# Critical evaluation in psychology essay sample

Media, Television



### 1. Introduction

# 1. 1 What will this handout help me with?

In Psychology, students are often asked to show evidence of "critical evaluation" in their work. Many students find this difficult, and even those who are told they do it well, often do not understand what it is they are doing! This handout is designed to teach you a little about how to evaluate critically, and what it really means! It is only an introduction – with practice, you will learn to develop this important skill for yourself, and you should find that your ability to evaluate critically improves throughout your undergraduate years.

# 1. 2 What is critical evaluation?

Critical evaluation is a process of assessing the relative merit of a piece of work, which may have been presented as a journal article, in a text book, on the internet, in a radio or television article, or in just about any other format (for academic purposes, this will usually be written, but could include seminar presentations). You are being asked to decide and discuss what is good, and what is bad, about the arguments being presented to you. Critical evaluation is not about picking fault, it is about deciding how useful and worthwhile the work, methodology and the arguments presented are; deciding how much the work has contributed to your understanding, or the world's understanding, of a topic. The crucial word is "evaluate" – to measure the value of something. You will find it extremely useful to be able to critically evaluate your own work, or to work together with a peer to do so for each other, and so identify and improve on weaknesses in your

coursework prior to submission. To see good examples of critical evaluation, try reading the introductions of some published articles in Psychology journals.

# 1. 3 Asking questions

A major part of critical evaluation is learning to ask questions of the text you are reading. At first, students tend to assume that just because something has been published, it must be true. This is understandable, but it is not the case, and is not a helpful way to approach your reading. Authors of papers and books are human, they make mistakes, they sometimes misunderstand or draw incorrect conclusions, and they often have their own agenda, which biases their opinions and thus the arguments they are making. To do well in academic work, you need to learn to spot problems like these. This gets easier with practice, and also if you read several texts on the same subject, as this will help you to notice inconsistencies and contradictions. Think about:

# 1. 4 Who is writing?

An important question, which covers several issues:

1. Is the person an expert in the field? If they are an authority, then you might be more likely to believe them. For example, if Rogers had written an article on person-centred approaches to counselling, you would expect his article to be error-free and knowledgeable (he devised this approach). However, if the same article had been written by a psychologist with no experience of counselling, or even someone who was not a psychologist,

then misunderstandings could occur. If you don't know whether someone is an expert, do an internet search to find out what they have published, and look at other articles to see whether they have been cited by other authors.

- 2. Does the person have their own agenda? For example, the emphasis of an article on risks associated with drug use written by an expert psychologist researching the topic might differ from one written by someone arguing for the legalisation of cannabis for their own personal reasons, or written by someone who is paid to present a particular point of view. You need to decide whether the author's agenda will have influenced their expressed opinion, and if so, how. So it might also be important to consider why someone is writing (their motivation), as well as who they are. One way to do this is to look at who is funding the research (a company? the government? an impartial funding body such as a research council?)
- 3. When was the text written? Some fields of Psychology are very dynamic; a text that was written 10 years ago would not necessarily be considered useful or accurate now. Try to obtain up-to-date references, but if you are reading a key article from some time ago, remember that ideas evolve over time. Find out!
- 4. Where was the work published? Newspaper articles tend to be written for a non-specialist audience and so can be less reliable, for example, than scientific journal articles, which are often peer reviewed (ie, evaluated prior to publication by other scientists who are expert in the same field of study). This provides you with some confidence about the scientific merit of the published work.

# 1. 5 What evidence is used to support the arguments made?

The types of evidence used to support arguments can vary enormously.

Sometimes, an author will make a claim that is completely unsupported, and will offer no evidence whatsoever to back it up. For example, I could argue that "reading this handout will enhance your ability to evaluate critically". This sort of statement should ring alarm bells – on what basis am I making this assumption?

Alternatively, I could make the same claim, but support it with the statement that "Student X, after reading this handout, said that her ability to critically evaluate was enhanced". This would go some way to supporting my view – but we have no way of knowing whether that one person really did improve, whether she was typical of other students, or whether other students read the handout and did not experience the same benefit. So, although some evidence has been offered, it is still not entirely convincing.

A more convincing type of evidence might be some sort of scientific study. I could say that: "Smith and Jones (2002) found that students given advice on critical evaluation improved this skill significantly compared to students who were not given such support". This is a useful type of supporting evidence; but if you really want to evaluate properly, you should go and find the Smith and Jones article yourself, and check that it really does say what I am claiming – critically evaluate the original article! You could also question the comparability of the advice given to students in the Smith and Jones study with the handout that you are reading.

I might decide instead to present evidence based on my own research.

Perhaps I could measure the ability of students prior to reading the leaflet, and again after reading it, and see if they improved. Then my statement could read: " a group of students were found to have improved abilities at critical evaluation after reading this leaflet".

However, if you are learning about experimental design, you will have noticed already that the study I have just described is seriously flawed, for all sorts of reasons. Perhaps the students would have improved at critical evaluation anyway, even if they didn't read the leaflet? There is no information given about the students involved, or how confounding variables were controlled. So one way to evaluate critically writing which describes experimental work is to think about the methodology. Be careful, though many students identify methodological problems with research, without really considering the implications of these problems. Think about how the design faults affected the results obtained, if at all, and say why they are problematic in each particular instance. For example, a common criticism is that "the research was conducted on students and so cannot be generalised to the population at large". This could be a valid point, if students are different from the rest of the population in some crucial way that will influence the results obtained; but for some studies it could be completely irrelevant. Only discuss methodological issues if you know why they are problematic for your particular piece of work.

Finally, even if the methods used were appropriate, you need to decide whether the results obtained from a study really support the conclusion

made by the author. For example, if 1 in every 10 students in my carefully designed study found that this handout enhanced their abilities at critical evaluation, would it be appropriate for me to draw the conclusion that: "Students reading this handout were found to have improved critical evaluation skills"?

Beware, though, of just picking faults. If an appropriate method has been used, or the conclusions drawn are sensible, say so – remember that critical evaluation is about assessing merit as well as problems. Aim to achieve a balance, and be respectful about other people's ideas, as well as to question.

1. 6 What does this work contribute to knowledge of the subject?

Most students can discuss basic design problems in an experiment, but a really good student will go beyond that stage to consider the overall implications of the text they are reading. Some things to think about are:

• Is this work original? Does it extend current knowledge?

For example, Piaget, who studied cognitive development in children, found that young children could not understand that, if a row of counters was rearranged so that they looked different, the number of counters would still remain the same (conservation). This work was extended by McGarrigle and Donaldson (1974), who used the "Naughty Teddy" to rearrange the counters, and showed that children developed this skill earlier than Piaget believed if they were given a realistic context within which to work.

From the point of view of critical evaluation, the work of McGarrigle and Donaldson was useful because it provided new understanding about an aspect of psychology – they have not simply repeated someone else's work. Replicating the work of others is important in another way – it shows that the findings are reliable, and were not obtained by chance.

• Is this work consistent with other work in the field? Are there any inconsistencies or contradictions? Can I explain any differences? Can I relate similarities?

For example, at face value, the work by Piaget and the work by McGarrigle and Donaldson described above are contradictory. McGarrigle and Donaldson showed that young children had a skill that Piaget believed they had not yet developed. However, the difference can be explained – children can demonstrate this skill if they are given a realistic context. When you write about more than one study, try to draw conclusions from the differences and similarities between them.

• Does this work explain observed phenomena? Or does it contradict other observations? Is it describing something, or does it attempt to explain why and how something happens?

For example, Maccoby and Jacklin (1974) observed several differences between boys and girls, such as that girls tended to have greater verbal ability than boys, and that boys have greater mathematical ability than girls. This is descriptive, it does not explain why boys and girls were different. If

you were discussing work like this, you might want to address possible explanations yourself.

In contrast, Frisch (1977) observed adults' interactions with babies, and found that adult behaviour differed depending on whether they thought the baby was a boy or a girl. So a possible explanation for the differences between boys and girls could be that they are treated differently by adults depending on their sex. This is explanatory; it offers an explanation about how the sex differences arose, and so opens up the potential for further research.

You might want to discuss the strengths and weaknesses of the explanation, as well as evaluate the study itself; you could also identify potential gaps in the knowledge provided which need further research.

# 2. Summary

So, critical evaluation is the skill of assessing the strengths and weaknesses of a piece of work, and of understanding the importance of its contribution to the subject.

It involves asking questions about the knowledge and motivations of the author.

It involves asking questions about the type of evidence used to support arguments, and about the logical basis of any conclusions reached.

It involves asking questions about the implications and contribution of this one piece of work to the subject you are reading about.

Finally, you need to reach a conclusion about the work you have evaluated – what can be learned from it?

# 3. An exercise in critical evaluation

### 3. 1 The extract

Below is a short piece of text (adapted from Carlson, Buskist and Martin, 2000, Psychology the Science of Behaviour, pp 412-413). Read through the text, and then answer the questions below. Some ideas about the answers are given on the following page.

Does television viewing affect children's cognitive development?

Cognitive development in children could potentially be influenced by many factors, some of which depend on social background. However, almost all children in industrialised societies are exposed to television for several hours a day. What effect does this have on their cognitive development?

Proponents of television for children include Bogatz and Ball (1972), who found that children from all socio-economic backgrounds who watched Sesame Street developed better vocabularies, better attitudes towards school and more positive attitudes to children of other races than children who did not watch Sesame Street.

On the other hand, many television programmes are full of violence, and watching them may well promote aggressiveness and impatience in children. In addition, commercials may encourage children to demand particular snack foods, toys and other items from parents (Taras et al., 1989).

Anderson and Collins (1988) reviewed some of the most frequent criticisms of television. These included that it mesmerises children, without engaging inferential or reflective thought, and distracts children from other, cognitively stimulating activities such as homework and reading. Reading achievement is arguably reduced. Children who watch television may be overstimulated, potentially leading to hyperactivity or passivity. Creativity, imagination and attention span are sometimes suggested to be reduced in children who watch television. However, the authors concluded that there is little evidence to support some of these criticisms, and in fact, the majority of evidence contradicts them. For example, children are rarely "glued" to the television set: they look away from it between 100-200 times each hour (Anderson and Field, 1983). They are often engaged in other activities, such as reading and playing, whilst they watch, and even leave the room frequently while the television is on (Anderson and Collins, 1988).

However, the argument that watching television impairs reading ability has received some support. Corteen and Williams (1986) measured children's reading skills before and after television became available, and found that reading ability was reduced in young children. However, the effects were slight and were not seen in older children.

In conclusion, although children spend a lot of time watching television, the detrimental effects on their cognitive development seem to be negligible. However, the possibility exists that television programmes could do more to stimulate children's cognitive development, especially through stimulating imagination, creativity, language skills and prosocial behaviour.

# 3. 2 Questions

- 1. What is the main argument presented by this text?
- 2. Think about the authors of this text are they authoritative/expert, do they have a biased agenda or perspective, is the text up to date?
- 3. Think about the evidence presented to support the main argument is it convincing, is it anecdotal, is there anything else you need to know?
- 4. If there are things you still need to know to make a decision about the evidence presented, how could you find out?
- 5. Are alternative arguments considered fairly? Do the authors present evidence to support alternative views?
- 6. Are the conclusions reached in this passage reasonable based on the preceding arguments and evidence?
- 3. 3 Possible answers to the questions:
- 1. The main argument is that the cognitive development of children is generally unaffected by watching television.
- 2. The authors of the original text are psychologists, who were considered sufficiently expert to publish an introductory psychology text book! However, they do necessarily conduct research of their own in this field, and may have had to rely on second hand knowledge. In addition, this excerpt has been drastically modified by Julie Hulme, who claims no such expertise so it is third-hand information (definitely not recommended!). However, it is

reasonably up to date, as the text book was published in 2000; although beware, text books take a long time to publish, so the information could already have been outdated by the time the book was available for sale.

Also, the information cited here is quite old – the latest article is dated 1989.

Overall, you may want to consider this a very basic introduction to some of the issues – but you would definitely need to check your facts before including them in an essay or exam!

- 3. The evidence presented in the text (as presented here) varies in quality. For example, the statement that "almost all children in industrialised societies are exposed to television for several hours a day" is completely unsupported how do the authors know this? Can it be believed? However, other evidence comes from published research, presumably of good quality such as the study showing that children repeatedly looked away from the television (Anderson and Field, 1983).
- 4. There are definitely other things you need to know for almost every study cited, you should check the methodology used, and the validity of the conclusions drawn. For example, was the study of the Sesame Street children (Bogatz and Ball, 1972) conducted by objective researchers or the television company that made the programme?! How did Corteen and Williams (1986) find children that did not have television, and how did they measure reading ability?

You could find out this information by checking back to the original reference – Carlson et al. (2000) includes all the references cited, in full, so you could check these things for yourself.

- 5. Alternative arguments are considered for example, the study showing that television did affect reading skill (Corteen and Williams, 1986) and the evidence presented was credible, although discounted as "negligible".
- 6. The first part of the concluding paragraph is entirely sensible and based on the rest of the passage. The second part does not follow logically from any preceding part of the text although it is related and interesting, it is also speculative. In your academic work, do not raise new ideas in your conclusions.