Outputs:

3. In-depth interviews. Field work and analysis with CAQDAS software.

	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Team: Responsible: Methodology: Resources needed: Deadlines: Outputs: </div>
4.	Online questionnaire
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Team: Responsible: Methodology: Resources needed: Deadlines: Outputs: </div>
5.	Performance of experimental tests
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Team: Responsible: Methodology: Resources needed: Deadlines: Outputs: </div>
6.	Others:
	<div style="border: 1px solid black; padding: 5px;"> Team: Responsible: Methodology: Resources needed: Deadlines: Outputs: </div>

4.2. Deliverables

These are documents that present partial results of research (e.g., from a panel of experts). Sometimes they take the form of reports of a given activity, typically of some consensus technique (Delphi, expert panel).

They are usually published on the project's own website. Other types of

deliverables are methodological: they explain the analysis techniques that the research group plans to carry out, may include pre-tests, and are a scientific contribution in themselves because they can help other researchers to improve their own research methods, and contribute to a basic principle of science: transparency.

4.3. Articles

In addition, researchers are obliged to publish their results, for which they have various platforms and formats. The most common is the scientific article, which has a reduced length and formal characteristics that are those of the journal where it is submitted for evaluation, generally double-blind peer review: the manuscript, without reference to its authors, is submitted to two independent evaluators, who do not know each other, to give their opinion according to a model that measures the quality of the different aspects of the research: good approach to the proposal and relevance of the research, objectives, use of methodology, theoretical support, formulation of objectives and hypotheses, correct use of graphs and tables, correct writing, correct manuscript structure, updated and relevant bibliography. The reviewers may reject or accept the proposal outright or, more commonly, suggest more or less important modifications to be submitted for further review. Sometimes, prior to writing the article, the proposal is sent in the form of a communication to a specialized congress, where it is accepted or rejected, according to the same quality parameters, and where the contributions are discussed publicly and orally.

A more visual version, which shows the parts of the research on a single

page, is the poster. Based on the reflections obtained in these scientific events, the authors of the proposal can improve it and turn it into an article.

4.4. Books

The monograph is another possible research result, which is normally reserved for presenting the results at the end of the research project period and in a more extensive form. It is a volume in which the contributions of the different researchers are generally collected in the form of a single or jointly authored chapter. It is not uncommon to invite other researchers from outside the group, especially those of international relevance, to collaborate with a complementary chapter, which ensures greater dissemination of the book.

Normally, a doctoral thesis adopts either the format of a monograph, or the format of a thesis by compendium of contributions (articles, communications, book chapters), in an articulated form, preceded by a general introduction and with final conclusions.

5. Design of a communication strategy

5.1. The communication plan

In this case, the communication strategy is put at the service of both the general public and the media, when they need access to the principal investigator or any of the members of the group to obtain information on their activities and results. It is convenient to appoint one of the members of the group as a liaison with the media, and to facilitate contact channels (e-mail, telephone, form). He/she will act as the first point of contact with the communications office of the institution to which he/she belongs.

5.1.2. *Steps for a communication plan*

To draw up a communication plan, we recommend the following steps:

5.1.2.1. An analysis of the situation

If the group is already constituted and has been running for some time (the same applies to each individual researcher), does it currently have a presence in the media and on the Web? If so, it would be necessary to study what has been the presence of the group and its researchers in the media (interviews, opinion articles,

participation in reports, writing of informative articles) and what type of presence we want to have for the new project. It is also recommended to analyze the presence of researchers and reference research groups in the area in the media and on the Web, in what way, in what media and using what platforms (e.g., social networks) to obtain useful models. The presence of the group and its researchers in the media will always depend on current events. The opportunity to influence current events can be obtained in two ways. One is when some event makes our specialization and expertise valuable to the media, which may seek our opinion (or we may send it spontaneously, for example in the form of an opinion article or a free forum). The other way is when our own research is likely to become news, through the publication of a report, a monograph, organization of a congress etc. Depending on these forecasts, both the news that we can generate and the news that can be produced and to which we can contribute our knowledge, members are assigned a role in this regard, for example, sending opinion articles providing specialized knowledge on certain topics, participating in interviews or serving as a source of information for news and reports, on the one hand; and on the other, sharing the news of which we are the protagonists by publishing reports, executive summaries, press

releases, organization of press conferences or other equally valid communication tools.

5.1.2.2. A definition of objectives

Why and why should we be in the social media, why and why should we create our own channels of communication with society, especially using digital technologies (the Web and social networks and platforms)? Here it is important to determine which audiences we are targeting in order to implement the tools through which we intend to reach those audiences. Specifically, we would talk about three:

The international scientific community.

The media.

The general public.

There are three other fundamental objectives in a communication plan, especially when we use digital media:

Maximize our presence using different formats and platforms.

To transmit the same image in all media. Therefore, tools such as logos and design are also essential. The group to which each individual researcher is attached, and its strategic communication plan, must be concerned with unifying messages,

so it is essential that there is a person or group of people in charge of ensuring this objective.

Explore new tools or platforms.

From here on, it would be convenient to express in our communication plan what type of actions we are going to use, to whom they are assigned and when they should be implemented. The first, as we will see in the following section, would be to centralize this strategy in some way through our own website. From there, we can start thinking about designing:

5.1.3.3. An editorial and dynamization plan

It will include aspects such as:

- A list of social media establishing their goals: reputation, influence, credibility, etc.
- A strategy for monitoring and curating quality content produced by media and academics on the topics of our research. This is crucial to focus our contribution to science (and communication).
- Technologies to use: Which platforms best respond to our objectives and audience? It includes a start-up plan, registration and configuration of accounts in the different platforms and an assignment of administrators for each platform (website, Twitter and

Facebook accounts, Youtube or Vimeo channels, etc.).

- What we are going to do in each medium and with what content.
- The action plan, which, for example through a timeline, will define objectives and dates.
- An online crisis plan, or how to act in case of communication problems.

The plan must include a monitoring of the contents themselves, which is recommended to be at least monthly.

5.1.3.4. Producing contents

Once the editorial plan has been established, it will be possible to start producing contents, which must always be of high quality and rigorous, whether they are the results of research or informative. The recommendations in this phase are:

Be dynamic in the creation and distribution of content.

Allow users to share content.

Allow users to interact with the research group and its members. For example, in addition to providing contact information, discussion forums could be opened on certain topics of social relevance. It is essential to interact with the community. And, in some way, reward the most valuable users.

5.2. The Web site as an information center

5.2.1. The website

One of the first communication resources is the design of the group's website. A research website typically includes sections dedicated to detailing and providing contact details of the group's principal investigator, researchers and collaborators, ongoing or completed projects (including projects in preparation), publications and other contributions, other documents and, if necessary, a version in the most widely spoken language in the international scientific community, English.

The website, in addition to giving visibility to the research team itself, allows to increase the impact of the participants' activities thanks to its multiplier character. The content and functionalities of the website will be determined by the target audience, so the first operation to practice is to explain to which audience or audience we are addressing.

It guarantees the availability of all the information developed by the group. A web site of this type also has a repository function, hosting publications, deliverables, reports, memoranda, communications to congresses and other documents produced as a result of the various actions promoted by the group.

The website could also serve as a space for reflection, as it could contain a blog, news, entries and information on research results. It is not uncommon for research groups to dedicate a section of the website to contact with the media. At the same time, it is a good idea for the person in charge of the group's communication to set up an agency with the contact of those journalists from the main media in the area in charge of covering research topics. This is an activity that must necessarily be designed. The web site must also aspire to have continuity, and not only be the web site of a specific project, but of a group that develops different activities continuously over time. There is the possibility of turning the website into a space where raw empirical data can be published and promote debate on the possible conclusions they lead to, while at the same time reinforcing its transparency and reliability.

5.2.2. Personal web pages

Along with the research group's website, personal web pages of the researchers can be designed, which in turn provide contact details, reference to their publications (within the group or outside it), and all those sections deemed necessary.

5.2.3. Press releases

As significant results are obtained, or scientific events are organized -which will be conveniently announced on the web page- that may be of interest to the general public, press releases, executive summaries of more extensive reports or even informative articles aimed at a less specialized public than the academic one will be produced. Many research project websites have a press section, with dedicated media files.

Occasionally, press conferences may be called to present research results of exceptional interest.

5.2.4. Summaries

A particularly interesting resource is the production of executive summaries of longer documents, such as reports or monographs. Of the latter, some excerpts can also be offered, such as the introductory chapter and table of contents, for example, since we will not have the right to offer it in its entirety in free digital format if the exploitation rights of the work have been assigned to a commercial publisher.

5.2.5. SEO

In order to position the website well, it is advisable to use SEO (Search Engine Optimization) strategies, so that search engines can index all our contents properly. We recommend following the advice of Lluís Codina, professor of Documentation at the Pompeu Fabra University in Barcelona and an authority on the subject, on his own website, which is also a model of usability. The contents dedicated to academic SEO can be found at <https://www.lluiscodina.com/cultura-academica/seo-academico/>.

5.3. Strategies for the dissemination of content on the social Web

5.3.1. Social web: An overview

In addition to the research group's website, the personal page of each researcher, hosted within the website or outside it (for example, in the university itself or in a service such as Wordpress that allows personal blogs) is a flexible communication and positioning tool. In addition to disseminating results - which can already be done with other types of tools we have examined - the personal page serves as an archive of teaching materials, lectures or courses, presentations, videos, concept maps and even a blog.

It should be linked to our profiles on social Web platforms (and vice versa). This same strategy will be carried out with the group's and the project's website, for which it is advisable to open your own accounts in the name of the group in digital social networks.

There are a number of services that should be taken into account, mainly the two best known, Twitter and Facebook, in addition to video storage services such as Youtube or Vimeo, which provide visibility, or to store and share. Technically, Twitter is a microblogging platform, used to keep the news alive through announcements, very short summaries or very direct messages, while Facebook is a generalist social network. The main objective of these social networks, as well as others such as Flickr, Pinterest or Instagram is to build trust and show industry knowledge.

5.3.2. Goals of social networks

More specifically, and this can help to select the tools to include in our communication plan and their utilities:

Twitter: Provides brand image and positioning.

Facebook: Transmits closeness. It allows interaction, information and conversation.

Youtube and Vimeo: Provide brand image, positioning and knowledge.

Slideshare: Transmits trust and knowledge.

Flickr, Pinterest and Instagram: Generate closeness and brand image.

LinkedIn: Conveys brand image. It allows interacting, informing and conversing with professionals.

Blogs: transmit trust and knowledge.

Google +: generates positioning. Allows interacting, informing and conversing.

through writing and academic SEO. Madrid: Scholar Network 2014 (disponible como ebook en Amazon)

Julián Marquina Arenas. Artículo W677. Elaborar el Plan Social Media [en línea]. En Cristòfol Rovira; Mari Carmen Marcos; Lluís Codina (dir.). Máster en Buscadores. Barcelona: Área de Ciencias de la Documentación. Departamento de Comunicación. Universidad Pompeu Fabra. <http://www.masteren-buscadores.com>

References

Lluís Codina. Ciencia 2.0: Redes sociales y aplicaciones en línea para académicos [on line]. "Hiper-text.net", núm. 7, 2009. <http://www.upf.edu/hipertextnet/numero-7/ciencia-2-0.html>

Lluís Codina. SEO académico. "lluiscodina.com", 2015. <http://www.lluiscodina.com/seo-academico/>

Mapa conceptual sobre Ciencia 2.0 <http://www.min-domo.com/view.htm?m=d4d1f77be0d04af0804c719038144de8>

Rafael Hernández Barros. Scholarly Writing, Citations, and SEO: How to increase the probabilities of your research paper to be cited

Ethical aspects when researching in communication

JAVIER DÍAZ-NOCI

Pompeu Fabra University (Barcelona)

javier.diaz@upf.edu

ORCID: 0000-0001-9559-4283

DOI: 10.31009/methodos.2021.i02.01

Díaz-Noci, Javier (2021). Ethical aspects when researching in communication.

OpenTexbook: An introduction to design a communication research.

Methodos. Research Methods in Social Communication Handbook, 2(1).

Barcelona: Universitat Pompeu Fabra (p. 87-88)

This work is distributed under this

Creative Commons license

For any other request and use of the
intellectual property rights on this work,

please contact the author

Ethical aspects when researching in communication

1. Introduction

A particularly important issue is the due respect for ethical issues in research in, in our case, social and human sciences, and especially in communication research. The university centers usually adhere to international standards, in our case those of the All European Academies (ALLEA), the COPE (Committee on Publication Ethics), which above all deals with plagiarism. The 2013 Code of Ethics for Researchers of the European Commission should also be taken into account.

The research will respect confidentiality agreements with sources, for example when carrying out observations, interviews or life stories, also when we practice virtual ethnography or netnography. It is recommended to sign agreements of this type with our sources and informants.

2. Principles

UNESCO's *Ethical Guidelines for International Comparative Social Research* lists 19 conditions that all research conducted with humans should follow. Some of these principles, which we recommend, are the following:

- * Research should avoid meddling in the lives of the investigated subjects without their permission.
- * The investigated subjects must provide their consent, so they must be informed in a clear and understandable way about the context, nature, methods and procedures, funding and objectives of the research.
- * An agreement in terms of confidentiality must be proposed to the investigated subjects.
- * Participating subjects must be offered access to research material and its results.
- * All data obtained in an investigation must be preserved so that the

data and agreements with the participants are respected at all times.

* The investigation will respect the law at all times.

* The research must respect the principles of not harming those investigated in any way, it must be designed in a way that is beneficial to society as a whole, it must respect the dignity and rights of the participants, and the benefits of the research must be distributed fairly among people.

* Investigations will be carried out in good faith, acknowledging the contributions of others, citing them properly without incurring in plagiarism or copying of any kind. All research materials and results will be original and will respect these ethical principles.

Produced by:

**Universitat
Pompeu Fabra**
Barcelona

Faculty
of Communication

<http://dx.doi.org/10.31009/methodos.2021.i02.01>