

Ninth lecture

Basics of scientific research

The goal to be achieved:

- The student will be familiar with the basic stages of preparing scientific research
 - -Preface
 - > research aims
 - > research importance
 - > search limits
 - > Previous studies
 - > Introduction to research
 - > Research completion plan
- Conclusion



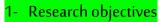




Introduction:

The importance of methodology in scientific research lies in several aspects that can be summarized in the following aspects, in that it is (a tool of thought, reasoning, and organization), after which it is an important tool in increasing knowledge, continuing progress, and helping the student to develop his abilities in understanding information and data and knowing the concepts, foundations, and methods on which any work is based. scientific reseach.





Scientific research's primary goal is to develop knowledge, and thus increase well-being and develop society. In this way, linking society with science is achieved. Research aims to solve the problems or issues that the constituent units of society suffer from. The goal of solving the problem within the available capabilities is the reason for which the problem is being addressed, and is considered the primary guide in the process of implementing and achieving the solution to the studied problem using research methods and not the component activities or trends.

2- The importance of research

When formulating the importance of research, we must focus on two basic aspects: the scientific aspect, that is, what will the research add to the current scientific knowledge in this field, while the practical aspect identifies the problem that the researcher will work hard to try to solve and provide benefit from to some party. In order for the researcher to formulate the importance of his research, he must understand the problem of his research well and the relationships that make up it.

3- Research limitations

The goal of writing the limits of the research is to focus precisely on a specific field of research, that is, what are the limits of the research variables in terms of time and space, which is the group of variables that have not been subject to study, for one of the following reasons:

- These variables have been previously studied in other fields.
- These variables are outside the scope of research in their content.
- These variables go beyond the scope of the time period given by the research or the spatial space given by the researcher.
- These variables are difficult to treat due to the scarcity of data related to them, and the difficulty of reaching members of the research sample.
- The difficulty and scarcity of scientific references that cover these variables.





4- Previous studies

The importance of previous studies for the researcher lies in helping him choose the right topic for the research, sparing him the trouble of repeating the research, and in informing him of and verifying the aspects of the topic comprehensively. Thus, the researcher is introduced to the difficulties and problems that other researchers faced, and the solutions they found to confront the problems that other researchers encountered, and if they could be avoided by benefiting from their experiences. It also provides the researcher with many references and sources of information for the subject of his research, and thus determines the correct direction for him in choosing the procedures and tools that he can benefit from in addressing the problem of choosing appropriate scientific research methods and tools. The researcher's knowledge of previous studies gives him a good opportunity to pay attention to his research and demonstrate its originality by referring to the theories and hypotheses relied upon by others and the results demonstrated by previous studies, and thus identifying the shortcomings or differences in those studies. The results of previous research and studies are very important in building his research hypotheses to complement the aspects that other researchers have considered. It also highlights the importance of his study over previous studies by highlighting the strengths and weaknesses of previous research and studies from a theoretical or methodological standpoint, which helps him determine the theoretical framework for his research in accordance with scientific developments and developments, and thus focuses on the dimensions and ideas that must be addressed according to methodologies and Appropriate scientific methods to complete his study. In the end, the researcher gets to know and familiarize himself with all the scientific terminology and vocabulary related to his study and improve his ability to express and write accurately and clearly. It is also worth noting that previous studies must summarize and include information related to the problem and arrange it according to logical foundations and by date. Post it.

• The following is the most important information that should be included in the summary of a previous study:

- 1- Title of the study, name of the researcher, and year of publication.
 - 2- The problem of the study variables.
 - 3- Limitations of the study and its location.
 - 4- Method of collecting data and methods of processing it.
 - 5- The results reached by the study based on the available data.
 - 6- A summary of the overall theoretical and practical results.

5- Introduction to the research

The introduction to the research must be formulated objectively, away from constructive statements, that is, the submission process must explain the dimensions, starting points, and importance of the research, because it expresses the extent of the researcher's awareness of the problem proposed for study, and the extent of his knowledge and experience in this field, and the following are the most important points that must be made. Include in the introduction to the search:

- 1- The subject of the research, the scientific additions, and the process expected from conducting this research.
- 2- The location of the study and the expected time period for its completion.
- 3- The collection of data and information that can be used in the problem area, in addition to the treatment methods that will be followed.
- 4- The subjective negative aspects of not conducting this study, and therefore its reasons.
- 5- Entities that can benefit from the results of the study.

6- Research completion plan

It represents a reflection of the researcher's initial understanding of the elements and variables of his study. However, it must be comprehensive, objective, and logical in the sequence of theoretical and practical ideas.







Conclusion

After the researcher in the field of social and human sciences has identified his research problem, and through adjusting the questions and hypotheses of the study, it is necessary to identify the various aspects that direct the researcher in his study to the right path, help him build theoretical aspects, and discuss the results based on what has been collected from previous and similar studies.