

# How to Write a Research Paper

Title page .....

Abstract .....

## Introduction and Literature Review

### Introduction: (1.5 to 2 pages maximum)

- Introduce the topic to the reader.
- What is the phenomenon or the problem you are studying (define the problem), How significant is it? What is the size of the problem (use numbers and statistics)
- Brief history
- Previous research: do an extensive research for your topic, and find articles on the subject.
- What is missing in previous research?
- .....this will lead to your research hypothesis or research question. Your hypothesis would be usually what you expect to find from your research or study.
- Do write the reference for what you quote from other papers e.g. (Author, year)

Quoting what other researchers have reported in their papers without writing the reference, is considered as plagiarism (stealing others' work and then lying by reporting it as your own work)...weather you quote ideas, sentences or expressions,....etc.

(Use the APA style in writing your introduction: go read and learn about it).

- Use font size 12 and double-spacing for the text (all over your paper).

### Literature Review:

- Establish the importance of the topic and justify the choice of the research question
- Set up a theoretical framework of the research
- Background information to understand the study (historical overview and research literature)
- Up-to-date research relevant to the topic, internationally, regionally, and in Jordan
- To establish your study as one link in a chain of research to develop knowledge in this field (how does this study fit into what

has already been done?)

- List your research objectives (drawn from the research question).
- Note: think about how you are going to order your discussion, and also about the section headings you will use.
- AGAIN, do write the reference for all what you copy or quote from other papers e.g. (Author, year) as in the introduction.

Use the APA style .... be consistent: whatever style you decide to use, use this style all over your paper.

**Methods** (to prove and judge reproducibility and validity, also provide enough details for researchers to replicate the study) (writing in the past tense)

- Time limits and Setting (when and where)
- Ethical considerations: It includes: approval from the ethics committee in the hospital (IRB), anonymity, confidentiality of the data, and consent form (verbal or written).
- Study design (type of the study, within-group or between-groups comparison, cross-sectional, case control, experimental)
- Target population (from which we select our sample)
- Sample or study population: type of sample, (demographic profile of subjects or participants), sample selection (inclusion criteria and rationale for inclusion)
- Sampling technique, and sample size (# of participants),.
- Study variables (independent variables and dependent variable(s))
- Data collection instrument (e.g. questionnaire, interview, observation).... (submitted with the Methods section)
- Data collection procedure (self-administered or interviewer administered questionnaire, when, how) describe in detail
- Data analysis plan (How data will be presented in results section and what statistical tests will be used). You will need Descriptive statistics which includes frequencies, percentages, mean,...)

**Results:** The purpose of the results section is to objectively present the key results without interpreting their meaning, in an orderly and logical sequence using both illustrative materials (tables

and figures) and text. Save all your interpretation for the discussion.

- Should include results relevant to the research question(s) presented in the introduction.
- Determine whether data should be presented in tables, figures or graphs. Chose the best way.
- The body of the results section is a text-based presentation of the key findings which includes references to each of the tables and figures (e.g. Table 1 shows..., ....(see table 2)....)
- Summarize your findings in text that should complement tables and figures, but not repeat all the information in them. The text is organized according to the sequence of tables and figures.
- Provide a clear description of the magnitude of the response or difference (use percentage of change rather than exact data in numbers).
- Spell out numbers that are less than ten (five instead of 5). Spell out numbers that start sentences.
- Summarize statistical analysis and report actual P values for all primary analysis. Standard statistical procedures should only be named (no need to show calculations), and Present descriptive statistics first.
- Do report negative results, they are important!! (if you did not get the anticipated results). Your results may be important to others even though they did not support your hypothesis.
- Use past tense when you refer to your results.
- Number tables and figures consecutively in the same sequence they are first mentioned in the text.
- Provide heading (title or legend) for each table and figure. Heading is located above the table, and below the figure or graph. A heading should include a brief description of the results presented in addition to other necessary information.
- Each table or figure must be sufficiently complete that it could stand on its own, separate from the text. The reader should be able to understand the table without reading the text.

## Discussion

### Including Limitations, Recommendations and Conclusions

- The purpose of the discussion is to state your interpretations of the data in relation to the original hypothesis and also to state your

opinions. Then, relate your interpretation to the present state of knowledge, explain the implications of your findings, and make suggestions for future research.

- Organize your discussion from the specific to the general.
- Begin the discussion by restating the hypothesis or the research question, and answer the questions posed in the introduction.
- Support your answers with the results, and explain how your results relate your expectations and to the literature. Explain if they are acceptable and whether they are consistent with the previously published literature.
- Discuss and evaluate conflicting explanations of the results.
- Identify potential limitations and weaknesses of your study, and how they may affect the validity of your findings. Suggest improvement of the methods.
- Summarize the main implications of your findings.
- Provide recommendations for further research on the topic.
- End your discussion section with a conclusion paragraph.
- In writing your discussion, discuss everything, but be concise, brief, and specific.
- Write the ABSTRACT after you finish your discussion and place it at the beginning of the paper.

**References:** A list of references (use one formatting system: alphabetical order, or according to order of appearance in the text) (e.g. APA formatting style).

**Appendices:** The questionnaire in Arabic and in English.  
Any additional material related to the project to be attached.

Good Luck

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