

Developing a project plan

This short guide outlines key points in the development of a project plan for a field study in a health related area. It is intended primarily for undergraduate and master level students and health professionals, planning studies within the scope of 10-20 Swedish university credits.

Examples in this text are given in *italics*. Normally, you of course write your plan in normal text.

Why develop a project plan?

There are several good reasons to spend time and energy to develop a solid project plan:

- you do a literature review, and hereby help position your planned work in relation to other studies
- you have a detailed plan when you reach the study field, where you may not have easy access to your supervisor, nor to scientific literature
- the project plan will serve you as a good start when you write up your project paper (as Background, aims, material, methods, references will be very much the same in the paper)

How?

Developing a good plan takes 2-4 weeks of full time work, that is best spread out over a longer period in order to allow an iterative process (think-read-write-discuss, think-read-write-discuss etc). Thus, the plan is developed in close collaboration with your supervisor, and you will draw on library/internet resources extensively.

Clearly, it is easiest to write a project plan - and carry out a study project – in which you have personal commitment/interest and preferably also some experience.

What should a project plan contain?

Typically, a project plan will have the following components:

Background (or Introduction)

Aims (or Objectives)

Material

Methods

Ethical considerations

References

Each of these needs quite a bit of work to reach a solid, well founded, realistic plan for your project. You can of course work on many of the components at the same time, but you will probably start by reviewing the field (what have others done internationally? In this country/region?) and start to think of/draft what you would wish to do. At the same time you will probably wish to organize your thoughts by starting to write on

Background, and of course listing your references as you go along. Let us look at what the components normally should contain:

Background.

This very important part of your plan is where you introduce both the topic of study, the study area (SW Uganda, N Skåne etc) and end up by concluding why this particular study needs to be done. This ending prepares for the next component, the Aims. Having read the Background, it should become very clear that this study is needed, in fact the last line of the Background, and the Aims, should “jump out” for the reader who has taken in the previous text.

The introduction most often contains two “story lines”, one on the subject of the study, and the next on the study area. Each of these sections will contain a logical sequence of substantiated (referenced) statements. Each starts generally, but rapidly narrows to the key topics. Let’s say that you wish do a pilot study on the possible protection against malignant melanoma in Western Australia, by wearing big hats. The Background could then look like this:

PREVENTING SKIN CANCER WITH BIG HATS. A PILOT STUDY IN PERTH

Background

First storyline one

Of malignant tumors, some are clearly related to environmental exposure. Most common of these is lung cancer, with tobacco smoking as a major risk factor (ref), and cervical cancer (ref), with sexual exposure as a risk factor (ref). Another common malignant tumor related to the environment is malignant melanoma. Malignant melanoma is...summing up what is known of frequency, risk factors etc (refs)

All in all somewhere between a half and a whole page for this storyline introducing the topic of the study

Then storyline two, the geographical area and what has been done there, referenced, also about _ page:

In Australia, due to the high frequency of this tumor, much work has been done, recently summarized by Smith (ref). Particular interest has been given to preventive measures such as sun creams, sun-protective swimsuits and big hats (refs). While sun creams have become much more effective, going from protective factor 10 to 30 in recent decades (ref), and becoming more effective screens (ref) and cheaper end less messy (ref), the research on sun protective swim suits has been largely ignored expect by the important studies of Johnson in Surfers’ paradise (ref). Little work has been done on hats, even though they protect the carcinogenically sensitive face. Australians have always borne hats, and hats are in big supply and are cheap. In Western Australia we have a good study site with a good cohort of tourists who come there year after year.

and here comes the final line that now “jumps out” as self evident

Therefore, this study on use of big sun hats for skin protection will fill an important need, and has also been requested by the local tourist authorities.

And immediately after come the aims:

Aims

The overall aims of the study are to find better ways of preventing sunlight induced malignant skin tumors

The specific aims are

- *to study the attitudes towards bearing large sunhats among vacationing tourists*
- *to study social marketing of big hats to a tourist population*
- *to study the incidence of malignant melanoma in a cohort wearing such hats over 3 tourist seasons*

One overall aim and about three specific aims is about right. You will with all probability at the end of this short study find out that you could never follow the cohort of tourists for 3 years – they disappeared and your money and patience were insufficient – so that when you write up the results into a report/paper one day, you substitute the last specific aim with something that you actually did manage to study, e.g. “to see if blue hats were more popular than red”.

Now you have the option of having here a section on the study setting:

Setting

This study will take place on the beaches of Western Australia, immediately north of Perth. To this area every year around November-February, large groups of national and international tourists gather to surf, swim and sunbathe. The beach is about 5 km long, and sharks, overeating and over drinking are major health hazards.

Then material and methods together in one section or in one section each, like this:

Material (which thus is about the subjects/people you are going to study)

The study will be carried out in Perth, Western Australia, by identifying a random sample of tourists contacted on the beach during sunbathing hours (compliance study). All individuals over 15 years will be included, exclusion criteria being sleeping inside a sun-tent. For the social marketing study, all sun hat vendors selling tourist stuff on the boardwalk will be included. For the cohort study, all tourists promising to come back three years in a row, and being willing to participate, will be recruited.

Method (which is what you will do with these subjects)

A specially trained research team of 3 lifeguards, who have been pre-selected for the task, will on a one to one basis inform all tourists encountered on the beach about the study, using an information leaflet. All tourists who agree to participate will then be interviewed using a pre-tested questionnaire, developed on the basis of International Skin Cancer Society’s tourist enquiry tool, TEQ (ref). All sun hat vendors will be contracted using the Sun Hat Vendors trading scheme, TS (ref). The results will be analyzed using EPI-INFO and SPSS.

Ethical considerations (in this important part you should describe the ethical considerations involved in this kind of study, and how you plan to deal with them. If you are seeking/have clearance from a Medical Ethics Research Committee, also write that) *Sunning on a beach during work time can be punished by the employer. People found with an extramarital friend can also have negative reactions to the interview. Therefore the written information (attached) underlines that the interview is voluntary, and can be interrupted at any time by the interviewee. All collected information will be de-identified and treated confidentially.*

Ethical clearance has not been sought from Lund University as this is a student project. Clearance has been sought from the Western Australia Ethics Tourist Board.

References

Already from the start save all your references, both the ones you know you will use, and the potential ones. Write them into this section with complete details. And you will save some later. Using a reference manager (e.g. Endnote, Get a Ref, Reference Manager) is very useful if you can get one.

Save them for the time being in the text as (Johansson 1999), (WHO b 2000) and only in the final edits of your proposal substitute for (1), (2) etc referring to the full details in the reference list. In this way you can easily re-order them while you develop your plan, and sort them in numerical order (as they appear in the text) only at the very end.

Last pieces of advice

1. In Background/Introduction you have much liberty to choose and thereby express your focus and priorities. There is a lot of freedom for you here (and in Discussion in the report/paper). Material, Methods and later Results are to be strictly “objective” however only describing as factually as possible, in adequate detail what you will do, with whom (and in results what you found).
2. When you eventually have done your study you can shift some of your ammunition between Background and Discussion, putting it where it makes best sense, and gives the best story. So everything you do (well, most of it...) in the preparations now, will be quite useful after doing your study, when you have your results and are writing your paper.
3. Consult with your supervisor at reasonable intervals!

Good luck!

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Flowchart: Steps in the development of a health systems research proposal

Questions you must ask	Steps you will take	Important elements of each step
What is the problem and why should it be studied?	Selection, analysis and statement of the research problem	<ul style="list-style-type: none"> - problem identification - prioritising problems - analysis - justification
What information is available?	Literature review	<ul style="list-style-type: none"> - literature and other available information
Why do we want to carry out the research? What do we hope to achieve?	Formulation of research objectives	<ul style="list-style-type: none"> - general and specific objectives - hypotheses
What additional data do we need to meet our research objectives? How are we going to collect this information?	Research methodology	<ul style="list-style-type: none"> - variables - types of study - data collection techniques - sampling - plan for data collection - plan for data processing and analysis - ethical considerations - pre-test or pilot study
Who will do what, and when?	Work plan	<ul style="list-style-type: none"> - human resources - timetable
What resources do we need to carry out the study? What resources do we have?	Budget	<ul style="list-style-type: none"> - material support and equipment - money
How will the project be administered? How will utilisation of results be ensured?	Plan for project administration and utilisation of results	<ul style="list-style-type: none"> - administration - monitoring - identification of potential users
How will we present our proposal to relevant authorities, community and the funding agencies?	Proposal summary	<ul style="list-style-type: none"> - briefing sessions and lobbying

NB: Development of a research process is a cyclical process. The double-headed arrows indicate that the process is never linear.