

# [Scientific documentation in research assignment](https://assignbuster.com/scientific-documentation-in-research-assignment/)

There are Specific Rules that should be followed in organizing and presenting research results. These rules are a great convenience for both the writer and the reader. The provide structure for the report and a uniform method of presentation, making It easier for the reader to understand and evaluate the report. Thus, the scientific journals in all disciplines specify the format, or writing style, that articles submitted to the Journal are to follow.

For Publishing the Research in Psychology, the 2001 revision of the Publication Manual of the American Psychological Association (PAP, 001 b) is used as the official arbiter of style for almost all of the Journals in psychology and education. This provides a uniformity in the format across various researches. The PAP Manual Is guided by Principles of “ Specificity and Sensitivity’. First, papers should be written at a level of specificity and detail that will allow others to replicate the research. Second, papers should be free on inappropriate of language that might be interpreted as biased and insensitive.

PAP Publications include: \* Publication Manual of the American Psychological Association (fifth edition, 2001) A Student Workbook and training guide for the Publication Manual (Zealand ; Walker, 2001) PAP-Style Helper, which Is a computer program that works with most word processors to ensure that the paper conforms to the rules of PAP style. When a Researcher sends his report to a Journal, it Is sent as a neat printed document and assembled in a particular manner to facilitate the editorial and publication process.

This PAP- style manuscript is called The Copy Manuscript, which is a preprint version of a research report, that Is, It Is a manuscript that has not yet been printed In a technical journal. WRITING AN PAP-STYLE RESEARCH REPORT MANUSCRIPT There are seven main sections in a PAP- style research report manuscript: 1. The Title Page 2. Abstract 3. Introduction 4. Method 6. Discussion 7. References 8. Appendix 9. Author Note 10. Footnote 11. Table 12. Figure Caption 13. Figures Getting Ready To Write | 8. 5 X II-inch (21. 59 CM X 27. 4 CM, which is the size off letter Paper Size: layout) I Typeface: For Body of Manuscript-For Figures- I -Times New Roman or Courier (serif text-“ ABACA”)-A sans serif (without lines extending from the beginnings and ends of letters- “ ABACA”) I Font Size: | 12 points I Letter Spacing: I Double-spacing is used throughout the manuscript I Line pacing: I Double-spacing is used in-between the lines of text, between lines in the title, and after headlines, footnotes, quotations, references, figure captions, and all elements of a table.

I Right Justification: I Off, so that the last words of the lines on page form a ragged right edge. I Automatic Hyphenation: I Off I I At least 1 inch all around(top, bottom, left, right)Leaving length of typed Margins: line as a maximum finches. I Indentation: I It is of from five to seven spaces. First line of every paragraph and footnote must be indented (with the exception of he abstract, block quotes, titles and headings, table titles, notes, and figure I Punctuation Marks: I A single space is left after punctuation captions). Marks(including periods and colons) 1.

The Title Page This is the first page of manuscript. It includes: I) The Manuscript Page Header (consisting of the first two or three words of the title of the manuscript) on the upper right hand side, it) Page Number (“ 1” in this case) on the five spaces to the right of the header text and flush with the right margin, Or alternatively, on a separate line immediately below the text, with right-justification for both text and page number. Ii) The Running Head, which is a shortened version of the title, having no more than 50 characters (including punctuation and spaces).

It is the heading that will appear at the top of the published article. It is typed flush left in capital letters following the words “ Running head:” near the top of the cover page of the copy manuscript. Iv) Title of The Paper needs to be concise and yet informative. Words that add little to the meaningfulness of the title should be avoided. The title should be short enough to avoid confusion about the research, but not so short that it fails to convey the topic of the paper. The recommended length for a title is 10 to 12 words.

If multiple lines are required, they should be double-spaced Just like the rest of the conjunctions. ) v) The Author Name(s) is given as the first name, middle initial(s), and last name; one double-spaced line beneath the title and centered between the margins. Multiple authors may be listed in order of their degree of contribution to the paper. Any title (Mr.. , Ms. , Dry. ) or degrees (B. A. , M. A. , PhD. Etc) is NOT included. V’) Institutional Affiliation includes the name of the organization that provided the local facilities and/or support for the research.

It appears one double-spaced line below the author’s, on the title page centered between the margins. 2. Abstract It is the concise summary of the paper and should not exceed 120 words. It is the first substantive section of the paper but it is typically written after the rest of the research has been written as preparing the summary of the paper is much easier after the researcher has written the paper and has got a clearer idea about what must be included in the abstract. Its Purpose is to introduce the article, allowing readers to decide whether the article appears relevant to their own interests.

The abstract should provide enough information so that the reader can decide whether to read the entire report, and it should make the report easier to comprehend when it is read. It is presented on a separate, next page (page 2) under the heading “ Abstract “(as a level 1 heading -centered uppercase and lowercase heading) in a copy manuscript; where it follows the title and page number header, immediately after the title page. The body of abstract begins from the next line. Do not indent the first line of the abstract. The abstract is always typed as a single paragraph with no paragraph indentation.

The abstract for an empirical study should include the following points: I. Information on the problem under study (preferably in one sentence). It. The nature of the subject sample (age, sex, etc) iii. A description of the methods used, including equipment, procedures for gathering data, names of tests, etc. ‘ v. A statement of the findings, including information on levels of statistical significance reached. V. A statement of the conclusions drawn and any implications or applications of the results. Few general guidelines that need to be followed while preparing the abstract are: I.

Make sure the information of the abstract reflects the body of the paper. Do not include any information in the abstract that does not appear in the paper. It. The abstract should be self-contained. There should be definitions of all the abbreviations that is needed to be explained in the body, spell out all names, and define the unique terms. Iii. Avoid using direct quotes and use paraphrase in the abstract instead. ‘ v. Make the abstract as concise as possible. Include only the most important information and write in concise sentences. V. Use the abstract to report and not to comment or evaluate on what is in the paper. ‘. Avoid using reference citations in the abstract. This section begins on a new page (page), with the title of the report typed at the top of the page followed immediately by the body of the introduction. Its Purpose is to particular study was conducted. It presents the specific problem under study, describes the research strategy, and presents the predicted outcomes of the research. After reading the introduction, the reader should know why it was decided to do the research and how it has been decided to go about doing it. Present general introduction to your topic.

Review literature. Link your literature review to your topic. State your hypothesis. In general, the introduction progresses from broad theories and findings to specifics of the presented research, that is, the structure of the introduction proceeds from the general to the specific. The components of the introduction are: the Problem under study, the Literature Review, and the Rationale and Hypotheses of the study. This can be further categorized as following: I. An introduction to the Topic under study. I’. A brief Review of the Research findings and theories related to the topic. Tenement of the problem to be addressed by the research (identifying area in which knowledge is incomplete). V. A statement of the Purpose of the research (always to solve the problem identified, but perhaps only a specific aspect of it). V. A brief Description of the research strategy, intended to establish the relationship between the question being addressed and the method used to address it. V’. A description of any Predictions about the outcome and of the hypotheses used to generate those predictions. A good introduction should address the following questions in a paragraph or two: I.

Why is the problem being studied important? Ii. How do the hypotheses and the methodology relate to the problem under study? Iii. What, if any, are the theoretical implications of the research, and how does the study relate to previous research in the area? ‘ v. What, if any, theoretical views are tested, and how were those views developed? The opening paragraph discusses the issue chosen to study. Next the underlying logic and rationale for the study is discussed in more specific terms by review of relevant research and integration of its findings. Then the problem addressed by the research and the purpose of the study is stated.

Finally, it is shown how the study has addressed the question and the specific hypothesis is stated. Expression of throng opinion on one side or another of a controversial issue should be avoided. If a personal opinion is expressed in the introduction, it should be offered without hostility and without making personal attacks on those with whom the writer disagrees. When citations are used to support one’s view or one’s research, it should be presented fairly and not out of context. 4. Method After you have established the rationale of the study and stated the hypotheses in the introduction, it follows how exactly the study was conducted.

The method section begins immediately after the end of the introduction (does not necessarily beginning uppercase and lowercase heading). Method section describes in detail the characteristics of the subjects of the study, materials, and apparatus used, as well as the procedures followed. The level of detail needs to be sufficient to allow another researcher to replicate the study. If the paper uses a methodology described earlier, a brief summary of the methods used, followed with reference for the reader to the more detailed published account.

The method section is usually divided into subsections to improve organization and readability. PAP style permits considerable flexibility in how the divisions are made and labeled. Separate divisions can also be combined if that improves clarity. The most commonly used format has following subsections: 1. Participants (or Subjects if animals are used), It follows immediately after the heading “ method”, following a double-spaced line. The first line of the body of participants subsection is indented.

This subsection specifies detail of the participants: a) The nature- the demographic variables of the participants (such as sex, age, race, ethnicity) and b) Size of the sample (the number of participants) used in the study, c) The procedure used for selection of the participants and their assignment to reattempts, d) Any special agreement made with the participants (such as payment for their participation), and e) Information on the personal characteristics of the participants (Q, personality, etc), f) And also any special characteristics of the participants (mental retardation, psychopathology, or special abilities) Or if the subjects were animals, then they are described in the Subject Subsection with the following: a) The genus, species, and any other important relevant information such as the supplier) b) The number of animals used in the study and their sex, age, weight, and physical condition. C) The details of the car and housing f the animals (such as whether housed in groups or individually, whether they were given free access to food and water, and the scheduling of light and darkness in the colony room). D) The number of subjects assigned to each condition in the experiment and any other information (such as special handling) that needs to be known to replicate the study. 2. Apparatus (or Materials, if this descriptor is more appropriate), The equipment or the material used to measure behavior is described under this subsection. Apparatus” is used as level 3 subheading (flush left, italicized, upper and lowercase side heading). ) If in the research, primarily the “ equipment” (such as slide projectors, operant chambers, computers, etc) is used. If a commercial piece of laboratory equipment is used, details about its characteristics are not mentioned. Instead the name of the manufacturer and the model number of the equipment is provided. A) If the research primarily uses written materials (such as questionnaire, summaries of criminal cases, or rating scales), it is described under a “ Material” subsection (typed as level 3 subheading- flush left, italicized, upper and lowercase side heading.

If a standardized test is used simply the name of the test (and the erosion, if relevant) and details about how it was obtained are provided. B) If a new measure is developed or a special equipment is designed, it should be described in provided. In either case, the level of detail necessary in the description depends on the nature of the equipment or materials used. 3. Procedure, This subsection covers the exact procedure that was followed throughout the course of the study. The conditions to which the subjects were exposed or under which they were observed are described in detail. All the necessary details regarding the conduction should be included under this subsection so that another researcher old reproduce its essential details.

If animal subjects were used, it should be described that how the animals were handled, the length of the experimental sessions, any special deprivation schedules, and to what manipulations the subjects were exposed. If human participants were used, the details should be provide regarding the instructions they received (these should be described in detail if they cannot be reproduced), informed consent procedures, procedures for assigning subjects to conditions, and how the experimental manipulations were introduced. 4. Design section can also be used if the design of the study needs to be specified. It should only be included if the study uses an unconventional or complex design. 5. Results This section begins immediately after the method section on the same page, if there is room. It should be a continuation of the paper.

The heading “ Results” (level 1 heading-centered uppercase and lowercase heading) is immediately followed by one double-spaced line. The body of this section is indented. The Purpose of the results section is to report the findings. All relevant data and analysis should be presented. If the analysis of data for the study is complex, an overview of the strategy for data analysis is provided in the first paragraph, with the outline of the statistical tests that are applied and the order of their application. This section is primarily a narrative to describe the findings. It also includes the results of the descriptive and inferential statistics to support the narrative statements that are made in this section.

If a statistical test are used that are not generally available, the information regarding where the test was found and how to obtain it should be avoided. The result of any tests used to establish how the data met the requirements of the statistical tests that are used should be reported. Also report any data transformations that are applied. The result of the statistical tests is reported in a sentence format. The sentence states the effects being evaluated, whether the difference between treatment levels was statistically significant, the critical statistical use, the degrees of freedom, the value obtained for the statistics and the level of significance achieved.

After the preliminary information has been presented, the results should be reported. However, interpretation or discussion of the findings is not provided in the results section. The tables or figures that are used to present the data of the study appear only in the body of the published text and not in the body of the manuscript, where only reference to the figure is made at appropriate places. However, when referring to a figure or table, no references to its position are made. The figure is only referred to by its number in the manuscript. 6. Discussion Specific: Tie your results with previous research and theory. General: State broad implications of the results, methodological implications and directions for future research.

In this section, the results are interpreted, conclusions are drawn and the present findings are related to the previous research or theory. The structure of this section reverses that of introduction, I. E. It moves from specific research findings to general implications. It begins with a brief statement of the hypotheses; followed by statement on whether the data was consistent with the pre-experimental hypotheses. Then an integration of the findings with previous research and theory is discussed. Finally, statement on how consistent the findings are with previous work in the area. The section includes the speculation on the importance of the findings.

However, these are to be maintained within certain bounds; the interpretations must e based on the present data, data from previous research, and/or established theory. Unsubstantiated interpretations should not be made even if they make intuitive sense to the author. If the study yielded results that are discrepant from the previous work, speculation should be made on why these discrepancies emerged. Also including any problems encountered during the course of the research that might have tempered the conclusions drawn from the study. Often, methodological problems become evident only when the study is actually conducted. These problems should be communicated to the reader.