

How to write Research Report

The research and its adequacy are examined on the basis of research proposal, research summary, research abstract and the research report. The contribution of the study is judged on the basis of research report. Thus the research report is the key aspect of the research and hence the researcher has to present the report. Further it is necessary that the report stands to the expectations of the researchers and the readers. Thus it is necessary that the report is cited with reference to the general rules of reporting. APA the abbreviation of American Psychological Association is a style of citations normally used in writing the research reports, different articles of the journals, magazines and the publications. It includes references which may be In-Text Reference and the reference list. These styles and the general rules shall be discussed with reference to the reporting in the form of a research paper.

What is a Research Paper

The research paper comprises of title page, abstract, and the body followed by the references, tables, figures and the appendices. The abstract is typed on a separate page and there is no page breaks between sections in the body. The body comprises of the introduction, rationale of the study, limitations, review of related literature, the sample, methods, tools and techniques, analysis and interpretation, results, conclusion and suggestions followed by the bibliography, and the appendices which include the tables, graphs and figures, if any. The research report is typed in double space on white 8 1/2 x 11 inch paper with 12 pitch typeface. The margins are set to one inch on all sides. Every page has a header in the upper right corner with the running header right-justified on the top line and the page number right-justified and double-spaced on the line below it. The research paper disseminates the new contribution in the specific area. It avoids the repetition of the problem and saves time, energy and money.

Title Page

The title page has the centered, title of the study, the author's name, and the institutional affiliation in separate lines and centered. At the bottom of the title page

there are the words in capitals the running header, followed by a short identifying title in two to four words for the study. This running header should also appear on the top right of every page of the paper.

Abstract

The top of the page of the abstract consists of the word Abstract which is centered. The abstract written in paragraph, typed in double space and limited to 120 words is a concise summary of the study including the problem, major hypothesis, sample and population, methodology, tools and techniques, major results and major conclusions. A researcher prepares an abstract after completing his research thesis or report to communicate research findings and contribution of the work in the field of study. A research abstract in past tense is written in simple and clear language. It disseminates the new knowledge and avoids the repetitions of research studies. It is economical in view point of time, money and energy and facilitates the reader to comprehend the research work easily and quickly. It provides the basis for preparing new research papers.

Body

The first page of the body of the paper comprises of the complete title of the study which is centered. Further it includes in the subsequent pages the introduction, research design, analysis and interpretation, result, conclusion, and suggestions.

Introduction

With the title at the top, the introduction without the heading of 'Introduction,' is written in paragraph. The introduction comprises of a statement of the problem, the cause-effect relationship being studied, description of the major constructs involved, review of related literature, and objectives and hypothesis. The entire section should be in paragraph form with the possible exception of the objectives hypotheses (if any), which may be indented.

Research Design

The research design of the paper has four subsections: Sample, Variables, Methodology, and Tools and Techniques. The research design begins immediately after the introduction (no page break) and has the centered title 'Research Design'.

Sampling

It includes description of the variables, population, the sampling technique, and the sample itself. A brief discussion of external validity describing the degree of the generalisability of the results from sample to the population should be done here.

Variables

It includes the brief description of the constructs and all measures which needs to be operationalised.

Methodology

Hereby, the researcher declares the method of the study and if possible the design structure in case of the experimental study. The design structure in notation should be indented and centered. The internal validity describing the major likely threats should also be included.

Tools and techniques

The instruments used to measure the variables should be presented here in its entirety. In case of more lengthy instruments, some typical questions are presented to give the reader a sense of what will be done and the full measure shall be included in the appendix. The standard test should be cited with the reliability and validity. Further the necessary statistics should also be quoted here.

Analysis and Interpretation

Here the researcher applies the appropriate statistics and interprets it. All hypotheses under the study are subjected to the verification.

Results

The heading is centered with upper and lower case letters and then the results are indicated concisely.

Conclusions

The researcher hereby depicts the conclusions. It is related to the level of the construct and the general problem area described in the introduction followed by the suggestions for possible future research.

References

The reference citations include the citation in the text and the list of the complete reference in the reference section at the end of the report.

Reference Citations in the Text

Reference citations are the way of giving credit to the authors. Cited references appear in the text of the paper with the author's last name and the year of the publication in parenthesis. The text by the authors can be cited direct as well as indirect. The quotations can be cited directly with parenthesis as well with author as a part of the narration. Page numbers are given with a quotation or when only a specific part of a source is used.

One Author

- As Jha (2006) stated, text continues
or
text or quotation here (Jha, 2006).
- Intra personal skills highly value intellectual freedom (Kulshrestha, 2007).
(Indirect quotation with parenthetical citation.)
or
Kulshrestha (2007) identified Intra personal skills as a key value for intellectual freedom (Indirect quotation with author as part of the narrative.)

- Gandhi suggested that "Peace is the conquest of Self" (Jha, 2009, p. 174).
(Direct Quotation with Parenthetical Citation)
or
Jha (2009) explained that Gandhi suggested that "Peace is the conquest of Self"
(p. 174). (Direct Quotation with author as part of the narrative)

Two to five authors (or editors as authors)

- According to Jha and Kulshrestha (2010), text continues
or
text or quotation here (Jha & Kulshrestha, 2010).

A specific part of a work

- According to Jha and Kulshrestha (2010, p. 24), text continues
or
text or quotation here (Jha & Kulshrestha, 2010, p. 24).

A specific part of an electronic source that does not have page numbers

- Saaket (2008, Conclusion section, para. 6) concluded, text continues
or
text or quotation here (Saaket, 2008, Conclusion section, para. 6).

Reference List in Reference Section

The Reference list includes all the articles, books, and other sources used in the research. These items are entered in alphabetical order according to the authors last name; if a source does not have an author, it is alphabetized according to the first word of the title irrespective of the articles, if they are, the first word in the title. Entries by the same author are arranged chronologically by the year of publication, the earliest first. References with the same first author and different second and subsequent authors are listed alphabetically by the surname of the second author, then by the surname of the third author. References with the same authors in the same order are entered chronologically by year of publication, the earliest first. References by the same author

(or by the same two or more authors in identical order) with the same publication date are listed alphabetically by the first word of the title following the date; lower case letters (a, b, c, etc.) are included after the year, within the parentheses.

Tables

The tables are headed with 'Table #' (where # is the table number), followed by the title for the heading. Tables and Figures are typed on separate sheets at the end of the paper after the References and before the Appendices.

Figures

Figures are drawn on separate sheets at the end of the paper after the References and Tables, and before the Appendices.

Appendices

Appendices should be used only when absolutely necessary. Generally, it is used only for presentation of the tools, for description of the program or independent variable and for any relevant supporting documents which is not included in the body.

APA Style for Writing Papers

American Psychological Association (APA) style specifies the names and order of headings, formatting, and organization of citations and references, and the arrangement of tables, figures, footnotes, and appendices, as well as other manuscript and documentation features. APA style uses the author-date style of parenthetical referencing, with such source citations keyed to a subsequent list of References.

Sections and subsections

Papers or articles following the Publication Manual of the American Psychological Association (APA style) typically includes the Title Page, Abstract, Body, References, Footnotes, Tables (new page for each table), Figure captions, Figures (new page for each figure), and Headings.

APA Headings

The use of headings aids in establishing the hierarchy of the sections of a paper to help the reader. Topics within a paper that have equal importance will have the same level of headings throughout the paper. APA Style uses a unique headings system to separate and classify paper sections. There are 5 heading levels in APA. Regardless of the number of levels, use the headings in order, beginning with level 1.

Running Head

The running head cannot exceed 50 characters, including spaces and punctuation. The running head's title should be in capital letters. The running head should be flush left, and page numbers should be flush right. On the title page, the running head should include the words "Running head." For pages following the title page, the running head in all caps without "Running head" should be repeated. The word "Abstract" should be centered and typed in 12 point Times New Roman. The first line of the abstract paragraph should not be indented. All other paragraphs in the paper should be indented. The title should be centered on the page, typed in 12-point Times New Roman Font. It should not be bolded, underlined, or italicized. In APA Style, the Introduction section never gets a heading and headings are not indicated by letters or numbers. Levels of headings depend upon the length and organization of the paper. One should always begin with level one headings and proceed to level two, etc.

Headings

APA Style uses a unique headings system to separate and classify paper sections. There are 5 heading levels in APA. Thus, if the article has five sections, some of which have subsection and some of which don't, the headings should be applied depending on the level of subordination. Section headings would receive level one format whereas subsections will receive level two format. The subsections of subsections will receive level three format and so on proceeding to level 4 and level 5 headings.

Level Format

1 Centered, Boldface, Uppercase and Lowercase Headings

2 Left-aligned, Boldface, Uppercase and Lowercase Heading

3 Indented, boldface, lowercase heading with a period.

4 Indented, boldface, italicized, lowercase heading with a period.

5 Indented, italicized, lowercase heading with a period.

For example:

Research Methodology (Level 1)

Hypothesis (Level 2)

Sampling (Level 2)

Probability sampling. (Level 3)

Random sampling. (Level 4)

Stratified sampling. (Level 4)

Proportional stratified sampling (Level 5)

Non probability sampling. (Level 3)

Methods of Research (Level 2)

Citation in text

In APA Style, the Introduction section never gets a heading and headings are not indicated by letters or numbers. Levels of headings will depend upon the length and organization of the paper and should always begin with level one headings and proceed

to level two, etc. When quoting directly or indirectly from a source, the source must be acknowledged in the text by author name and year of publication. If quoting directly, a location reference such as page number(s) or paragraph number is also required.

Reference citations in text are done using parenthetical referencing. Most usually, this involves enclosing the author's surname and the date of publication within parentheses, separated by a comma, generally placed immediately after the reference or at the end of the sentence in which the reference is made. However, it is also common for the authors to be the subject or object of a sentence. In such a case only the year is in parenthesis. In all cases of citation, author name(s) are always followed immediately by a year, and years are never presented without author name(s) immediately preceding it. In the case of a quotation, the page number is also included in the citation.

Full bibliographic information is then provided in a Reference section at the end of the article. APA style defines that the reference section may only include articles that are cited within the body of an article. This is the distinction between a document having a Reference section and a bibliography, which may incorporate sources which may have been read by the authors as background but not referred to or included in the body of a document.

Single author

Format should be Author's last name followed directly by a comma, then the year of publication. When one makes the reference to the author(s) directly as a part of the narrative, then only the year (and page number if needed) would remain enclosed within parentheses. The same holds for multiple authors.

- A recent study found a possible genetic cause of narcotics (Baxi, 2007).
- Baxi (2007) discovered a possible genetic cause of narcotics.

Two authors

Authors should be presented in order that they appear in the published article. If they are cited within closed parentheses, the ampers and (&) between them should be used. If not enclosed in parentheses then expanded "and" should be used.

- A recent study found a possible genetic cause of alcoholism (Choksi & Baxi, 2008).
- Choksi and Baxi (2007) discovered a possible genetic cause of alcoholism.

Three to five authors

With three to five authors, the first reference to an article includes all authors. Subsequent citations in the same document may refer to the article by the principal author only plus "et al." However, all authors must be present in the references section.

- A recent study found a possible effect of narcotics and alcoholism on genes. (Choksi, Dave, & Baxi, 2009).
- Choksi, Dave, and Baxi, (2005) conducted a study that discovered a possible effect of narcotics and alcoholism on genes.
- Choksi et al. (2005) discovered a possible effect of narcotics and alcoholism on genes.
- A recent study found a possible effect of narcotics and alcoholism on genes (Choksi et al., 2005).

Six authors or more

The correct format is (First Author et al., Year). In the reference section, all six authors' names should be included.

- Anto et al. (2005) discovered self concept to be dependent on the gender.

Multiple publications, same author

If an author has multiple publications that the researcher wishes to cite, then a comma should be used to separate the years of publication in chronological order from the oldest to most recent. If the publications occur in the same year, the Publication Manual recommends using suffixes a, b, c, etc. (note that corresponding letters should be used in the reference list, and these references should be ordered alphabetically by title).

- Recent studies have found self concept dependent on the gender. (Anto, 2004, 2005a, 2005b).

- Anto (2004, 2005a, 2005b) has conducted studies that have discovered self concept dependent on the gender.

Multiple Publications, Different Authors

The rules for one author as above is followed and a semicolon is used to separate articles. Citation should first be in alphabetical order of the author, then chronological.

- Recent studies found self confidence dependent on the gender (Choksi, 1999; Anto, 2008, 2009; Singh, 2005)

Direct quotes

The same rules as above apply here, as such Author, Year, Page Number.

- When asked why his behavior had changed so dramatically, Mithil simply said, "I think it's the reinforcement" (Jha, 2009, p. 76).

Author is a group, no author, and anonymous author

Group Author

- For a work authored by a group, the group name is spelled. When it is long, and has a readily understandable abbreviation, it may be abbreviated in subsequent references.
- (The Women Development Cell [WFC], 1999) (WDC, 1999)

No Author

For a work with no author, instead cite the first few words of the work's entry as given in the "reference list" Usually it will be the title. If it is a title of an article or book chapter, put it in "quotes". If it is a title of a book, periodical, or report, italicize it.

Anonymous work

For a work designated as anonymous, cite the author as Anonymous

Undated work

- For undated works, note n.d.

- As Kulshrestha (n.d.) stated, your text continues **or**
Your text or quotation here (Kulshrestha, n.d.).

Citing Secondary Sources

When a text or a quotation is used as a citation from a source, which itself has used that text or a quotation as a citation from some other source then the secondary source citation is used. Hereby the book referred by the researcher is the secondary source whereas the book used by the author to cite that quotation or text is the original source. When citing in the text a work discussed in a secondary source both the primary and the secondary sources are given. In the example below, the study by Jha and Kulshrestha was mentioned in an article by Sinha.

- Jha and Kulshrestha's study (as cited in Sinha, 2010) provided a glimpse of acquiring peace in this world

In the references page, the researcher would cite the secondary source and not the original study.

- Sinha, M. (2010). Where is Peace? *Psychological Review*, 100, 589-608.

Statistics in APA

Including statistics in written text requires enough understanding and thus enough information should be included for the reader to understand the study. Needless to brief that the amount of explanation and data included depends upon the study. Following are the guidelines as per APA Style for the representation of statistical information:

- Avoid repeating descriptive statistics in the text when represented in a table or figure.
- Use terms like respectively and in order when enumerating a series of statistics; this illustrates the relationship between the numbers in the series.
- The common statistics as such the mean, t test and others need not the formula.
- The common statistics need not require references but the uncommon statistics, or the statistics used unconventionally, requires the references.

Punctuating Statistics

- Use standard typeface (no bolding or italicization) when writing Greek letters, subscripts that function as identifiers, and abbreviations that are not variables.
- Use boldface for vectors and matrices: \mathbf{V} , Σ
- Use italics for statistical symbols (other than vectors and matrices): t , F , N
- Use an italicized, uppercase N to refer the number of subjects or participants in the total sample as such $N = 620$
- Use an italicized, lowercase n to refer a portion of the sample as such $n = 75$
- Use brackets to enclose limits of confidence intervals:
89% CIs [3.45, 2.7], [-6.0, 3.89], and [-7.23, 1.89]
- Use parentheses to enclose statistical values:
...proved to be statistically significant ($p = .42$) with all variables.
- Use parentheses to enclose degrees of freedom:
 $t(39) = 6.54$
 $F(4, 75) = 3.15$

Reference list

- The APA style guide prescribes that the Reference section, bibliographies and other lists of names should be accumulated by surname first, and mandates inclusion of surname prefixes.

Graphs

- It should have titles for the X and Y axis
- It should not have outline around the graph
- It should not have minor lines on the chart
- It should not have page numbers, and should have penciled in, on the back the top and the figure caption that corresponds to it.

Tables

- It should have page numbers
- It should not have vertical lines

References

Print Publications

Books

- Author, A. A. (Year). *Title of Book*. Location: Publisher.
- Author, A. A., & Author, B. B. (2004). *Title of book*. Location: Publisher.
- Jha, A.S., Kulshrestha, S., & Chauhan, R. (2009). *Research Methodology*. New Delhi: APH Publishing Corporation.

Chapter in a Book

- Author, A. A. (2004). Title of chapter. In A. Editor, B. Editor, & C. Editor (Eds.), *Title of book* (p./pp. page number/s). Location: Publisher.
- Patel, A. (1997). Adolescence and development. In Kulshrestha, A (Ed.), *Advanced Psychology* (pp. 258-272). New Delhi: APH Publishing Corporation.

Journals, Magazines, Newspapers in Print Format

The journal title and the volume number are in italics. Issue numbers are not required if the journal is continuously paged. If paged individually, the issue number is required and it is in regular type in parentheses adjacent to the volume number.

Journals Articles

- Author, A. A., Author, B. B., & Author, C. C. (2004). Title of article. *Title of Journal, volume* (issue, when appropriate), page- number/s.
- Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Journal, xx, xxx-xxx*.

One Author

- Jha, A. S. (2008). Defeating Life: The impact on Life. *Voice of Research, 53(12), 40-45*.

- Kulshrestha, S. S. (2003). An Experimental Evaluation of Divorce. *Journal of Psychology*, 68, 43-56.

Two to Seven Authors [List all authors]

- Jha, A. S., Kulshrestha, S. S., & Patel, R. S. (2009). Physical Development in Early Adolescence. *Journal of Psychology*, 50, 348-373.

Eight or More Authors [List the first six authors, ... and the last author]

- Kulshrestha, S.S., Patel, R.S. Wolchik, S. A., West, S. G., Tein, J. Y., Coatsworth, D.,...Jha, A. S. (2000). An Experimental Evaluation of Remarriage. *Journal of Psychology*, 68, 43-56.

Magazine Articles

- Author, A. A. (2004, Month day). Title of article. *Title of Magazine*, volume (if any), page-number/s.
- Kulshreshtha, A., & Kulshrestha, S. (2009, May 23). Cognitive Development. *Science Today*, 235, 9-17.

No Author and Bracketed Descriptive Information

- The Physical Development [Letter to the editor]. (2000, May 19). *The Indian Times Magazine*, 5.

Newspaper Articles

- Author, A. A. (2004, Month day). Title of article. *Title of Newspaper*, p./pp. page number/s.
- Dubey, A. (2008, March 24). Duty and Responsibility of a Teacher. *The Times of India*, p. 6.

Newspaper Article with No Author and Discontinuous Pages

- Moral development. (2004, March 24). *The Indian Express*, pp. 1, 4.
- Generic debuts. (2000, May 19). *The Times of India*, pp. 1, 4.

Review Articles

- Author, A. A. (2004, Month day as needed). Review title [Review of the medium Title of item reviewed]. *Title of Periodical*, and publication information following format for journal, magazine, or newspaper, as appropriate.
- Jha, S. (2004, February 24). Regrets [Review of the motion picture The life of unwanted]. *The Era Bros*, 121, 66-67.

Review is Untitled

- Raval, R. M. (2007). [Review of the book The History of Medieval India]. *College & Research Libraries*, 58, 487-488.

Others

Reports, Theses

- Jha, A. S. (1992). *A Study of Creativity and its Components in relation to certain Variables*. Ph.D dissertation, Department of Education, Gujarat University

Conference Papers

Published (referenced as a chapter in an edited book)

- Kulshrestha, S.S., & Jha, A. S. (2004). An analysis of linear programming. In: A. Kulshreshtra, & R.S.Patel (Eds.), *Linear programming* (pp. 182- 91). APH Publication Corporation 2006: International Seminar conducted at the Annual Convention of the All India Association for Educational Research, Rajkot, Gujarat, India.

Unpublished more than six authors

- Kulshrestha, S.S., Kulshreshtra, A., Jha, A. S., Kulshrestha, L. S., Patel, R. S., Dubey, A., Raval, R. M., et al. (2004, August). *Enriching Curriculum through Local Wisdom* International Seminar conducted at the Annual

Convention of the All India Association for Educational Research,
Rajkot, Gujarat, India.

Voice of Research
An International Journal