

# HOGYAN ALKOSSUNK AKADÉMIAI SZÖVEGET?

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A segédanyag Szokolszky Ágnes Using Scholarly Literature in Psychology. How to find what you need, read what you have found, and how to write it up c. könyvének 6. fejezete (JATE Press, 2009)

## Chapter 6. WRITING UP YOUR PAPER

### Goals of the chapter

- To discuss academic writing skills
- To provide a brief tutorial on “how to write well”
- To review guidelines for writing research papers, review papers and essays
- To present the APA format adapted to student papers

### Sections

- 6.1 Effective academic writing
- 6.2 Writing up your research paper
- 6.3 Writing a review paper
- 6.4 Writing an essay
- 6.5 Polishing sentences and paragraphs
- 6.6 The proper use of citations and references
- 6.7 Formatting your research paper based on the APA style guide
- 6.8 Checklist for the self-assessment of your research paper

### 6.1 Effective Academic Writing

RESOURCES. Up to this point we have been dealing with skills related to finding and reading the research literature that you need. Now we will turn to the next step of writing up your paper. Papers that students are required to produce come in various types. You may need to write an essay, a review paper or a research paper. These papers differ in scope, goal, and format. However, the basic rules of style and composition are the same for each type of academic writing task.

Reading academic literature also introduces you to the art of writing academic papers, as you may have noticed. While reading published articles you learn what makes a good sentence, a good paragraph, and eventually, a good paper that meets the standards of the scientific community. The self-conscious, active, critical reading practice advocated in

the previous chapters is, in fact, an effective tool for learning to write. Though true, reading the literature is not quite enough for learning to write well. Writing is a learnable skill that you can develop by constant practice. It is something you cultivate over time, not learn in a day or so.

The rules of composition are well known among professional writers. However, there are common mistakes that less experienced writers tend to commit. Universities abroad often have Writing Centres as part of academic support services for students. In writing courses, students can learn and practise the rules of good style and composition.<sup>1</sup> One can also find excellent style manuals that serve to improve writing skills. William Strunk's 'The Elements of Style' is, for instance, a good reference book and it is also available online.<sup>2</sup> There are plenty of other reference books available in the English language that help you acquire good writing skills.<sup>3</sup> Nowadays you can also purchase software that claim to teach you how to write well.<sup>4</sup>

In psychology, the [Publication Manual of the American Psychological Association](#) is the most widely accepted content-specific guide for authors who intend to publish their papers. The APA style guide is taught to students in research methods courses internationally. The APA Manual is detailed and lengthy (the fifth edition published in 2001 is 439 pages long). Concise summaries of the APA guidelines are available on the Net and they are popular sources for students.<sup>5</sup> In this chapter we will present a concise summary of the APA format adapted for student papers. For detailed information on the APA style for manuscripts for publication, you should look at APA's online resource site or read a copy of the printed version of the APA Manual.<sup>6</sup>

Advice given in this chapter should be useful regardless of the language you write your paper in. Of course, you need to write your papers in Hungarian, and whereas reading the literature in the English language is a necessity, writing a term paper in English may seem to be an unrealistic idea. Surely writing a scientific paper in English is an advanced level professional skill that is not easy for non-English speakers to pick up, including seasoned researchers. However, if you plan to study abroad, for example as an Erasmus-, an MA or a PhD student, or you are planning an academic career, sooner or later you may find yourself in a situation where writing a paper in English is a definite requirement. Then some practice beforehand can be of great help to you. Below we offer advice that is useful for writing papers in the English language and other languages as well.

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<sup>1</sup> You can easily find course materials if you search Google for academic writing courses. See, for example: Psychology at the University of Washington. Psychology Writing Center. (n.d.). Retrieved 16 November, 2008 from <http://web.psych.washington.edu/writingcenter/index.html>  
The Adler School of Professional Psychology. Writing Courses. (n.d.). Retrieved 16 November, 2008 from <http://www.adler.edu/services/552WritingCourse.asp>

<sup>2</sup> Strunk, W. (1918 / 1999). *The Elements of Style*. New York: Bartleby. Electronic version retrieved 16 November, 2008 from <http://www.bartleby.com/141/>

<sup>3</sup> Venola, J. (2001). *Wright right! A Desktop Digest of Punctuation, Grammar, and Style* (4th edition). Berkeley, CA: Ten Speed Press

<sup>4</sup> Electronic writing course. (n.d.). Retrieved 16 November, 2008 from <http://www.electronicwritingcourse.com/>

<sup>5</sup> Encyclopedia of Psychology. Paper Writing Resources for Psychology. (n.d.). Retrieved 16 November, 2008 from [www.psychology.org/links/Resources/Writing/](http://www.psychology.org/links/Resources/Writing/)

<sup>6</sup> American Psychological Association. (1994). *Publication Manual of the American Psychological Association* (4th edition). Washington DC: APA

For additional help with APA style guidelines:

APA Style. (n.d.). Retrieved 16 November, 2008 from [www.apastyle.org](http://www.apastyle.org)

THE WRITING PROCESS. Writing a really good paper requires motivation and time. There are prerequisites, of course: an interest in the topic, a thorough (perhaps exhaustive) review of the available literature, a thoughtful research project, and last but not least a commitment to writing the text with care. Writing a paper with care requires not just commitment but also time, and it may take more time to complete than you first think. The realisation that you are running out of time when a deadline is approaching may sound familiar to you. (Yes, a deadline can be irksome, but everyone should acknowledge if weren't for deadlines nothing would ever get done!) A term paper may earn a worse grade than it could have gotten if there had been enough time for writing and revision. Remember, planning and time management is an important part of writing a good paper.

The writing process consists of several steps. You may think that some of the suggestions below are overly meticulous. Not each and every paper must, of course<sup>7</sup>, meet the highest standards. Nonetheless, only if you strive for excellence will you ever do excellent work and produce something that is worthwhile. Getting feedback from your instructor or advisor is important, but you should do as much as you can on your own.

Let us suppose you are well into your research project and you are ready to start writing. To start writing during the research process is a wise thing to do. Jotting down notes and drafting the introduction and the method section early will give you more time later on and this may be needed if have to revise your paper to a fair degree. The process of writing should involve four consecutive steps.<sup>8</sup>

The first step is **drafting**. A draft is a rough version of the paper that one writes freely, without bothering much about how perfect it is. Drafting makes ideas more articulate and it may expose questions and problems in need of further clarification. Drafting also helps avoid the so-called “writer’s block”- the anxious feeling one may have about the task of writing. The end product of drafting (and redrafting) is the final draft. Allow a break before you go on. Distancing yourself from the final draft should make the next step easier.

The second step is **revising**. Revising is the self-conscious process of looking for possible improvements in the final draft. When you sit down to revise your paper, read it through from the first page to the last in order to get the “big picture”. In your mind, look at the paper from a fresh perspective, as if you were a reader and not the author. Think about the content. Ask yourself questions like: Are the ideas clearly developed? Are major points convincingly and tightly argued? Are sections proportionately developed? What is a typical reader likely to make of it? Also think about style. Ask questions like: Is the tone appropriate? Does it sound scientific? How does it come across? To recognise errors and shortcomings in one’s own work may be difficult. That is why you should make use of checklists containing criteria for good work (such checklists are provided as you read on). In order to ‘fine-tune’ your paper, evaluate and improve individual sentences and paragraphs where you think it necessary. Doing this will result in a revised/polished draft, but this is still not the end of it.

The third step is **proofreading**, which is a final check for clarity and correctness. Proofreading is necessary because even after careful revision some errors, as well as some room for final improvement, remain. Professional proofreaders may conveniently do this job for authors in the publication process. As a student, however, you should be your own proofreader. To proofread your paper is easier if you 1. Give yourself a break

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<sup>7</sup>

<sup>8</sup> Based on....

between the time you completed your revised draft and the time you sit down to proofread; 2. Proofread your paper with a selective focus, first looking just at the spelling, then at the clarity, and so on; 3. Read the text aloud. By reading aloud you can catch mistakes that you might not notice when reading in silence.

The fourth step is **formatting**, which will bring the paper into its final form. Formatting includes everything that has to do with how the paper looks, including the title page, typeset, margins, spacing, and page order. Unless your teacher/supervisor tells you otherwise, use the standard APA formatting requirements. Below you will find an APA style template that you can use for formatting your term papers. Table 6.1 summarises the key stages of the writing process.

Table 6.1 The writing process

ACTIVITY		PRODUCT
<b>Draft</b> ▼	Write freely. Allow for a break before revision.	Final draft
<b>Revise</b> ▼	Read it through, then read the details. Evaluate and make any necessary revisions. Try to find fault with your sentences and paragraphs. This should make it more robust.	Revised draft
<b>Proofread</b> ▼	Go through it line by line to catch any remaining obvious errors and make improvements where possible.	Final version
<b>Format</b>	Follow the template provided, unless you are told differently.	Hand-in version

## 6.2 Writing up your research paper

Research papers, review papers, and essays are the most common types of papers that students need to produce during their BA or MA studies in psychology. In this chapter we will discuss each genre in turn, but the main focus will be on writing research papers since doing empirical research and writing it up is a trademark of psychology. Moreover, these research papers have a highly conventionalised structure which students must become familiar with. But before going into specifics, here is some general advice for writing papers.<sup>9</sup>

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<sup>9</sup> The points highlighted in this chapter reflect the fact that there are many writing guides specifically prepared for psychology students. These overlap to a great extent and reflect typical problems that are practically the same the world over. I have adapted the following sources:

Writing Prose. (n.d.). Retrieved 16 November, 2008 from <http://www.schepartzlab.yale.edu/Coollinkspdfs/yale-writingprose.pdf>  
 Writing a Psychology Literature Review. (n.d.). Retrieved 16 November, 2008 from <http://depts.washington.edu/psywc/handouts/pdf/litrev.pdf>  
 Aston University, Academic Writing. (n.d.). Retrieved 16 November, 2008 from <http://www.aston.ac.uk/current-students/welfareservices/studyskills/essayconts.jsp>

**THINK ABOUT THE TARGET AUDIENCE.** Writers need to write in a manner and at a level that is appropriate to the particular audience they hope to reach. The target audience of published scientific articles are peer scientists who are looking for new results and novel ideas. When you write a course paper it may seem evident that your target audience will be the instructor who assigned you the task. The instructor is, however, a proxy – s/he is representing a more general audience of teachers who seek to introduce you to the world/science of psychology. The instructor assigned you the research project and the report writing task because you need to learn skills for doing academic research and writing. In the paper demonstrate that you have mastered these skills at the required level. But do not assume that the teacher knows the topic so that you need not explain concepts or ideas. Assume instead, that beyond the instructor, your audience includes interested peer students – readers who know something about psychology but not about the specific topic. For them you need to define and explain concepts, and cover background knowledge that is relevant to the specific topic.

**AVOID THE ROYAL “WE” BUT DO NOT BE SUBJECTIVE.** According to traditional rules, academic writing should be impersonal. The author distances himself/herself from the text in order to underline the objective nature of what has been written. Here s/he avoids the personal pronoun “I” and uses the “royal we” (pluralis majestatis). However, the “royal we” is not favoured anymore. Without doubt, empirical research is typically conducted by a team of researchers today and there are very few empirical papers written by a single author. Use the first person singular when you are the single author of your paper. Speak for yourself, not for a fictitious group.<sup>10</sup> At the same time, try not to be subjective. In a research report do not use a sentence that, say, starts with “I feel” or “I think” (although such terms might be proper in an essay). Such a vague sentence would signal not just objectionable subjectivity, but probably an unsupported opinion as well.

**DEFINE YOUR CONCEPTS AND USE THEM CONSISTENTLY.** Psychology is full of special constructs (ego-strength, stigma consciousness, template matching, couple resilience, to mention but a few), but psychology is also notorious for the frequent lack of a general consensus of its terms. The meaning of scientific terms may change over time or may be used by authors in an idiosyncratic manner. So be consistent when using key terms in your paper. Define all non-obvious concepts to make them clear to the reader. Once you have introduced the terms you will use in your paper, use them consistently throughout, even at the risk of being repetitious. Synonyms often connote slightly different meanings and they may endanger conceptual clarity. Remember that in a scientific paper repetition is better than confusion.

**EXPLAIN ACRONYMS.** Your paper must be self-contained; the reader should find in the text all the definitions, abbreviations and explanations that are necessary to understand what is being said. When you use acronyms, explain them. (An acronym is a sequence of capitalised letters comprising the initial letters of the words like BMI – Body Mass Index and ADHD – Attention Deficit Hyperactivity Disorder) When you first use the concept in the paper you could write it out in full, define it, and introduce the acronym in parentheses. After, you can use just the acronym to save space.

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Plonsky, M. (2007). Psychology with style: A hypertext Writing Guide (Version 5.014). Retrieved 16 November, 2008 from <http://www.uwsp.edu/psych/apa4b.htm>

<sup>10</sup> Here I decided to use the “royal we” in order to induce the feeling that I, the author, and you, the reader, are traversing the road of knowledge and wisdom together.

**WRITE CLEARLY AND CONVINCINGLY.** At the expense of repetition, let us emphasise the importance of grammatical and conceptual clarity of your paper. Develop your argument in a logical, systematic, and transparent manner. Closely examine the idea and how you expressed it in words; your written words may not reflect exactly what you had in mind. Do not forget, as one tutorial rightly remarks, that the reader reads your paper, not your mind.<sup>11</sup> Avoid empty, tautological, general statements. Use specific language and support your arguments with evidence and concrete examples.

**CUSTOMISE THE PROCESS OF WRITING.** Tailor the writing process so that it best fits your individual writing style. For the first draft, it may be a good idea to write about the hypotheses, the methods and the results, followed by a sketch of the introduction and the discussion. If you have trouble with one section, leave it for a while and try another. Start out with a working title, and finalise it later on. Remember to allocate sufficient time for editing and revising your first draft.

**BE CLEAR ON REQUIREMENTS.** Make sure that you know exactly what you are expected to do and hand in. In this chapter an APA-based format will be offered which is generally followed by course instructors at various universities and psychology programmes. However, individual schools and instructors may have special requirements, and it is up to you to find out about them.

**FIND A GOOD TITLE.** Try to find a working title right at the beginning and finalise it by the time you finish your paper. The title should succinctly describe the content of the paper. A good title should also raise interest in the reader's mind. Avoid vague and general titles (*"An investigation of short-term memory processes"*). The title itself should be self-explanatory. It should identify the main variables and the main issue under investigation. (E.g. *"Effects of optimism, pessimism, and trait anxiety on ambulatory blood pressure and mood in everyday life"*).

**WRITE THE ABSTRACT WITH CARE.** It is a good idea to write the abstract last. Important: Do not treat the abstract as part of the paper! It comes first, right after the title, but it is not an introduction to the paper in any sense. Decide on your key words once you have written the abstract. Find those 3-6 terms that best capture the content of your paper.

**WRITING THE INTRODUCTION.** The Introduction gives the reader the first impression of your work and if the first impression is favourable the reader will read on with positive expectations. It is difficult to write because it is the most complex section of the paper: it should give the reader a clear sense of what has been done, why, and how to certain degree (see Section 5.2). The Introduction places your research into perspective and sets the stage for describing the specific methodological details and findings of the study.

What you have to accomplish in the Introduction essentially reduces to three main points: introduce the problem, develop the background and the justification (rationale) of the study, and say what you did in a nutshell. The Introduction should give answers to the following questions: *What is the problem under investigation and why is it important or interesting? How does the study relate to (and perhaps go beyond) previous work in the field? What is the specific goal of the study, the hypothesis tested and the design used?* When writing the Introduction, consider the following points:

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<sup>11</sup> Baron, J. (1991). How to write a research report in psychology? Retrieved 16 November, 2008 from <http://www.sv.uit.no/seksjon/psyk/labrep.htm>  
With help from R. Rescorla and an appendix by M. Seligman.

Kick off the paper with a lead sentence that raises interest. State the research question clearly and explain why it is interesting. The introduction should have a “funnel” structure: it should move from the general to the specific. Begin with broad theoretical and practical considerations of the problem in question and gradually proceed to the specific questions of the study. Start developing the rationale (justification) of the study by showing (perhaps also illustrating) why the problem is meaningful and significant.

Develop the rationale further by reviewing the relevant literature. A review paper would require an extensive literature review, but for a research paper it is sufficient to review the main papers that are directly relevant to the chosen topic. Do not describe the cited studies in detail, but cover just those points that are relevant to the arguments you will make. Studies are often relevant due to inconsistent or contradictory findings, inconclusive evidence, or a possible confusion in earlier studies. Relevancy can also be demonstrated by showing how much of your work logically follows from a theory.

When discussing the literature, give credit to the sources you have relied on and use proper citations. (How to make proper citations is discussed in Section 6.3 below). Do not quote other authors verbatim (unless you have a special reason for doing so), but paraphrase their ideas instead.

The rationale should lead up to the specific goal of the study and your hypothesis (or hypotheses). A hypothesis is a clear and precise statement that offers a testable relationship between variables. Note, too, that not just the statement of the hypothesis should be clear but also its justification. What it says should sound quite reasonable and rational. You should explain the way it relates to other studies and what its empirical and theoretical grounds are. If you have several hypotheses, each should have a clear rationale. Do not mention the null hypothesis here, as it is a purely statistical notion.

The Introduction should be rounded off with a statement of how you approached your question (an outline of the design and, if necessary, reasons for why you chose this particular design for the study). Begin telling the reader what you did in the study and why, but do not go into specific details. At this juncture you can point out what is new or special about your particular contribution (great scientific discoveries are welcome, but not expected).

**WRITING THE METHOD SECTION.** In the method section you have to elaborate on how the study was carried out. Based on the method section, the reader should be able to understand and evaluate all relevant methodological details of the study and its degree of generality. The method section should give answers to the following questions: *How many participants were there, who were they, and how were they selected? What was the design? What were the research variables and how were they implemented? What was the method/procedure used for gathering data?*

It is often difficult to decide what information to include and the level of detail. If in doubt, consider the relevance of the given piece of information for the study (e.g. the socio-economic status, SES, of the participants may be important in one study but not in another). As a rule of thumb, giving overly detailed information is better than giving inadequate information. In the standard case the method section comprises subsections (marked by subheadings) on participants, equipment, and procedure. Use standard subheadings in the method section of your study where suitable, and customise

subheadings if you think it reasonable to do so (e.g. you may lump together parts about the equipment and procedure used, or insert a “measurements” subheading).

When writing about the participants give all the relevant details on recruitment and selection processes, the total number of participants, and the number of participants in the given conditions. Tell the reader about participants who did not complete the study (lost through attrition). The gender and age of participants should also be reported. Be specific when providing age ranges. Other demographic characteristics of participants - such as ethnic background, health status, and level of education - should also be reported if they are relevant for the interpretation and the degree of generality of the findings.

When describing participants or groups of participants in the study avoid biased language or potentially offensive labelling and be receptive to the individuality of people in the study. While earlier people in psychological studies were called “subjects”, the sensitivity of scientific language has changed and today the term “participants” is preferred. When describing people with disabilities, do not use labels such as “the amnesiacs”, “the schizophrenics”, “the LDs”. Instead, use adjectival forms (like “amnesic patients”) or say “people diagnosed with schizophrenia”. The latter solution currently is preferred when describing people with disabilities.<sup>12</sup> Do not contrast lesbians with “normal women” or autistic children with “normal children”. Use neutral terms for labelling groups (“heterosexual women”, “high language ability children”, and so on).

In ethically sensitive studies describe how you gained informed consent (informed consent being the expressed willingness of the participant to participate in a study based on the clear understanding of the procedure). Also, describe what measures you took to protect participants from potential harm or inconveniences, if there were any in your study.<sup>13</sup>

When writing on the design, describe all the necessary details on treatment conditions, trials, assignment to treatment conditions, variables including their implementation, and control measures (randomisation, counterbalancing, etc.). The reader should have all the relevant information on the specific methodology you have chosen to carry out for the study.

Give information about the equipment (usually some kind of computer set-up) and the materials used (stimuli such as pictures, computer displays or sound effects) in a separate subsection only if the equipment or materials played a central role in the study, or complex equipment was used. Otherwise put such information in the “Procedure” subsection. Do not just give a list of the equipment used, but describe what each piece did and how it was used.

Describe the procedure in chronological order, and say what the participants were actually doing at a given time. Summarise or paraphrase instructions but give the exact wording if this has any significance.

**WRITING THE RESULTS SECTION.** The main idea of the results section is that you tell the reader in sufficient detail what you actually found: you present your data and a statistical treatment of it. You can present your data in terms of narrative description, descriptive statistics, inferential statistics, and visually in tables and figures. The results

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<sup>12</sup> American Psychological Association. (1994). *Publication Manual of the American Psychological Association* (4th edition). Washington DC: APA

<sup>13</sup> Szokolszky, Á. (2004). *Kutatómunka a pszichológiában*. Budapest: Osiris



should relate directly to a hypothesis. The results section should give answers to the following questions: *What differences were significant? What evidence did the researchers provide for each hypothesis? Was each hypothesis fully supported?*

First, briefly sum up the results, then report the data in sufficient detail to show to what extent they support your hypothesis. Describe all relevant results, including those that seem to contradict the hypothesis. Report interesting and relevant findings even if they were not part of the original hypothesis. Do not interpret the data and do not discuss the implications of the results in this section. Do not include individual scores or raw data, unless you have good reason for doing so.

With an analysis based on very small samples, you may give all the data in the form of a table or figure.

In the narrative description present findings objectively and realistically, and avoid overstatements and comments. Avoid statements like *“Unfortunately, the effect was insignificant”* or *“this is very important because...”*.

Insert the tables and figures in the text close to where they are needed and in each case tell the reader when to look at the figures and tables (*“As shown in Figure 1 ...”*). Figures and tables should be labelled consecutively and separately. Each one should have a caption explaining its content. Supply column headings and labels on axes to allow readers to understand the table without consulting the narrative description, but do not forget that tables and figures are just supplements to the narrative description.

Statistical presentations should contain descriptive statistics as well as inferential statistics. Include descriptive measures that give a basic indication of the treatment effect (or the lack of it) and the size of the effect. Where you report means, always include an associated measure of variability. Should you have observers in the study, include data on inter-rater reliability. When reporting inferential statistics give the name of the test (e.g., *t* tests, *F* tests, chi-square), the degrees of freedom, the magnitude or value obtained from the test, the direction of the effect and the chosen level of significance, such as  $p < .05$  or  $p < .01$ . When reporting an interaction effect do not just state that the interaction was significant, but explain why. For example, a bad version is: *“The interaction between drug and weight was highly significant ( $F(2,31)=14.56, p<.001$ ).”* The right version is: *“Small doses of the drug put small rats to sleep right away, while big rats stayed awake even with very large doses ( $F \text{ weight} \times \text{dose} (2,31) = 14.56, p<.001$ )”*.<sup>14</sup>

**WRITING THE DISCUSSION SECTION.** In the discussion section you should evaluate and interpret the findings, especially with respect to the original hypothesis. Do not think that the results will speak for themselves and that after presenting them your job is over. Even if the results may speak for themselves to some degree, you have to spell out their meaning in a narrative form. You can explain the key implications of the results, anticipate counterarguments and alternative explanations, reflect upon the methodology used, discuss whether they can be generalised, and so on. In the discussion section you should relate the discourse to the original rationale of the study and its theoretical background, thereby creating a balanced framework. The discussion section should give answers to the following questions: *What do the results mean? Are there possible alternative interpretations of the results? What practical or theoretical conclusions can*

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<sup>14</sup> Baron, J. (1991). How to write a research report in psychology? Retrieved 16 November, 2008 from <http://www.sv.uit.no/seksjon/psyk/labrep.htm>  
With help from R. Rescorla and an appendix by M. Seligman.

*be drawn?* When the discussion is relatively brief and straightforward, you may combine it with the results in a “Results and Discussion Section”.

You may open the discussion with a clear statement of the support or non-support for your original hypothesis. Unexpected findings or negative findings should also be discussed. Should you have a complex results section, you may begin the discussion with a summary of the results and then explain/interpret what you think these results mean. Discuss similarities and differences between your results and the work of others. Examine to what extent the study helped to resolve the original problem and draw inferences from the results.

Use appropriate words when describing the relationship between your results and the conclusions. Do not say e.g. “*the findings proved that*”; “*prove*” can be used in mathematics, but not in the context of psychology research. Instead of “*proves*” use a word like “*suggests*”, “*supports*” or “*indicates*”. Evaluate the findings realistically and cautiously, and avoid overstatements. Failing to find a significant difference does not mean there was no difference, but rather that there was no empirical evidence of a difference.

Be cautious with generalisations: your conclusions should not go beyond what the sample(s) would warrant. Be realistic and honest about what can be and what cannot be concluded on the basis of your data.

Discuss the limitations of the study, point out where results are inconclusive, and suggest ideas for further research, where appropriate. If the study has not yielded a clear-cut answer to the hypothesis, try to find reasons for it and spell out what needs to be done.

End the paper with a general statement that “stays with the reader”. Make sure that the final paragraph is effective and that it summarises the main message of your paper.

### **6.3 Writing a review paper**

A review of the literature is a constituent part of both a research report and a review paper, but the latter is not just a longer version of the former. In a research report a review of the literature is part of the rationale of the concrete study. The reviewed literature is limited to those studies that are directly relevant to the research question, and the focus is on how the study relates to or goes beyond previous work in the area. This review is not only selective but also condensed: it highlights points pertinent to the particular study.

The focus of a review paper is the literature itself. More precisely, the goal is the clarification of a point based on observation and the critical analysis of the literature. Authors write review papers because they notice important methodological or conceptual problems, tendencies, contradictions and inconsistencies. These points become clear when a large amount of the literature is under scrutiny, so review articles usually present a “big picture” of a given research area.

When students are asked to write review papers they are typically not expected to write “grand reviews”. Review paper assignments are meant to be exercises in the critical analysis of the literature. They should demonstrate that you are thoroughly able to understand, describe, interpret, relate and evaluate ideas and research findings based on a

survey of the literature. Review papers are also good for becoming acquainted with the literature of a given topic. Thus, writing a thorough review paper can be a great preliminary exercise for doing research in the topic, and eventually, to writing a substantial empirical paper. An in-depth comprehension of the reviewed literature is vital when writing a review paper. Once you have your articles, you must read them carefully and understand their implications before you get down to writing. When writing a review paper, keep the following guidelines in mind:

**WRITING THE INTRODUCTION.** Introduce the problem in question, tell the reader why it is interesting or important, and what you would like to achieve in the paper in concrete terms. (E.g. *“In this paper I will describe, compare, and evaluate studies that represent two different approaches to the study of verbal development of children. ...”*; *“In this paper I will survey recent research studies on animal-assisted therapy for depression. ...”*). You can use the “funnel” structure: move from the general to the specific. Begin with a broad consideration of the problem being investigated, then turn to the specific things that you want to discuss and analyse.

Both the quality and quantity of the reviewed items are important questions. According to general course guidelines, a short literary review generally requires about 5-15 articles and is about 10-15 pages long.<sup>15</sup> (Always check with your instructor on course guidelines.) The selection of the articles, along with the major points of analysis, must be done with care. Although finding the right articles can be a challenge, in a review article it is especially important to use primary sources.

**WRITING THE BODY TEXT.** Find an organising theme that will help you define how you will structure the body text. The organising theme could be, for example, a controversy in an area, or differences between a theoretical or methodological approach, where you first discuss the studies done on one side, discuss the studies done on the other side, then draw some conclusions.

Use headings and subheadings to structure the paper in a meaningful way. Headings and subheadings should be specific and they should delineate a clear and logical flow of structure.

Strike a balance between description and interpretation. In a review paper both the descriptive and the evaluative elements are important. Describe studies in an unbiased, focused way, keeping the main theme in mind. But a review paper requires much more than mere description. A description of the details will serve to support interpretative statements; if you jump into interpretation too early, without showing what it is based on, your paper will not sound convincing. The dictionary meaning of interpretation is *“to explain to oneself the meaning of something”*; or *“an intellectual process in which you select, gather, and reassemble information and evidence within the framework of your own ideas”*. Comparison is often at the heart of interpretation; you should identify the factors and dimensions with which you can compare the findings and ideas you discuss.

Paraphrase rather than quote. As I said before, in scientific writing paraphrasing an author's idea is more common than using direct quotes; this holds for review papers as well. Use direct quotes if you want to use the author's words as part of an argument.

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<sup>15</sup> See, for example:

Writing a Psychology Literature Review. (n.d.). Retrieved 16 November, 2008 from <http://depts.washington.edu/psywc/handouts/pdf/litrev.pdf>

WRITING THE CONCLUSIONS. Place your body text into the framework of the introduction and the concluding sections. End your paper by revisiting the major themes of your introduction, and by highlighting the most important ideas or conclusions. Make sure you have accomplished what you said you would do in the Introduction.

## 6.4 Writing an academic essay

An essay is a short piece of writing that discusses, describes or analyses a topic.<sup>16</sup> Essays come in many types, including academic and non-academic essays. Non-academic essays include, for example, admission essays, literature essays, and informal personal essays. An **academic essay** is a short work where the author reflects upon a scientific topic and expresses and analyses ideas and evidence related to that topic. Unlike a research report or review paper, an essay offers more room for personal views on a topic. Although academic essays allow the presentation of the writer's own perspective, this is done in a factual and rational manner, where statements are supported by evidence, references to the literature, and convincing arguments. Hence the point of an academic essay is analysis, evidence, and sound reasoning.

TYPES OF ACADEMIC ESSAYS. There are various types of academic essays<sup>17</sup>. An **expository essay** presents other people's views, theories or research, completely and fairly. Expository writing elucidates the subject in detail, apart from argument or evaluation. Such writing conveys information or introduces and analyzes novel or complex ideas. An **argumentative essay** promotes an argument in favour of a theory, hypothesis, or point of view about some phenomenon in the light of competing arguments and explanations. This kind of essay makes a point and substantiates it by critically reviewing the literature and drawing conclusions. A **comparison essay** compares and contrasts ideas, positions, interpretations, theories, or phenomena. Instead of simply listing the similarities or differences, a well-written comparative essay makes a clear point by the comparison. A **critical essay** describes a point of view, an article, a book, or a theory, and then develops an evaluation of it. "*Critical*" means "*detached evaluation*", where positive as well as negative remarks can be made regarding the coherence of the argument, the completeness of the data, and so on. A **definition essay** explains what a certain term means, or what certain authors mean by that term, and develops a conclusion.

In higher education, academic essays are used to test a student's ability to address scholarly topics in an organised, intelligent way, and judge their comprehension and integration of the study material. In an essay assignment (or on an essay exam) students are typically asked to explain, comment on, or assess a topic. Writing an essay forces one to think about the topic, relate it to other knowledge and synthesise this information. If you are given an essay assignment, follow the guidelines below.<sup>18</sup>

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<sup>16</sup> Essay Writing Center. (n.d.). Retrieved 16 November, 2008 from <http://essayinfo.com/essays/>

<sup>17</sup> Essay Writing Center. (n.d.). Retrieved 16 November, 2008 from <http://essayinfo.com/essays/>

<sup>18</sup> There are plenty of internet sources that show you how to write a good essay. The present section has been adapted from:

University of Kwazulu-Natal, School of Psychology, Style guide. (n.d.). Retrieved 16 November, 2008 from [www.psychology.unp.ac.za/Documents/Style%20guide%202002b.pdf](http://www.psychology.unp.ac.za/Documents/Style%20guide%202002b.pdf)

**DO A TOPIC ANALYSIS.** Topic analysis means that you find the key words in the title of your essay and thoroughly understand them and how they relate to each other. What is expected of you, for example, when you have to write an essay with the title “*An Overview of Psychoanalytical Theories and Theorists*”? You have to define and interpret the term “psychoanalytical”, decide what theories and theorists to include and what to do with them (describe, interpret, relate them to each other). Given the title “*The credibility of the Mozart effect*” you have to highlight the controversial state of the evidence, analyse the use of terminology (various uses of the term “Mozart effect”), critically reflect upon research on the Mozart effect, and perhaps discuss the Mozart effect in a wider context after it came into the public eye.

**REVIEW THE LITERATURE.** Reading, reviewing, and referencing a well-selected body of literature is an important part of essay writing, but in this case you may rely on secondary and tertiary sources as well. An essay allows for personal reflections, but each statement must be argued and should rest on a defensible argument or have some grounds. Academic conventions for citation and referencing are as much a part of essays as other academic genres.

**MAKE AN OUTLINE.** Once you have considered what points you wish to cover, what literature to use, and what lines of arguments to make, it is advised that you organise your ideas and make an outline before you start writing. The outline contains the headings and subheadings that reflect the central thoughts of your paper. Going from the general to the specific (the “funnel structure”) is generally recommended for an essay structure.

**DEVELOP A STRONG THESIS STATEMENT AND A GOOD INTRODUCTION.** The introductory paragraph should grab the reader's attention and tell the reader what the paper is about. The Introduction should contain a strong **thesis statement**: a brief sentence presenting the main point of an essay. A thesis statement distills the most important idea into a sentence or two, indicates the point of the discussion and takes a stand, thereby guiding the reader to the author's argument and position.

You may begin right away with a clear statement that tells the reader what the essay will be about and what you intend to say. “*In this paper I will examine the idea of the ‘selfish gene’. I will argue that ...*” “*In this essay I will explore the controversy surrounding .....*”. Or you may use some kind of “attention grabber” to start with (like an interesting observation you have made or a challenging idea in the form of a question). The Introduction should include a short problem and concept definition, a summary of what has been written on a topic, and why you yourself consider the topic important.

**DEVELOP YOUR ARGUMENT IN THE BODY TEXT.** The body text contains a well-developed chain of key ideas, supporting evidence and explanation. Make sure that the paragraphs have a logical flow, that arguments are coherent and relate to the main topic, and that your key points are covered in sufficient depth.

Be careful to distinguish between theory and data, and separate opinion from fact. Avoid vague statements, use specific language and support your arguments with evidence and concrete examples. Watch your style; even though personal reflections are allowed, avoid sentences that start with “*I feel*”, as they may suggest unsupported statements.

DO NOT FAIL TO WRITE CONCLUSIONS. In the final section concentrate on “pulling together” what you have accomplished in the paper. Restate the main points and relate the discussion to points covered in the Introduction. Discuss open questions and identify lines for further study.

## 6.5 Polishing sentences and paragraphs

WRITING EFFECTIVE SENTENCES. A good paper consists of well-written sentences and well-written paragraphs, but sentences and paragraphs do not usually achieve their final form in the first draft. When you start writing, just let your sentences flow. Once you are done, however, take a second look and try to find fault with your sentences. Treat each sentence as important, lead or key sentences as even more important. Try to implement the following guidelines for writing effective sentences and apply the troubleshooting checklist.<sup>19</sup> That is,

**Keep your sentences conceptually clear and tight.** Vigorous writing is concise. Maximise the meaning of your sentences by finding the best words to convey the intended meaning. Watch out for unintended meaning; check whether your sentences really express what you have in mind.

**Use short, direct sentences to convey important points.** A sentence should not be unduly complicated and it should not contain unnecessary words. The APA Manual refers to this maxim as the “economy of expression”. Delete needless words and empty phrases. Consider whether breaking a long sentence into two would sound better.

**Keep related words together.** The position of a word in a sentence shows its relationship to other words. You should, therefore, bring together the words that are related in thought.

**Avoid ambiguity of reference.** Ambiguity of reference occurs when it is not obvious to whom or to what the statement refers to. In the sentence “*Writers wish to avoid ambiguity and achieve smooth expression, which is not easy.*” the referent of “which” is ambiguous. Most ambiguity of reference problems result from the use of pronouns (such as “it”, “that”, “this”). In scientific writing it is usually better to use important words redundantly than risking being unclear. Avoid vague references such as “this” (e.g., “this illustrates” should be “this experiment illustrates”; “*Writers seek to avoid ambiguity and achieve smooth expression. Avoiding ambiguity is not easy.*”

**Pay special attention to lead sentences.** The first sentences of each section, and the first sentences of each paragraph, are the most important sentences. They should state your main points in a plain and forceful way. Vague modifiers (“almost”, “quite”, “rather”, “very”) and introductory “that” clauses (e.g. “*Thus we can see that ...*”; “*We must agree that ...*”) make sentences weak and wordy. Select nouns and verbs that need no extensions and qualifications.

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<sup>19</sup> Based on ...

For more advanced writing skills, consult other sources. See, for example: Writing Prose. (n.d.). Retrieved 16 November, 2008 from <http://www.schepartzlab.yale.edu/Coollinkspdfs/yale-writingprose.pdf>

**Vary the length of your sentences.** The maxim of brevity does not mean that you should not use longer sentences at all. The right proportion and sequence of short and long sentences gives the text its proper rhythm.

**Pay attention to sentence links.** One sentence should lead clearly and smoothly to the next. One way of achieving this is by signalling in advance. Certain words and phrases, for example, enable the reader to predict the type of information that will follow. (E.g. the sentence “*Tremendous biological diversity presents a problem*” signals that the next sentence will proceed to elaborate on the problem. When it is otherwise, the expectation of the reader will not be fulfilled.) Other signals are sentence connectors such as “moreover”, “although” and others, which show in what way two pieces of information are being linked. Another way of having a smooth transition is by chaining, when an idea brought up at the end of one sentence is developed at the beginning of the next.<sup>20</sup>

**Use proper “psychologese” and avoid slang.** Do not use colloquial words in scientific writing. Use the accepted scientific terms and expressions of psychology (write “psychologese”).

**Make sure that your grammar and spelling are both alright.** Make sure your sentences are well formed. Correct grammar and spelling are basic requirements. Use the spell-checker on your computer as an aid.

#### **Checklist for sentences**

1. Is the sentence conceptually clear?
2. Is the sentence concise and direct?
3. Are related words kept together?
4. Is every referent clear?
5. Is the lead sentence forceful?
6. Are words correctly chosen?
7. Are sentences smoothly linked?
8. Are the grammar and spelling aspects OK?

WRITING EFFECTIVE PARAGRAPHS. The paragraph differs from a word or a sentence in that it has no obvious counterpart in spoken language. The paragraph is a convention of the written word, and since most of us have no innate “ear” for paragraphs, we need to strive to perfect an “eye” for them.<sup>21</sup> In addition, new forms of electronic written communication (email, SMS) have tended to disintegrate our sense of what a paragraph is.

A paragraph was defined in Chapter 4 (Section 4.5) as a series of related sentences organised around a main idea. The main idea is expressed in the topic sentence, although sometimes there is no topic sentence in a paragraph. Paragraph structure is typically deductive, inductive, or mixed. A paragraph should contain an amount of material that the

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<sup>20</sup> Aston University, Academic Writing. (n.d.). Retrieved 16 November, 2008 from <http://www.aston.ac.uk/current-students/welfareservices/studyskills/essayconts.jsp>

<sup>21</sup> Writing Prose. (n.d.). Retrieved 16 November, 2008 from <http://www.schepartzlab.yale.edu/Coollinkspdfs/yale-writingprose.pdf>

Other source:

Research and Argument: Tools for Teachers and Students. Editing and Proofreading. (n.d.). Retrieved 16 November, 2008 from <http://karn.ohiolink.edu/~sg-ysu/proofed.html>

reader is supposedly able to read and comprehend with one continuous effort. Paragraphs perform a variety of functions (they can introduce an idea, elaborate an idea, define a term, compare and contrast, give an illustration of something, analyse, describe, narrate, explain, and so on). Because of this diversity of function, paragraphs greatly vary in length and complexity. Try to consciously apply the following guidelines for writing effective paragraphs and use the troubleshooting checklist for revision.

**Keep your paragraphs conceptually clear and coherent.** Effective paragraphs are focused and coherent. Keep one, conceptually clear key idea in focus. In other words, be clear on what the key idea of your paragraph is and do not try to cram other key ideas into one and the same paragraph. The paragraph should only contain information relevant to the key idea.

**Take care with long paragraphs.** Long paragraphs may be long due to lack of focus (but this is not always so). Keep your paragraphs tight by keeping just one key idea in focus.

**Develop your paragraphs sufficiently.** Do not make your paragraphs ridiculously short. The insufficient development of a paragraph is a frequent problem in students' papers. A paragraph should be long enough to contain a fully formed train of thought, but short enough for the reader to comprehend it as one unit.

**Use the deductive structure in lead paragraphs.** The deductive structure (when the topic sentence comes first) is the most direct way of conveying the key idea. Opening your paragraph with the topic sentence lets the reader discover the purpose of the paragraph right away. This structure is especially effective for airing new ideas and arguments.

**Vary paragraph structure.** Carefully insert the topic sentence to define paragraph structure. As we mentioned before, a topic sentence can come first, last, or in the middle of the paragraph. Vary the paragraph structure to avoid monotony.

**Pay attention to paragraph transitions.** The beginning of each paragraph is a signal to the reader that a new part has been reached in the development of the topic. The connection between the new paragraph and the preceding one needs to be transparent; the same goes for the subsequent one. Needless to say, paragraphs must be integrated into the larger logical scheme of the argument.

**Develop ideas in a logical, systematic and clear manner across paragraphs.** Make connections, transitions and references easy to follow.

### **Checklist for paragraphs**

1. Is the paragraph conceptually clear and coherent?
2. Is it too long?
3. Is it sufficiently developed?
4. Do lead paragraphs have a deductive/logical structure?
5. Is the paragraph structure varied?
6. Are paragraph transitions smooth and clear?
7. Are ideas logically and clearly developed from paragraph to paragraph?



## 6.6 The proper use of citation and referencing

A **citation** in the present context is an in-text reference to a work (e.g. book, article, web page) that has been used by the author. It gives credit to the source of information and provides details for identification right in the body text, next to where the information has been used. A **reference** is, on the other hand, an item that provides information on the works cited in the body text, listed alphabetically by author. Citation and referencing have strict rules laid out in the APA Publication Manual. In this section the most important rules are summarised. The most important rule is, however, that you should **avoid plagiarism** by giving due credit for the information source. Always give appropriate credit to the intellectual works of others, both when you quote and when you paraphrase.

The authoritative source that presents up-to-date conventions concerning referencing electronic material is always the latest edition of the Publication Manual of the APA. The Manual discusses citation and referencing at great length (the fourth edition sets up rules for 77 cases, including rules on how to reference software programs, video material, music recordings and television broadcasts). Next we will focus on a set of cases that are quite common.<sup>22</sup>

THE BASICS OF IN-TEXT CITATIONS. In psychology, in-text citations are given in parentheses and they typically include the last name of the author(s) and the year of publication. They are placed in the text right after the idea or work cited. Citations have several functions beyond avoiding plagiarism: they support statements by citing empirical work or theories; they identify the most relevant items of the literature in the topic; they identify work that represent certain views, theories, or controversies; they direct the reader to background information, such as review papers on the topic; they display verbatim quotes. Observe closely in the following excerpts below at what points, to what end, and in what manner citations are used:

Table 6.2 Sample excerpts demonstrating the practice of citation

<p>1. As research on divorce and children's adaptation has accumulated, there has been a gradual shift in emphasis from family structure to family process (Emery, 1988; Emery, Hetherington, &amp; DiLalla, 1984). That is, events that accompany marital dissolution, rather than the event of divorce per se, have been identified as 'potentially more salient correlates of children's adjustment (Amato &amp; Rezac, 1994; Camara &amp; Resnick, 1988; Emery, 1988; Fauber, Forehand, Thomas, &amp; Wierson, 1990; Haurin, 1992). Longitudinal investigations of divorced families (Hetherington, Cox, &amp; Cox, 1979, 1985; Wallerstein, 1991; Zill, Morrison, &amp; Coiro, 1993) have provided particularly strong support for this focus on family process. .... Although for many years clinicians have postulated an association between parental conflict and maladjustment in children (Baruch &amp; Wilcox, 1974; Minuchin, 1974), empirical attention to the effects of parental discord on children has increased only in the last two decades. From these recent controlled studies and from earlier reports</p>	<p>Citations support the claim that there has been a change in research focus.</p> <p>Citations identify empirical studies in order to make a point.</p> <p>Citations document earlier postulations by others.</p> <p>Citation directs the reader to</p>
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<sup>22</sup> American Psychological Association (1994). *Publication Manual of the American Psychological Association* (4th edition). Washington DC: APA

<p>of "broken" families, interparental conflict has been identified consistently as major correlate of behaviour problems in children across a wide array of family structures and settings (for reviews, see Davies &amp; Cummings, 1994; Erel &amp; Burman, 1995; Grych &amp; Fincham, 1990).<sup>23</sup></p>	<p>reviews of recent studies making this point.</p>
<p>2. To the functional systems of neuronal activity that construct our experiential world (model), dreaming of perceiving or doing something is equivalent to actually perceiving or doing it. (Stephen LaBerge, 1990, p. 124) ... Dreams—the nocturnal hallucinatory worlds we roam night in and night out—are intuitively an important type of conscious mental phenomena. Curiously enough, none of the recently proposed accounts of consciousness (e.g. Jackendoff, 1987; Baars, 1988; McGinn, 1991; Dennett, 1991; Searle, 1992) really examines dream-ing or the new results of dream research. The dream researcher David Foulkes (1990) has made an attempt to connect empirical dream research with the current cognitive theories of consciousness, but of the contemporary philosophers of mind, Patricia Churchland (1988) is the only one who has suggested that dream research is a domain highly relevant to consciousness... ... Daniel Dennett (1976, 1979) returned to the question of whether or not dreams are experiences. He concluded that "it is an open, and theoretical question whether dreams fall inside or outside the boundary of experience" (Dennett, 1976, pp. 170-171).... ... Dream researcher J. Allan Hobson's (1992) account of brain actual (?) during sleep is quite opposed to Dennetts:</p>	<p>Citation of a paraphrased statement.</p> <p>Citation points out studies that fail to do something.</p> <p>Citation points out authors making theoretical claims.</p> <p>Citation for paraphrased ideas, then of a brief quote.</p>
<p>Activation level ... determines the energetic "power" of the system to process information of whatever source, quantity or kind. This factor can be estimated most simply from the firing level of reticular activating neurons in the midbrain ... Activation level thus discriminates NREM sleep from waking and REM sleep but cannot discriminate between the latter two states. In other words, <i>if only activation level were involved in generating mental state, then waking and REM sleep would be identical.</i> (Hobson, 1992, p. 234, emphasis added)<sup>24</sup></p>	<p>Citation for a long quote.</p>

The first excerpt is taken from the literature review of an empirical study. The topic had been actively researched and there were plenty works to cite. At each step the authors document and support the claims they make by citations, thereby showing how strongly their points are grounded in the literature and this also allows the reader to locate sources for further reading. The second excerpt is from a theoretical paper in which the author argues against views expressed by philosopher of mind Daniel Dennett. In this critical analysis citations and quotations serve, for the most part, to identify points of views.

In the above two texts you can observe many rules of form and content of the practice of citation. However, in the present work the practice of citation is discussed from the term paper point of view. In the context of a term paper, citations serve to show that you are able to locate relevant works in sufficient quality and quantity, and that *you have actually read them* when you prepared your paper. Citing works that you have not read (not even the abstract of it), is not acceptable practice. This, together with the maxim of “where possible, use “primary sources”, puts the Hungarian student in a difficult situation, since

<sup>23</sup> Shaw, D. S., Winslow, E. B., & Flanagan, C. (1999). A Prospective Study of the Effects of Marital Status and Family Relations on Young Children's Adjustment among African American and European American Families. *Child Development*, 70(3), 742-755. (p.742)

<sup>24</sup> Revonsuo, A. (1995). Consciousness, dreams and virtual realities. *Philosophical Psychology*, 8(1), 35-58. (pp. 37-38)

it can easily happen that s/he cannot get access to the relevant primary literature that s/he has identified, despite making an effort to do so. In certain cases the use of secondary literature is unavoidable and acceptable. This problem is discussed in more detail below in a separate point. Next, the most important rules for using citations are summarised in a series of points.

1. When you cite a work that has **one author**, you can do it in the following ways: “*Rogers (2001) compared reaction time ...*” or “*In a recent study on reaction time (Roger, 2001)...*”.

2. When you cite a work that has **two authors**, use “*and*” between the two names, e.g. “*Kosslyn and Bradly (2006) found that ...*” or “*In a recent study (Kosslyn and Bradly, 2006)...*” When it has **three authors**, put comma between the first and the second, and “*and*” between the second and the third, e.g.: “*..... (Goldberg, White and Ramirez, 1994)*”.

3. When a work has **3-5 authors**, give all the names of the authors the first time you cite the work, but if you cite it again, give only the last name of the first author followed by “*et al.*” When a work has six or more authors, cite only the last name of the first author followed by “*et al.*” already in first citation. E.g. “*Smart, Rock, Underwood, Spence and Ramirez (2007) found that ...*”; then: “*Smart et al. also found that...*”.

4. For an in-text citation of an **electronic source**, try to cite as usual; give the author if there is one; if there is none, give the name of the page in quotation marks. Give the date of publishing; in case there is no date, give the date of the retrieval. E.g. from Wikipedia, if the name of the page is “*Plagiarism is stealing the works of others (“Plagiarism”, 2006)*”.

5. **Do not quote verbatim** unless you have good reason to do so. Direct quotes are seldom used in scientific writing (critical analysis is one of the exceptions). If you quote directly from a work, always give the exact page number. In the unlikely case of quoting more extensively (more than four typed lines – more precisely – 40 words), put the quote in a freestanding block and omit quotation marks. (See example in Table 6.2)

6. **Paraphrase** instead of quoting. If you are paraphrasing an idea from another work, make reference to the author and year of publication if the reference is general. Also, provide the page number if the citation is of a specific idea that can be easily located in the cited work (or a chapter in the case of a book). This is welcome, since it makes the citation more precise e.g. “*....(Buss, 1981, p.332)*” or “*....(Malcolm, 1981, chap.3.)*”

7. **Distinguish between citations for non-empirical work and citations for empirical work**, e.g. “*Dent (2001) theorised / postulated that ...*”; “*Dent, Green, & Johnson (2000) found that ...*”

8. When listing **several citations within parentheses**, follow an alphabetical order, not a chronological order. Separate the citation by semi-colons. e.g. “*Amato & Rezac, 1994; Camara & Resnick, 1988; Emery, 1988; Fauber, Forehand, Thomas, & Wierson, 1990; Haurin, 1992*”.

9. When **repeatedly citing the same source within a single paragraph**, give the year in the first citation, but omit the year in subsequent citations. e.g. “*Cheek (2005, p.5) claimed that ... Cheek also noted that..*”.

10. When citing more than one work by the same author published in the same year, assign letter suffixes to the year, e.g. “*Bechtel (1981a) makes similar claims...*”.

11. When institutions, associations serve as authors, give the name (along with the abbreviation, if it is very long) and the date as if it were a regular author, e.g. “... (*National Institute of Mental Health, NIMH, 2005*)”. With repeated citation just use the abbreviation. e.g. “... (*NIMH, 2005*)” “... (*DSM-IV, 1994*)”. In certain cases it is advisable to cite the title as well, e.g. “... (*American Psychiatric Association, 1994, Diagnostic and statistical Manual of Mental Disorders, DSM-IV, 1994*)”.

12. When a classic work is cited, or a work that was published a long time ago, cite the year of the book where you found the classic work and also provide the original publication date, where possible, e.g. “*James (1890 /1983) suggested that ...*”.

13. When a work has no publication date, give the author’s name followed by a comma and “*n.d.*”.

14. When there is no author or editor, place the title in the author position. E.g. “... (*Merriam-Webster’s College Dictionary, 1993, p.323*)”.

15. Cite what you have actually read. Should you have learnt about a work from a secondary source, cite the secondary source in the following way, e.g. “... (*Piaget, 1951, as cited in Koch, 2004, p.23*)”; “*Smith (1998, as cited in Rowson, Reed, & Johnson, 1990, p. 43) reported that ...*”

**BASICS OF WRITING THE REFERENCE LIST.** Complete cited details on items of the literature used in the study appear in the reference list placed right after the body text. Needless to say, all citations in the text should appear in the reference list, and all references must be cited somewhere in the text.

The main point of providing accurate references is that the reader himself /herself can find and read the articles and books you cited, if they wish to. In a student paper the reference list tells the instructor a lot about the quality of the work the student has done. The citations for a book generally include the author(s), the title, the publisher and the date of publication. Citations for a journal article generally include the author(s), the title, the journal title, the volume, the issue, the date of publication and the page numbers. (Journals that are paginated by volume begin with page one in issue one and continue numbering across issues; journals paginated by issue begin with page one for each issue.) Table 6.3 shows a list of examples of items taken from the reference list of a journal article.

**Table 6.3 Sample reference list<sup>25</sup>**

REFERENCES	
Adolph, K., & Berger, S. (2006). Motor development. In W. Damon & R. Lerner (Series Eds.) & D. Kuhn & R. Siegler (Vol. Eds.), <i>Handbook of child psychology: Vol. 2. Cognition, perception, and language</i> (6th ed.), 161-213. New York: Wiley.	<b>Article in a handbook.</b>

<sup>25</sup> Heft, H. (2007). The Social Constitution of Perceiver-Environment Reciprocity. *Ecological Psychology*, 19(2), 85-105.

<p>Alley, T. (1990). The ecological approach to person perception. <i>Contemporary Social Psychology</i>, 14, 153-158.</p> <p>Barker, R. G. (1968). <i>Ecological psychology</i>. Palo Alto, CA: Stanford University Press.</p> <p>Barker, R. G., &amp; Gump, P. (1964). <i>Big school, small school: High school size and student behaviour</i>. Palo Alto, CA: Stanford University Press.</p> <p>Barker, R. G., &amp; Schoggen, P. (1973). <i>Qualities of community life: Methods of measuring environment and behaviour applied to an American and an English town</i>. San Francisco: Jossey-Bass.</p> <p>Berry, D., &amp; Wero, J. (1993). Accuracy in face perception: A view from ecological psychology. <i>Journal of Personality</i>, 61, 497-520.</p> <p>Bril, B., &amp; Sabatier, C. (1986). The cultural context of motor development: Postural manipulations in the daily life of Bambara babies (Mali). <i>International Journal of Behavioural Development</i>, 9, 439-1986.</p> <p>Butterworth, G. (1995). Origins of mind in perception and action. In C. Moore &amp; P. Dunham (Eds.), <i>Joint attention: Its origins and role in development</i> (pp. 29-40). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.</p> <p>Call, J., &amp; Tomasello, M. (1996). The effect of humans on the cognitive development of apes. In A. Russon, K. Bard, &amp; S. Parker (Eds.), <i>Reaching into thought: The minds of the great ape</i> (pp. 371-403). New York: Cambridge University Press.</p> <p>Super, C. (1976). Environmental effects on motor development: The case of 'African precocity'. <i>Developmental Medicine and Child Neurology</i>, 18, 561-567 (cited in Brill &amp; Sabatier, 1986).</p>	<p><b>Article in a journal.</b></p> <p><b>Monographs.</b></p> <p><b>Articles in journals.</b></p> <p><b>Articles in edited books.</b></p> <p><b>Article in a journal, cited in another journal article (the primary source is also in the reference list, as we suggested).</b></p>
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You can write your reference list by using **citation management software**, such as the popular EndNote software, produced by ISI, or Bibus, which is available for free. Citation management software allows a user to retrieve information by interfacing with library databases; the results are properly formatted footnotes or citations inserted in your paper.<sup>26</sup> Another solution is to use **interactive online citing tools**, such as Son of Citation Machine, or Internet Citation Maker, to help create your citation lists.

Although using a citation manager or an online citing tool is a wise thing to do, it is useful to have citation rules for reference lists at hand. Next, you will find some common examples of the usual reference types. Please take a close look at them.

<sup>26</sup> A 30-day free trial is available on the EndNote homepage: EndNote. Bibliographies made easy. (n.d.). Retrieved 16 November, 2008 from <http://www.endnote.com/> Bibus Bibliographic Database. (n.d.). Retrieved 16 November, 2008 from [http://bibus-biblio.sourceforge.net/wiki/index.php/Main\\_Page](http://bibus-biblio.sourceforge.net/wiki/index.php/Main_Page)

### 1. JOURNAL ARTICLE

**Author, A. A., Author, B. B., & Author, C. C. (year). Title of article. Title of Journal, volume number(issue number), page numbers.**

Wood, G. (1978). The knew-it-all-along effect. *Journal of Experimental Psychology: Human Performance and Perception*, 4, 345-353.

### 2. MONOGRAPH

**Author, A. A., & Author, B B. (year). Title of book. Location: Publisher**

Winograd, T. & Flores, F. (1986). *Understanding computers and cognition: A new foundation for design*. Norwood, NJ: Ablex Publishing Corporation

### 3. ABRIDGED BOOK

**Author, A. A., & Author, B B. (Eds.) (year). Title of book. Location: Publisher**

Costall, A. & Dreier, O. (Eds.) (2006). *Doing things with things. The design and use of everyday objects*. Burlington: Ashgate

### 4. ARTICLE OR CHAPTER IN EDITED BOOK

**Author, A. A., & Author, B. B. (year). Title of chapter. In A. Editor & B. Editor (Eds.), Title of book (pages of chapter). Location: Publisher**

O'Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: Metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), *Gender issues across the life cycle* (pp. 107-123). New York: Springer

### 5. ORGANISATION AS AUTHOR

**Name of organisation. (year). Title. (number of edition, if not first) Location: Publisher**

American Psychological Association. (2003). *Publication Manual of the American Psychological Association*. (4<sup>th</sup> edition) Washington DC: APA

### 6. UNKNOWN AUTHOR,

**Title. (number of edition, if there is one). (year). Location: Publisher**

*Merriam-Webster's collegiate dictionary* (10th ed.,1993). Springfield, MA: Merriam-Webster

### 7. NO DATE

**Author. (n.d.). Title. Location: Publisher**

Richardson, F. (n.d.). *Philosophy of psychology*. New York: Springer

### 8. CLASSIC WORK

**Author. (original date / date of republishing). Title. Location: Publisher**

James, W. (1890 / 1950). *The Principles of Psychology*, 2 vols. Dover Publications

### 9. SECONDARY SOURCE

**Give both the secondary source from which you cited and the primary source**

Bril, B., & Sabatier, C. (1986). The cultural context of motor development: Postural manipulations in the daily life of Bambara babies (Mali). *International Journal of Behavioural Development*, 9, 439-1986.

Super, C. (1976). Environmental effects on motor development: The case of "African precocity." *Developmental Medicine and Child Neurology*, 18, 561-567 (cited in Bril & Sabatier, 1986).

### 10. ABSTRACT FROM A DATABASE

**Author. (year). Title. Journal vol (issue), pages. Abstract retrieved date, source**

Yeh, H. C. & Lempers, J. D. (2004). Perceived sibling relationships and adolescent development. *Journal of Youth and Adolescence*, 33 (2), 133-147. Abstract retrieved on 8 June, 2004 from PsycINFO database

### 11. SEVERAL WORKS BY THE SAME AUTHOR

**Follow chronological order.**

Dennett, D.C. (1976). Are dreams experience? *Philosophical Review*, 73, pp. 151-171.

Dennett, D.C. (1987). *The intentional stance*. Cambridge, MA: MIT Press

## 12. SEVERAL WORKS BY THE SAME AUTHOR IN THE SAME YEAR

Berndt, T. J. (1981a). Age changes and changes over time in prosocial intentions and behavior between friends. *Developmental Psychology*, 17, 408-416.

Berndt, T. J. (1981b). Effects of friendship on prosocial intentions and behaviour. *Child Development*, 52, 636-643.

ELECTRONIC PUBLICATIONS IN YOUR REFERENCE LIST. Along with the increasing use of the Internet there has arisen a need for referencing electronic publications and all sorts of on-line sources. Rules of electronic referencing were established earlier, but these rules may change slightly from time to time with new developments (see DOI number, below). The authoritative source that presents up-to-date conventions regarding referencing electronic material is, again, the latest edition of the Publication Manual of the APA.<sup>27</sup>

The general guideline is to follow the rules given for print publications, as far as possible. However, the elements of a reference can be difficult to find on Internet sources. For example, there may not be a title or page numbers, and the author, the publisher, and the date of publishing may be hard to locate. The rule for electronic publications is: try to include the same elements as for print publications (author, title, date, etc.), and include as much electronic retrieval information as needed to help others find the source you cited.

Retrieval information includes the date of retrieval and the exact Web address. The retrieval date is always necessary for undated or changeable content retrieved from the Web, but no retrieval date is necessary when a fixed publication date, edition, or version number can be cited. If an online journal is an exact reproduction of the print publication (most PDF documents are), and you did not consult the print version, cite as if it is in print (with page numbers) and include it (the electronic version) as the last element of the article title. You may supply the web address of the document if you wish. When in doubt, giving the retrieval date is a better solution than not giving it. And when giving the web address, copy – paste the URL directly into your document in order to avoid incorrect addresses. Be sure not to insert a hyphen if you need to break a URL across lines.

Using an **electronic citation program** like Internet CitationMaker makes the citation of electronic material a lot easier.<sup>28</sup>

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<sup>27</sup> Neyhart, D., & Karper, E. (n.d.). The Owl at Purdue. APA Formatting and Style Guide. Retrieved 16 November, 2008 from <http://owl.english.purdue.edu/owl/resource/560/01/>

<sup>28</sup> Interaction-Design.org. Internet Citation Maker. (n.d.). Retrieved 16 November, 2008 from <http://www.interaction-design.org/citation-maker/>



### 1. FULL TEXT ARTICLE RETRIEVED FROM DATABASE

**Author, A.A. (date of publication). Title of document or Web page; subtitle if needed, Retrieved day Month, year from http://Web address**

Beardsley, E. (1960). Determinism and moral perspectives. *Philosophy and Phenomenological Research*, 21, 1-20.(the electronic version). Retrieved 12 September, 2000 from JSTOR database

### 2. ENTRY IN AN ENCYCLOPEDIA

**Author of entry. (year). Title. (Vol. number, pages) Location: Publisher**

Bergman, P.G. (1993). Relativity. In *The new encyclopedia Britannica* (Vol. 26, 501-508). Chicago: Encyclopedia Britannica

### 3. ABSTRACT FROM DATABASE

**Author, A.A. (date of publication). Title of document or web page; subtitle if needed, Retrieved day, month, year from database**

Yeh, H. C. & Lempers, J. D. (2004). Perceived sibling relationships and adolescent development. *Journal of Youth and Adolescence*, 33 (2), 133-147. Abstract retrieved 8 June, 2004 from PsycINFO database

### 4. ARTICLE FROM ONLINE JOURNAL

**Author, A. A., & Author, B. B. (Date of publication). Title of article. Title of Journal, volume number. Retrieved day month, year from http://Web address**

Poulos, C. N. (2008). Narrative Conscience and Autoethnographic Memories. *Qualitative Inquiry* (on-line) Vol. 14, No. 1, 46-66. Retrieved 2 February, 2008 from <http://qix.sagepub.com/cgi/reprint/14/1/46>

### 5. DOCUMENT FROM "OPEN" WEB (NO AUTHOR, NO DATE)

**Title of document or web page; subtitle if available. Retrieved day, month, year, from http://Web address**

NCAA Committee on Sportsmanship and Ethical Conduct. (n.d.). Operations plan 2001-02 and 2002-03: Strategic planning and budgeting for the 2002-03 and 2003-04 Academic Years. Retrieved 9 February, 2004 from [http://www1.ncaa.org/membership/governance/assoc-wide/sportsmanship\\_ethics/index.html](http://www1.ncaa.org/membership/governance/assoc-wide/sportsmanship_ethics/index.html)

## 6. CITING PAGES FROM WIKIPEDIA

**Title of document or web page; In *Wikipedia, The Free Encyclopedia.*, Retrieved day, month, year from <http://Web address>**

Psychoanalysis. (30 January, 2008,). In *Wikipedia, The Free Encyclopedia*. Retrieved at 16:11 on 30 January, 2008 from <http://en.wikipedia.org/w/index.php?title=Psychoanalysis&oldid=187933570>

THE DOI SYSTEM<sup>29</sup>. Document locations and identifications are prone to change in the digital environment. The **DOI system** was developed to meet this challenge. “DOI” stands for “Digital Object Identifier”, and the DOI number assigned to entities on the Web provides a unique and permanent identification of documents and the like. Information about a digital object may change over time, including where to find it, but its DOI name will not change. The DOI System was developed by the not-for-profit International DOI Foundation (IDF) in 1998. The DOI System is in increasing use in scientific primary publishing, in government documents, and in other contexts. If you find a DOI number assigned to the document you cite, cite the DOI number in the reference list. This is what a reference item with a DOI number looks like:

## 7. DOI NUMBER IN REFERENCE:

Qualitative Inquiry (on-line) Vol. 14, No. 1, 46-66 (2008)  
DOI: 10.1177/1077800407308916 retrieved 2 February, 2008 from  
<http://qix.sagepub.com/cgi/reprint/14/1/46>

A SHORT RECAP OF THE USE OF SECONDARY AND TERTIARY SOURCES, AND ABSTRACTS. In Chapter 1 we mentioned that primary sources contain the original publication. Secondary sources are reports that draw on primary sources and make interpretive, analytical or synthesised statements (they are “one step away” from the given topic). Finally, tertiary sources are publications such as encyclopaedias, dictionaries and textbooks that summarise an extensive number of secondary and primary sources (they are “two steps away” from the given topic).<sup>30</sup>

As we said before, you should use primary sources in your research work whenever possible. The prudent use of secondary literature is justified, since a good review paper, say, can provide an invaluable survey of the literature. Relying heavily (or even exclusively) on tertiary sources in your research work is, however, definitely not recommended. Tertiary sources may not be up-to-date, they may present findings selectively or they may misrepresent ideas, and generally, using a secondary source does not make it possible for you to understand and evaluate its content first hand. The role of tertiary and secondary sources in the research work is to give you, in the initial phase, a broad overview or idea on the topic to help you find your topic and the primary literature on the topic.

**Wikipedia**, the free online encyclopaedia, is a special kind of tertiary source of growing popularity, since it is a community-based enterprise where anybody can be an editor or

<sup>29</sup> The International DOI Foundation: The DOI System. Overviews. (n.d.). Retrieved 16 November, 2008 from [http://www.doi.org/about\\_the\\_doi.html](http://www.doi.org/about_the_doi.html)

<sup>30</sup>

contributor. The advantages, as well as the limitations of using Wikipedia, were discussed in Chapter 3, along with the ongoing debate about the use of Wikipedia in an academic context. Wikipedia has issued the following note that is intended especially for students:

*IMPORTANT NOTE: Most educators and professionals do not consider it appropriate to use [tertiary sources](#) such as encyclopaedias as a sole source for any information — citing an encyclopaedia as an important reference in footnotes or bibliographies may result in censure or a failing grade. Wikipedia articles should be used for background information, as a reference for correct terminology and search terms, and as a starting point for further research. As with any [community-built](#) reference, there is a possibility for error in Wikipedia's content — please check your facts against multiple sources and read our [disclaimers](#) for more information.<sup>31</sup>*

An **abstract** of an original article can be considered an original source, but evidently, it is no substitute to reading the full article. An abstract is not meant to serve as an exclusive source of information on a piece of research. In practice, however, it may happen that you can use only the abstract of an article, or an article from Wikipedia. In this case it is vital you cite the source that you actually used; if that was an abstract, or an article from Wikipedia, cite them that way.

## 6.7 Formatting your research paper based on the APA style

The APA Manual has exact rules for formatting a manuscript intended for publication. Generally accepted guidelines for student papers are based on the APA style, but there may, of course, be variations in requirements from school to school and from course to course.<sup>32</sup> Treat the suggested format below as a default ('standard') format and make sure that your course instructor accepts it. It is usually recommended that your paper be typed, double-spaced on standard-sized paper and with standard margins on both sides, and that you also use 12 pt. Times New Roman or a similar font.

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<sup>31</sup> MediaWiki:Cite text. (4 November, 2008). In Wikipedia, The Free Encyclopedia. Retrieved at 15:21 on 4 November, 2008, from [http://en.wikipedia.org/w/index.php?title=MediaWiki:Cite\\_text&oldid=243008430](http://en.wikipedia.org/w/index.php?title=MediaWiki:Cite_text&oldid=243008430)

<sup>32</sup> American Psychological Association (1994). *Publication Manual of the American Psychological Association* (4th edition). Washington DC: APA

<p style="text-align: right;">Running head</p> <p style="text-align: center;">TITLE OF YOUR PAPER</p> <p style="text-align: center;">Your Name</p> <p style="text-align: center;">email address</p> <p style="text-align: center;">Your Department, Your University</p> <p style="text-align: center;">Title of your course</p> <p style="text-align: center;">Year, semester</p>	<p><b>Title page</b></p> <p>Include a <b>running head</b> in the upper right-hand of every page, including the title page. The running head should be the first 2-3 words of the title of the paper.</p> <p>Centre the <b>title</b> of your paper.</p> <p>Put your <b>name</b> underneath, along with <b>email</b> address.</p> <p>State your <b>affiliation</b>, the name of the <b>course</b>, <b>year</b> and <b>semester</b> at the bottom</p>
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Running head

Results

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xxx (See Table x)

Table x.

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3

Label the **Results** section.

Running head

References

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
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5

In the **References list** follow the rules of end-of-paper referencing.





## **6.8 Check list for the self-assessment of research papers**

After the major steps of the writing process have been examined, you should reread and revise your paper. For a self-assessment of your work a final checklist is provided. While writing your paper, keep these guiding questions in mind and use them to refine your paper.

### **TITLE PAGE**

- 1. Does the title page contain all the pertinent information?**
- 2. Does the title accurately reflect the content of the paper?**

### **ABSTRACT**

- 1. Is the abstract concise and self-contained?**
- 2. Is it one paragraph or several?**

### **INTRODUCTION**

- 1. Does the Introduction clearly state the problem under investigation?**
- 2. Is the rationale of the study (background, justification) well developed?**
- 3. Was the literature adequately reviewed by the authors?**
- 4. Do the authors elucidate on how the study relates to previous literature?**
- 5. Are the goals and hypotheses clearly presented and justified?**
- 6. Is the methodological framework transparent?**

### **METHOD**

- 1. Are the relevant details mentioned on participants, stimuli, apparatus and procedure?**
- 2. Is the design clearly described / outlined?**
- 3. Could the study be replicated elsewhere based on the description provided?**

### **RESULTS**

- 1. Are the results clearly and well presented?**
- 2. Are the results adequately explained verbally?**

### **STATISTICAL PRESENTATION**

- 1. Does the descriptive statistical data sufficiently characterise the results (the effect of size, direction, mathematical measures, etc.)?**
- 2. When reporting inferential statistics, is the name of the test, along with the degrees of freedom, value of the test, direction of the effect and level of significance presented?**
- 3. If observers were used to assess variables, is the inter-observer reliability reported?**

## TABLES AND FIGURES

1. Do tables and figures communicate things clearly to the reader?
2. Are all the tables and figures nicely arranged?
3. Does every table and figure have a number, title and caption?
4. Is every table and figure mentioned in the text?

## CITATION AND REFERENCE LIST

1. Are the citations consistent in the text and in the reference list?
2. Are the in-text citations adequate?
3. Are the citations complete and up to date?
4. Are abstracts, electronic sources cited according to rules?
5. Do the quality and quantity of papers meet the necessary requirements?

## STYLE

1. Is the style concise (i.e. no redundancy, waffle, vague generalities, verbosity)?
2. Specific, concrete language. Use precise language and cite specific examples to support assertions. Avoid vague references (e.g. "this illustrates" should be "this result illustrates").
3. Use scientifically accurate language.

## FORMAT

1. Are all pages numbered in sequence, starting with an introduction page?
2. Is the paragraph indentation consistent?
3. Are section headings and subheadings concise and adequate?

☺ *Psychology with humour -*

### Useful research phrases and what they really mean<sup>33</sup>

"It has long been known" . . . [I didn't look up the original reference; I was too lazy.]

"A definite trend is evident" . . . [These items of data are practically meaningless.]

"Of great theoretical and practical importance" . . . [Interesting to me, anyway.]

"While it has not been possible to provide definite answers to these questions" . . . [An unsuccessful experiment, but I still have to get it published.]

"Three of the samples were chosen for a detailed study" . . . [The results for the others didn't make any sense.]

"Typical results are shown" . . . [The best results are shown.]

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<sup>33</sup> Charlotte's Web The lighter Side of Psychology. (n.d.). Retrieved 16 November, 2008 from <http://users.erols.com/geary/psychology/>

"These results will be shown in a subsequent report" . . . [I might get around to it sometime if I'm pushed.]

"The most reliable results are those obtained by Jones" . . . [He was my graduate assistant.]

"It is believed that" . . . [I think that]

"It is generally believed that" . . . [A couple of other guys think so, too.]

"It is clear that much additional work will be required before we have a complete understanding of it" . . . [I don't understand it.]

"Correct within an order of magnitude" . . . [Wrong]

"It is hoped that this study will stimulate further investigations in this field" . . . [This is a lousy paper, but so are all the others on this miserable topic.]

"Thanks are due to Joe Blotz for his assistance with the experiment and to George Frink for his valuable assistance" . . . [Blotz did the work and Frink explained to me what it meant.]

"A careful analysis of obtainable data" . . . [Three pages of notes were obliterated when I knocked over a glass of beer.]