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FISH MODEL HOW TO WRITE RESEARCH PROPOSALS, RESEARCH ARTICLES AND RESEARCH TOPICS: SCIENTIFIC WRITING

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ABSTRACT

These days the students are like to see or understand with some animated types explanation for any type of study whether it's a topic or research or any kind of protocol. This is a time of digitalization so if we want to be with the current demand then we have to think like them. So to understand the research proposal and research model we prepared a Fish model which will be very helpful to make any topic easily understandable. In this fish model, the students and researchers are more eager to learn and it also made the topic easy to understand. We can use this method to explain any topic or any research proposal. This method was found very helpful to explain any protocol or research proposal. If any research or student wants to write any research synopses and topics for their research they can follow it. This model used many times by the author to make the topic more understandable and more interesting for the graduate students during the teaching in the classes. In the class of 60 people, this model was liked by more than 90% candidates rather than showing a PPT to the students this fish Model works as compared to the traditional method of teaching.

KEYWORDS: Fish Model, Research Model, Research Article, Research topic, Concept of research.

INTRODUCTION

This article is for everyone for school students, graduation students post-graduation students, and for the master and research scholars also. In the school teachings how the small kids catch the things very easily. Even if we all imagine or we can go to our student's life then we can easily understand this topic. We are all aware of the good learning during school times. In childhood we were learning through the small model there was a model and explain competitions in the class one day we were asked by the teacher to bring any model of choice and we have to explain about that particular model or a particular item. So this method is also like those kinds of models. But here we will talk about the research articles, research topics, and research proposals. By applying this method the researchers and students will be able to understand how to write a good proposal and research article for the scientific consideration.[1] This topic is consists of some steps and these steps correlated with the body outer morphology of the fish. So by applying this fish model we can learn any topic and research proposal and how to write a project for funding it will become an easy task.

This method will work as a very good supportive tool to seek any kind of help in designing and writing the proposal for scientist consideration.[2] This model we are using from many years in our school times but with the higher educations and the other work pressures we are ignoring the best things from our life so we should take care of these small learning in our life and we have to think about the big issues and problem to fight with them or to find out the solution of our most of the problems in our daily life is different types of infection and diseases so we can prepare a research model, a Proposal how we can solve the existing problem with the help of research.[3] This method will be very helpful for the fresher researchers, Like Medical students while writing there synopses and research protocol. This can be understood with an example suppose we have a problem so to solve that problem we have to go step by step and we can overcome this problem. So this fish model will help you out how we start our thesis writing also because a thesis also consists of the same steps as we are writing any research proposal. So the steps are the same but the material and matters are required small or large. It always depends upon the research project and the topic of your research proposal. Keeping all this background in the mind we decided to develop a model which is named the fish model to understand the research model.

This fish model is very easy to understand because it is not with the internal structure of the fish but is the outer

body appearance of the fish is helpful in this particular model.

Our main focus in the present article is to explain about the designing or preparation of any research proposal. The many students during their entry-level in the master and the Ph.D. courses confused that how much they have to write for a synopsis so after the reading of this paper it will become easy to understand the research topics and proposal. So after the reading of this writing, anybody can be easily prepared any research proposal and easily submit it for the research funding this type of writing is like a high level of scientific writing which is also known as the high level so research like medical research writing. The proposal is a detailed plan or 'blueprint' for the intended study, and once it is completed, the research project should flow smoothly.[4]

Guidelines on Writing a Research Proposal

Different funding agencies have a different format for submitting the research proposal according to the topics of the study and their area of interest. But the method and way of writing the proposal are almost the same. Here we discuss the common format followed by al the research agencies and funding agencies. We divided this model into small parts according to the fish anatomy. Here we have to understand the little physical appearance of the fish. And we have to understand the three main questions here! **What? Why and How?**

Here our main focus is to make this topic easy to understand that how we can design a Proposal or Research project or review articles on any topic here the topic is not the focus but the main body and features of these are the same. The research topic and research proposals for the funding whether it's for Ph.D. or MD or any level. This is the standard format for all. There are many guidelines to write to submit the research proposals, research article and review of literature.

Writing a research proposal is rightfully considered as one of the most complex tasks and requires mastery of multiple skills. It is a paper, which aims to deliver a brief information on the research you want to conduct, explaining the main reasons why it will be useful for the reader and society. A correct research proposal should contain the following headings which can be explained by the fish model easily. The research proposal outline is very important if you are submitting for funding it should be according to the guidelines of that particular funding agencies. According to a search on the different funding agencies, we found most of the funding agencies have a common format for all the research proposals.[5] The main purposes of this writing are to make everybody aware that how to write a proposal and what are the different steps involved in the proposal. This model is covering the following headings:

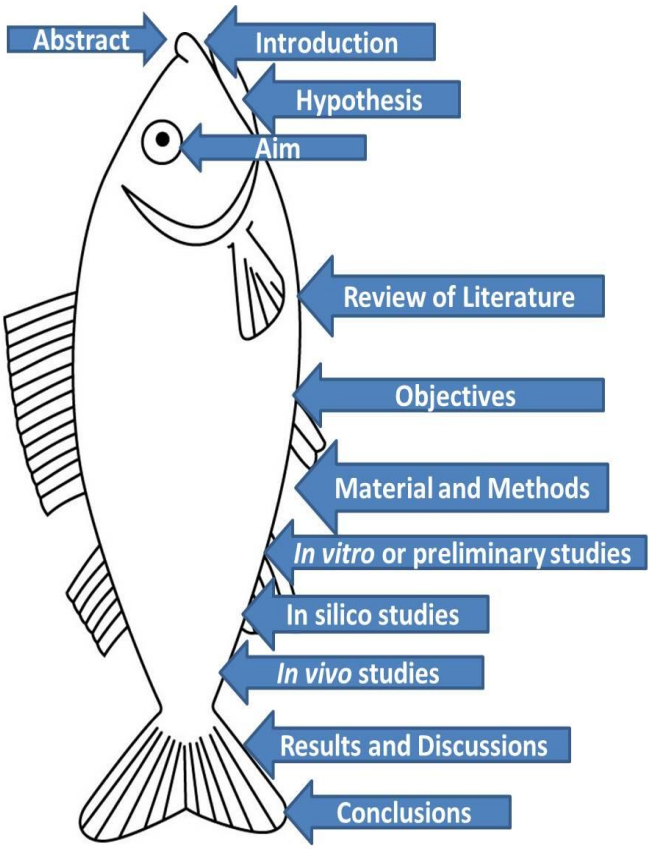

Figure 1: Fish Model to understand how to write a Scientific Proposal for research funding.

Abstract: It is the complete information about the performed research work. It is about the short details of the proposal which is being conducted or which may be performed shortly or done at present research. It also includes a short summary by the present group. Use the adjective abstract for something that is not a material object or is general and not based on specific examples. The abstract is from a Latin word meaning "pulled away, detached," and the basic idea is of something detached from physical, or concrete, reality. An abstract is a self-contained, short, and powerful statement that describes a larger work. ... An abstract of social science or scientific work may contain the scope, purpose, results, and contents of the work. An abstract of a humanities work may contain the thesis, background, and conclusion of the larger work. To write an abstract, start with a short paragraph that explains the purpose of your paper and what it's about. Then, write a paragraph explaining any arguments or claims you make in your paper. Follow that with a third paragraph that details the research methods you used and any evidence you found for your claims.

1. Introduction: An introduction is the first paragraph of a written research paper, or the first thing you say in an oral presentation, or the first thing people see, hear, or experience about your project. Keep your first sentence short. Don't repeat the title. Keep the introduction brief. Use the word "you" at least once. Writing an Introduction to a Research Paper – What to Include Introduce your topic. These are some heavy points which must be included. Create some context and background. Tell your reader about the research you plan to carry out. State your rationale. Explain why your research is important. State your hypothesis. Dedicate 1-2 sentences to explaining why the article is important. It has the starting of any research proposal or topic required for the introduction of that particular topic or research. Design of experiments and apparatus; classification, sampling, and measurement; analysis of experimental data; errors of measurement; probability, randomness, and logic; much more. Indispensable for any researcher.[5] Two parts: 1. A general introduction to the topic you will be discussing.

2. Review of Literature: This is the 2nd main heading of any research proposal and an important part of it. It is responsible for any type of research proposal and any research article because on the bases of this review literature we will be able to decide the hypothesis and objective of the study and research. So you can connect these all parts of the proposal to each other because each heading is interrelated to each other. In a simple language, we can say that a literature review provides a scholarly context for the argument you propose and support in your paper. It helps readers perceive how your argument fits into past and present scholarly discussion of your subject. Most often, a literature review is formatted to appear as a separate section of your paper, preceding the body. In the absence of specific instructions about the length of a literature review, a general rule of thumb is that it should be proportionate to the length of your entire paper. If your paper is 15 pages long 2-3 pages might suffice for the literature review. As we can see the stomach of the fish is big so it will be like that the area covered by the fish stomach. So the review of literature depends upon the area of research and it also depends on the topic on which a particular researcher or scientist wants to work. If the more work was already done then we will have more review of literature if work is novel means the same topic of research has been done by few people then we may behaving less literature on that particular topic. This part provides us the total work done on that particular topic on which we are writing the review. So this is also depending upon the introduction so all the steps are in order so that we can easily co-relates them step by step.

3. Hypothesis: Hypothesis of study or research project: Now this also depends on the review of literature now the researcher understood by reviewing the all studies and data that what already has been done what we can plan next to get better results and better response. So this is also helpful to understand the current research situation and novelty of the particular topic.

4. Aim: The aim of the study and research should be precise and small and easy to understand.

5. Objectives: To achieve a specific aim we can divide them into some objectives so the objective can be more than one. With the help of different objectives, we will be able to achieve any particular aim of the study or research. With the help of online databases we can find out the current research on that particular topic and the researchers can find out how many objectives they can easily achievable.

6. Material and Methods: To execute or achieve the different objectives we required some material some chemicals and consumables if the work is a wet lab and if the work is on some interventions then we required the patients and involvement of the human active participants then we have to go for some ethical clearance. The ethical clearance is required. So again the material and methods also depend on our objectives. What we want to do in these objectives. It depends on the type of study.

***7. In vitro* or preliminary studies:** As it should be clear from the heading that the research is an in vitro study of any type of basic mechanism study. So here the in- vitro means. In this study, we cultivate infectious agent like bacteria and viruses or other organisms and performed experiments on the particular infection of the disease agent. We can check the effects of particular new drug effects on any infection. This is known as in vitro study. For example, the study did on cell lines in the lab. Several in vitro models have been developed for

systematic studies of interactions between breast cancer cells and the bone microenvironment.[6]

8. *In vivo* studies: Before going into the humans some studies performed in the mice models and other animals host. The scientist cannot give anything to humans directly. So there are some steps before going into the human trials and studies. For example the in vivo study. Animal models have enormously contributed to the study of diabetes mellitus, a metabolic disease with abnormal glucose homeostasis, due to some defect in the secretion or the action of insulin.[7]

9. In silico studies: The use and utility of computational models in drug development have significantly grown in the last decades, fostered by the availability of high throughput datasets and new data analysis strategies. These *in silico* approaches are demonstrating their ability to generate reliable predictions as well as new knowledge on the mode of action of drugs and the mechanisms underlying their side effects, altogether helping to reduce the costs of drug development. This review aims to provide a panorama of developments in the field in the last two years. The aim of target discovery is the identification and validation of suitable drug targets for therapeutic intervention, whereas lead discovery identifies novel chemical molecules that act on those targets.[8]

10. Clinical trials: A clinical trial is "any form of a planned experiment which involves patients and is designed to elucidate the most appropriate treatment of future patients with a given medical condition.[9]" To check the efficacy and safety of many molecules of therapeutic agents on the humans and the infective population is known as the clinical trial. For example studies on different groups of populations' total 3 human trials are needed: first Phase 1 which takes 3 months, Phase 2 takes 3 months and Phase 3 takes 5 Months at least to seen the results on the particular populations. Before we can say It's safe & effective3 human trials are needed Phase 1 takes 3 months Phase 2 takes 3 months Phase 3 takes 5 Months Before we can say It's safe & effective for any vaccine candidate. So this is known as clinical trials of any vaccine candidate.

11. Results and Discussions: Whatever the research was done by the researcher or candidates it got some results so it should be discussed with previous findings. For example, the Worksite obesity prevention interventions using an ecological approach may hold promise for reducing typical weight gain. The purpose of this study was to examine the effectiveness of Go!, an innovative 12-month multi-component worksite obesity prevention intervention.[10]

12. Conclusions: The end part of the research topic and any research proposal after the performance of that particular task or research. It is the summary of all research done by the researchers or any particular scientific group or groups. It is given by at the end of the work so that a summary type of flash what has done in the following heads. A Graphic must be included in the research abstract.[11] It is the tail of the fish according to the fish model so you can see every topic of heading is related to eachother. We cannot go without the executive of any of the topics form these.

13. Conclusion of the present writing: The Reading of this Model for the writing of research will help the researchers and the graduate students how to write a research proposal for scientific consideration. As we can see in the figure this fish model all the heading in the first ascending order and after the review of literature it is in descending order likes decreasing order. It is totally depends upon the size and shape of the fish. It is very easy to understand with this model. As you can see the abstract of any particular research is like a nose of the fish it can be written before or after the research or research article or review articles. If we talk about the introduction it is like the mouth front part the opening of mouth means an entry for food or water so it is the introduction to anything so we can correlate with. So in this way can make a correlation with the specific part of the fish with the physical appearance.

The other benefits of these readings are:

1. The researcher will be able to design his/her research topic
2. Easily they can write a Review Article and Research articles.
3. After this reading, they can also develop these kinds of research models for the future for better understanding of the research proposals and research topics.
4. For writing any proposal and project first reading is very important so a reading of these kinds of papers definitely will support in the research.

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