

DEVELOPING AND SUPPORTING AN ARGUMENT

Introduction

Common criteria of undergraduate essay writing focus on the following requirements:

students need to be analytical and critical in their response

students need to structure their writing logically

students need to be persuasive writers

students need to answer the question

This booklet looks at the requirement to be persuasive in your response. Other Learning Centre booklets in this series deal with the other aspects:

- Analytical Writing deals with the difference between analytical and descriptive writing
- Planning and Structuring an Essay deals with logical structure
- Analysing an Essay Question deals with answering the question

The following examples of lecturers' comments indicate they feel the student has a problem in developing an argument in their written assignments:

"You have made some good points but you have not substantiated them."

"Where is your evidence for this claim?"

"You need to show me that you have done the reading on this topic."

"I know the literature myself so you don't need to just tell it all to me: What I want to know is - what is your position?"

"Your argument here contradicts your starting position"

This booklet looks at how you can develop and substantiate an argument or position ("persuade") in writing through the use of evidence. Its objective is to answer the following five questions:

- ♦ what is appropriate evidence for academic contexts?
- ♦ how can I recognise different positions taken in the readings?
- ♦ how can I develop my own argument through the evidence?
- ♦ how can I present and support my own position?
- ♦ what is the difference between merely summarising the evidence, and using it to substantiate my position and develop my argument?

Please look at page 17
for a glossary of terms

There are two main reasons why we use evidence.

- (1) **to develop a position** after reading and developing our own conceptual understanding of the topic. (Question 2 & 3)
- (2) **to present this position to our reader:** we use evidence to persuade the reader that our position is justifiable. (Questions 4 & 5)

Question 1: What is appropriate evidence for academic contexts?

There are many different kinds of evidence that can be used to develop and present a position, but you need to consider first whether the people reading your essay would think they are appropriate. This table shows some of the aspects you should think about:

Aspect of evidence	Some possibilities	Examples
Origin	<ul style="list-style-type: none"> ▪ personal experience 	<ul style="list-style-type: none"> ▪ your own reflections and opinions
	<ul style="list-style-type: none"> ▪ the experience of others 	<ul style="list-style-type: none"> ▪ someone else's reflections and opinions
Mode	<ul style="list-style-type: none"> • print 	<ul style="list-style-type: none"> ▪ academic and general publications
	<ul style="list-style-type: none"> • electronic 	<ul style="list-style-type: none"> ▪ internet, email etc
	<ul style="list-style-type: none"> • verbal 	<ul style="list-style-type: none"> • conversations, interviews etc
Purpose	<ul style="list-style-type: none"> • academic 	<ul style="list-style-type: none"> ▪ textbooks, journal articles etc - aimed at students / academics
	<ul style="list-style-type: none"> • non-academic 	<ul style="list-style-type: none"> • news media, magazines etc - aimed at the general public
Source	<ul style="list-style-type: none"> • primary (closest to the event) 	<ul style="list-style-type: none"> ▪ letters & diaries (history), lab notes (sciences), literary work (literature)
	<ul style="list-style-type: none"> • secondary 	<ul style="list-style-type: none"> • comments on a primary source (journal articles, scientific reports etc)
	<ul style="list-style-type: none"> • tertiary 	<ul style="list-style-type: none"> • general textbooks, encyclopedia etc

When you are writing essays at university, you would normally use substantiating evidence from **the experience of others** rather than from your personal experience; from **printed** rather than non-print modes*; and from **publications intended for an academic readership** rather than those for a non-academic audience.

* Some disciplines are happy for you to use certain electronic journals; some are not happy about any non-paper modes of presenting information. If in doubt, ask your tutor or lecturer.

[For other kinds of assignments, other types of evidence may be acceptable. For instance, in Nursing and Education, students are often asked to write reflective journals, which involve personal experience and less academic sources.]

Find out which type of evidence is required or expected

⌘ Exercise 1:

Read the following two extracts from essays on the effect of TV violence on children, and decide which one uses evidence which is only from the writer's personal experience of the world.

- (a) When considering the content debate, the most controversial aspect must be that of televised violence. Seemingly today, violence is a common theme in our television programs. Programs from America like *The Sopranos*, and *NYPD Blue*, among others, have violence as a central theme. Programs from Britain like *The Cops*, *Prime Suspect* and *Cracker* are much the same if not worse in their portrayal of violence. Added to this now, comes our own homegrown programs like *Water Rats* and *Wildside*, which are spin-offs from overseas ideas.
- (b) Most children are subjected daily to televised violence and aggression, whether in cartoons, or performed by human actors, or by real people in the news. It has been estimated (Parker, 1983: 38) that by graduation from high school, the average American child has seen 18,000 television murders; and it seems probable that this would significantly affect the child's aggressive behaviour.

Check your answers in the Key, page 18 .

Question 2: How can I recognise different positions taken in the readings?

When you are preparing your essay through reading literature on the topic, you will probably be reading from different sources, which often have different positions towards the topic. It is important that you can recognise these differences to help you understand the topic more. Sometimes the different views that you read on a topic are very strongly in conflict with each other, particularly in areas that are quite controversial.

⌘ Exercise 2:

Examine the information in the following two sources which are about the effects of passive smoking, and answer the following questions about them:

- (a) What position does each source take towards the effects of passive smoking?
(b) Are these sources reliable (i.e. trustworthy)?
(c) How would you assess the validity (accuracy, truth) of the information presented in these sources?

Source 1

Excerpt from *Sullum Jacob (1998) FOR YOUR OWN GOOD: The Anti Smoking Crusade and the Tyranny of Public Health, Free Press, N.Y.*

..... it is safe to say the hazards of secondhand smoke have been grossly exaggerated. ETS is certainly an irritant. It can induce tears, headaches, coughing and nausea. It probably aggravates asthma and bronchitis, and it may increase the frequency of respiratory infections in young children.⁷⁴ On the other hand the risk for kids exposed to ETS in the home, which the Lancet calls “unquantifiable and probably tiny,” is hardly enough to justify a charge of child abuse.⁷⁵

Excerpt from the reference list:

(74) For a summary of possible effects on children, see Anne Charleton, “Children and Passive Smoking: A Review,” *Journal of Family Practice*, 38:3 (March 1994) pp267 - 277; the review was funded by the British Cancer Research Campaign.

(75) “Is Health a Moral Responsibility?” *Lancet*, 347 (May 4, 1996) p1197

Source 2

Excerpt from *Winstanley, M [Ed] (1995) Tobacco in Australia: Facts and Issues, (2nd Ed. p.77) Action on Smoking and Health Limited (ASH Australia), 5th Floor 64 Kippax Street, Surry Hills, Sydney.*

A wealth of scientific evidence now exists showing that the breathing of tobacco-smoke polluted air by non-smokers can lead to serious harm, such as increased bronchitis, pneumonia and other chest illnesses in children, lung cancer and other lung diseases, and cardiovascular disease. This is of course in addition to the well known ‘irritant’ effects of tobacco smoke to the eyes, nose, throat and airways passages.⁶

Excerpt from the reference list:

(6) US Department of Health and Human Services. The Health Consequences of Involuntary Smoking. A report of the Surgeon General, Rockville, Maryland, Public Health Service, Centers for Disease Control, Center for Health Promotion and Education, Office on Smoking and Health 1986.

Here are the questions again:

- (a) What position does each source take towards the effects of passive smoking?
- (b) Are these sources reliable (trustworthy)?
- (c) How would you assess the validity (accuracy, truth) of the information presented in these sources?

Check your answers in the Key, pages 18-19 .

A Case Study
Why you need to ask questions about possible evidence

(1) 8 March 1998 Sunday Telegraph (UK) news item

Passive smoking doesn't cause cancer - official

The world's leading health organisation has withheld from publication a study which shows that not only might there be no link between passive smoking and lung cancer, but that it could even have a protective effect. ... the World Health Organisation, which commissioned the 12 centre, 7 country study has

(2) 9 March 1998 World Health Organisation Press Office press release

Passive smoking does cause lung cancer, do not let them fool you

The World Health Organisation (WHO) has been publicly accused of suppressing information. Its opponents say that WHO has withheld from publication its own report that was aimed at but supposedly failed to scientifically prove that there is an association between passive smoking and a number of diseases, lung cancer in particular. *Both statements are untrue.* (details)

(3) 11 March 1998 ASH Briefing

How the Sunday Telegraph and BAT got it badly wrong on passive smoking

The WHO report leaked to the Sunday Telegraph is undergoing peer review prior to being published in an academic journal. It cannot therefore be described as 'withheld'. The study gives the following figuresThese figures mean that non-smokers are 16% more likely to get lung cancer if their spouse smokes than if they live with a non-smoking spouse..... Despite this, BAT (British American Tobacco) and tobacco industry spokespeople continue to push the Sunday Telegraph's misleading version.

....the error (or deception) was to misinterpret a statistical test applied to these results....

(4) Extract from abstract of unpublished WHO paper

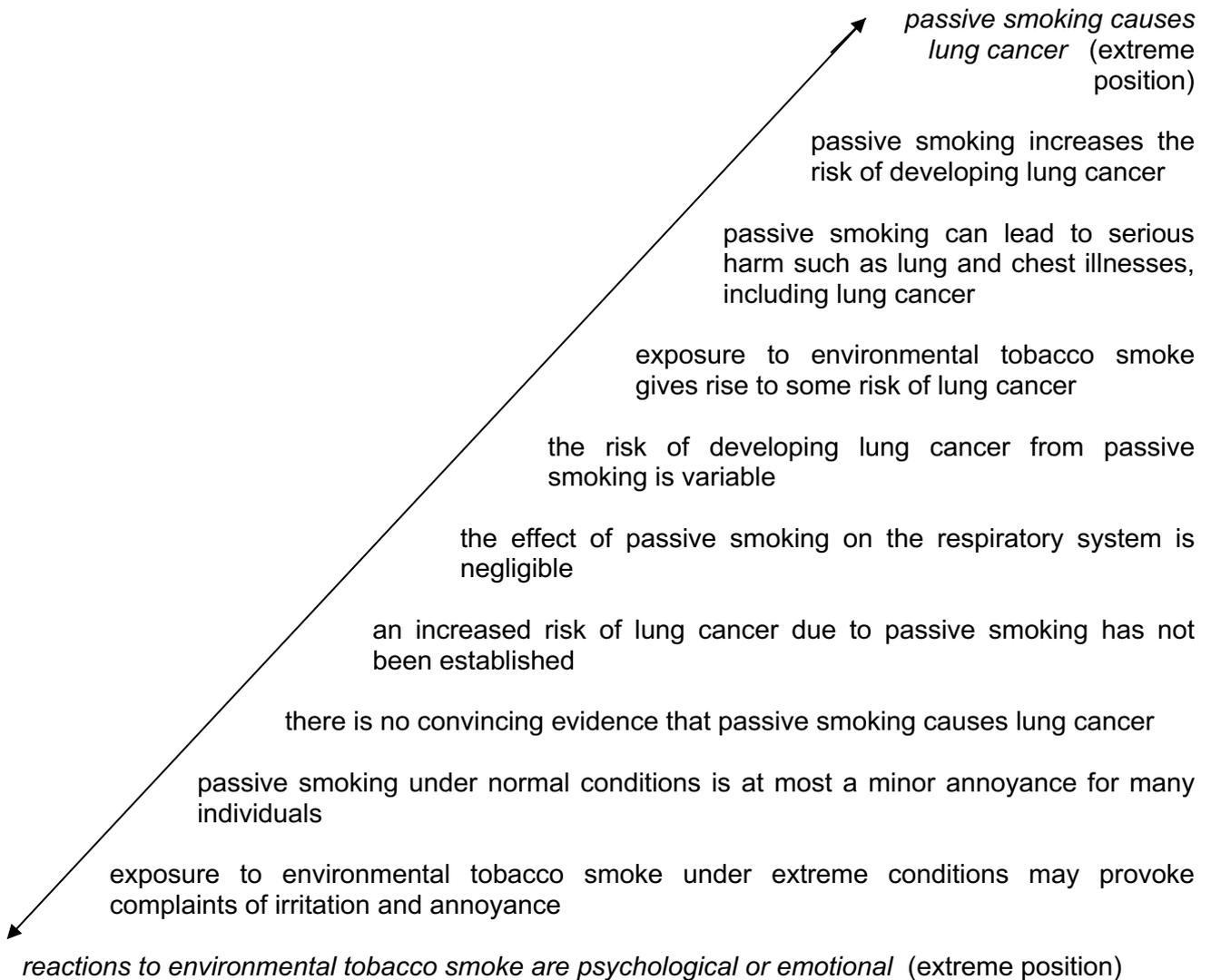
.....Our results are in line with those of recent investigations; they add substantially to the evidence available from Europe of the association between ETS exposure and lung cancer, provide statistically stable risk estimates, assess the contribution of different sources of ETS and point towards a decrease in risk after cessation of exposure.

Question 3: How can I develop an argument out of the evidence to support my own position?

First, you need to choose your position. When you are researching a topic, you will probably come across a range of positions, sometimes extremely opposed to each other. You will then have to evaluate each position and decide why one is more valid than another. This will help you to decide what your own position is, so that you can establish the starting point of the argument for your essay. Sometimes your position will be determined by the amount of source material available.

Reflection:

If you had to make a position statement to identify where you stand on the effects of passive smoking, would it be similar to 1) or 2) above? Would it be stronger or weaker than those positions? Try to identify your position on the following gradient of views.



Most essay topics which involve developing an argument will have a similar range of possible positions. You may find that your choice of position in any argument will depend largely on the amount of evidence available to support it.

Once you have done enough reading on your topic, you should begin to get a feel for the range of positions put forward by different authors, and also a feel for where you stand on the topic. This next exercise will help you to go through the process of reading different positions, making judgements about which ones are most valid, and then deciding your own position.

⌘ Exercise 3:

On pages 8 and 9 are a number of pieces of information about tobacco production, product sales and effects which you have found in preparation for an essay on the topic

"Discuss the economic effects of tobacco use".

Below are some steps to go through in this exercise.

The steps to follow:

- (a) Read all the evidence through once before going on. Then go back and read each piece in turn, and answer the following questions:

Is this piece of evidence relevant to the essay question - "Discuss the economic effects of tobacco use"?

Is this piece of evidence written by a reputable person or group?

(You might still be able to use evidence which is not as reputable, by criticising it.)

- (b) Make notes about how you could use this piece of evidence: what position is it taking? is it valid in taking this position? if it is not valid, what are the problems with it?

- (c) Decide which position you intend to take in order to respond to the task.

Finally, decide how you will structure your ideas and the information you want to use to support them. Draw a diagram to show how you will "taxonomise" your analysis.

The evidence:

- (1) ...the more recent study by Collins and Lapsley⁴ ...estimated the total cost of tobacco to the Australian community in 1992 to be \$9.2 billion annually. These calculations take no account of the pain and suffering experienced by those with disease and their families.

[4. Collins DJ, Lapsley HM. The economic costs generated by tobacco use in Australia. Department of Human Services and Health submission to the Industry Commission Inquiry into the Tobacco Growing and Manufacturing Industries. Canberra: Commonwealth Department of Human Services and Health, 1994]

Winstanley, M [Ed] (1995) Tobacco in Australia: Facts and Issues.
Action on Smoking and Health Ltd (ASH Australia)

- (2) In any given year, smokers' healthcare costs will on average exceed nonsmokers'.
.....In high-income countries, smoking related healthcare costs accounts for between 6 and 15% of all annual healthcare costs.

Tobacco Free Initiative: Governments and the Economics of Tobacco Control
World Bank Report 2000

- (3) In Ecuador, Philip Morris International's contributions allowed hunger-relief agencies to quadruple the monthly food provision for hungry people in the city of Cuenca....

Philip Morris International Financial Overview, June 2000
http://www.philipmorris.com/tobacco_bus/PM/fin_overview

- (4) The total domestic output arising from the activities of the tobacco industry was valued at \$8 billion.

Australia's Golden Leaf: the economic impact of the tobacco industry in Australia (1990)
Price Waterhouse Economic Studies Unit,
commissioned by the Tobacco Institute of Australia

- (5) In 1997 the tobacco industry directly employed more than 670,000 people in the United States alone, and also created over 830,000 jobs in related sectors such as transport, retail, finance, business services, construction and agriculture.

British American Tobacco
<http://www.bat.com/bat/WhatWD.nsf> 30 May 2000

- (6) The federal and state governments collect considerable income from the sale of tobacco products. Around a quarter of the retail price of a packet of cigarettes is accounted for by federal excise, and a further third by state or territorial licence fees....

Winstanley, M [Ed] (1995) Tobacco in Australia: Facts and Issues
Action on Smoking and Health Ltd (ASH Australia)

- (7) Crop substitution is often proposed as a means to reduce the tobacco supply, but there is scarcely any evidence that it reduces consumption, since the incentives to farmers to grow tobacco are currently much greater than for most other crops.

Tobacco Free Initiative: Governments and the Economics of Tobacco Control
World Bank Report 2000

- (8) In 1998 China was easily the top tobacco producer at 2,525 million tons followed by the USA (746 million kilogram), India (635), Brazil (468), the European Union (349) and Zimbabwe (220). The major exporters were Brazil (280), USA (210), Zimbabwe (178), Turkey (151), and Malawi (111).

Africa Tobacco No 1, International Tobacco Growers' Assn Publications 1999

- (9) ... Many governments have avoided taking action to control smoking - such as higher taxes, comprehensive bans on advertising and promotion, or restrictions on smoking in public places - because of their concerns that their interventions might have harmful economic consequences. For example, the permanent loss of thousands of jobs.

Tobacco Free Initiative: Governments and the Economics of Tobacco Control
World Bank Report 2000

Check your answers in the Key, page 20 .

Question 4: How can I present and support my position?

MATCHING EVIDENCE WITH THE DIFFERENT STAGES OF YOUR ARGUMENT

⌘ Exercise 4:

On the next page is an example (shortened) of a student's paper on the economic effects of tobacco growth. The body of the paper, which contains the development of the writer's position, has gaps where evidence is needed. Go through the following steps:

- (1) Examine the introduction and the conclusion and identify the position statement.
- (2) Look at the stages in the body of the essay to see how the writer is developing the argument to support the position.
- (3) Select appropriate pieces of evidence and put them in the gaps in the body of the essay to support the development of the argument. You may need to select parts of different pieces of evidence to fill the gaps. For this exercise, you can simply write in the pieces of evidence without changing them very much.

When you have finished this exercise...

If you are working on an essay at the moment, check your draft for the following:

- is there a clear position statement signalled in your introduction?
- are there clear stages in the body of your writing where you develop your argument?
- is your evidence relevant? from a reputable source? used in an appropriate way?

Example essay

There is no doubt that in many countries the tobacco industry plays a major economic role in terms of generating income and employment. However, **it is questionable as to whether these benefits outweigh the costs to society of tobacco use.**

Tobacco use results in a number of costs to society, primarily health costs.
(Gap a)

These costs are largely born by governments who are responsible for funding health care systems. However it is really society as a whole which contributes through tax revenue to these health care systems.

On the other hand it must also be remembered that governments themselves benefit
(Gap b)

It is certainly the case that tobacco production generates economic activity, employment and large revenues. Most of the world's tobacco is produced in the developing world
(Gap c)

and this area is amongst the greatest tobacco exporters
(Gap d)

The tobacco industry employs a large number of people worldwide, for example, in the US....
(Gap e)

In addition the distribution of the finished product supports ...
(Gap f)

Governments may be slow to act because of these benefits,
(Gap g)

However, total benefits must be compared to the total costs of tobacco use.
(Gap h)

Therefore, in economic terms, the tobacco industry has become a financial burden to the community since it generates far greater costs which affect all members of a society through their tax support of health care systems.

Check your answers in the Key, page 21 .

Question 5 What is the difference between merely summarising the evidence, and using it to substantiate my position and develop my argument?

We have looked at how you can develop an argument through reading critically and then deciding your position. When you present your position, it will only be convincing if you use evidence to support your argument. In Exercise 4 you matched the evidence to the stages of the argument. This is an important step, BUT IT IS NOT ENOUGH!

A persuasive analytical piece of writing must be based on a logical structure which is your own way of seeing the topic. The research literature is then used to support your way of seeing the topic. You have to choose those ideas from the literature that are useful to support your position and show the inadequacies of other ideas that contradict your position. There is no point at all in just making a summary of what the various authors have all said.

Reflection:

Read the following two paragraphs.

- (a) Dickson (1984: 12) maintains that television violence has a marked effect on the development of the child. Brown (1985: 176) says that children who watch a great deal of televised violence could be affected for many years. The Television Broadcasting Tribunal (1982: 16) recommends that we should "limit the number of hours per week of programs showing violence during children's viewing times".
- (b) That television violence has a considerable effect on the development of the child is not disputed. Both Dickson (1984: 12) and Brown (1985: 176) have shown through extensive experiments that the majority of children are affected by television violence, Brown having extended the base of her research to longitudinal studies which reveal that this effect is quite long-term. In the face of such convincing evidence, the Television Broadcasting Tribunal has been compelled to act in order to reduce the impact that increased television viewing could have on children. The Tribunal has recommended (1982: 16) that the number of hours per week of violent programs should be limited during children's viewing times. In spite of these recommendations, however, there continues to be a significant level of violence in programs which are broadcast at prime viewing times for children.

Text (a) is a summary of what each researcher has concluded, and what the TBT recommends, with no position or argument from the writer. This means the reader has to do a lot of work to figure out what is going on. Most readers can't be bothered!

Text (b) uses the evidence to support the main points of the author, and states the writer's position in the first sentence. Much less work for the reader!

When you want to write like Text (b) you have to make some decisions.

DECISION 1 CHOOSING YOUR FOCUS: SOURCE OR AUTHOR?

When you refer to a source, you can focus on the author, or on the ideas in the source. This means that you **begin your sentence** with either the author's name or with the actual idea in the source.

Focus information is the information in front of the main verb of a sentence

Examples from Paragraph (a) of strong focus on the author:

Dickson maintains... (that television violence has a marked effect on the development of the child)

Brown says... (that children who watch a great deal of televised violence could be affected for many years)

If you want to change to a focus on the source ideas, you could do something like this:

That television violence has a considerable effect on the development of the child... (is not disputed) Paragraph (b)

The possible longterm effect of televised violence on children is noted by Brown...

If all your focus is on the author, the danger is that you are merely summarising the evidence and not using it to develop an argument and support your own position.

DECISION 2 WHAT ABOUT THE RELATIONSHIPS BETWEEN THE DIFFERENT PIECES OF INFORMATION?

➔ **Demonstration:**

Looking at the annotated model of paragraph (b), on page 13, you can see that the relationship information is included in the beginning of the sentences, to focus the reader on the connections between your pieces of evidence, and move the reader on to your conclusion.

Finding the relationships - a strategy

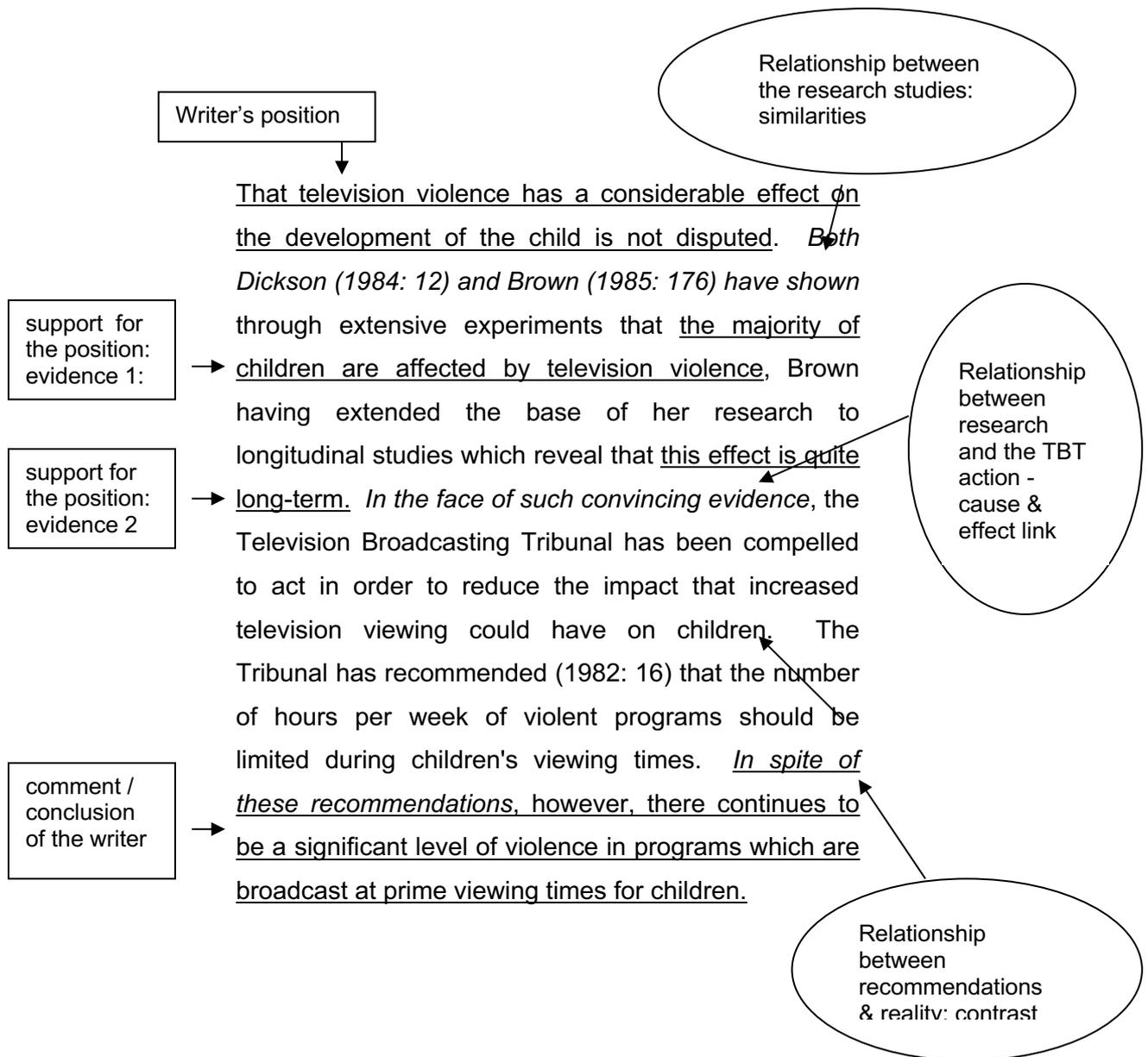
In the same short text, the focus relationships are the similarities and differences between the research studies and the effect of these studies on the TBT. Many students find these sorts of relationships difficult to identify. Instead they see the evidence simply as a list of various sources without asking themselves how the ideas in one source are related to the ideas in other sources. In other words they do not synthesise the information and ideas in their sources.

⌘ **Exercise 5:**

Examine the brief summaries of research studies in the area of environmental tobacco smoke (ETS) and respiratory/lung ailments (Page 14). Enter the main information on the synthesis grid below the summaries, working horizontally.

Check your grid in the Key, page 21 .

Paragraph (b)



The evidence:

- (1) Sankus et al (1988) studied 21 adult asthmatics to look at the effect of experimental ETS on asthmatics. The study failed to demonstrate any association between 'sensitivity' and objective immunologic tests.
- (2) Ugnat et al (1990) a national survey of Canadian children under 17. This study found no association between asthma as reported by parents and residential exposure to ETS.
- (3) Knight and Breslin (1985) studied the effects of experimental EST on 6 asthmatic adults. All developed chest tightness and symptoms of an asthma attack.
- (4) Volkmer et al (1995) surveyed 14,124 children through parental questionnaire as part of a preschool check. The study found that parental smoking was associated with bronchitis and wheeze, but not asthma.
- (5) Weidermann et al (1986) looked at the reactions of 9 asthmatic adults to experimental ETS and found there were no significant effects on pulmonary function.
- (6) Evans et al (1987) looked at 191 asthmatic children between the ages of 4 and 17, and made an association between ETS and emergency hospital visits as reported by parents and confirmed by data from medical records.
- (7) Bener et al (1991) looked at 3043 children aged 7 - 12 years in two categories, frequent and infrequent asthma. 78% of children with frequent asthma had smoking parents compared with 6% of children with infrequent asthma.

The synthesis grid:

Source (by author)	Dates	Aim of study topic	Study subject(s)	Outcomes
Sankus et al				
Ugnat et al				
Knight & Breslin				
Volkmar et al				
Weidermann et al				
Evans et al				
Bener et al				

Then, working vertically, you can make comparisons among the pieces of evidence.

For example:

- which studies use big samples?
- which studies look at children?
- which studies look at adults?
- which studies have similar aims?
- which studies have similar methodology?
- which studies make a connection between ETS and asthma?
- which studies fail to make that connection?

Developing your argument.

In the previous exercise you have looked for comparisons and contrasts in the different pieces of evidence. However you could still simply summarise these similarities and differences without telling the reader your own position. What you need to do next is decide on your own position. Then you can begin to sequence the evidence in a logical way to develop your argument and support your position. In this next exercise, you will see how another writer has done this.

→ Demonstration:

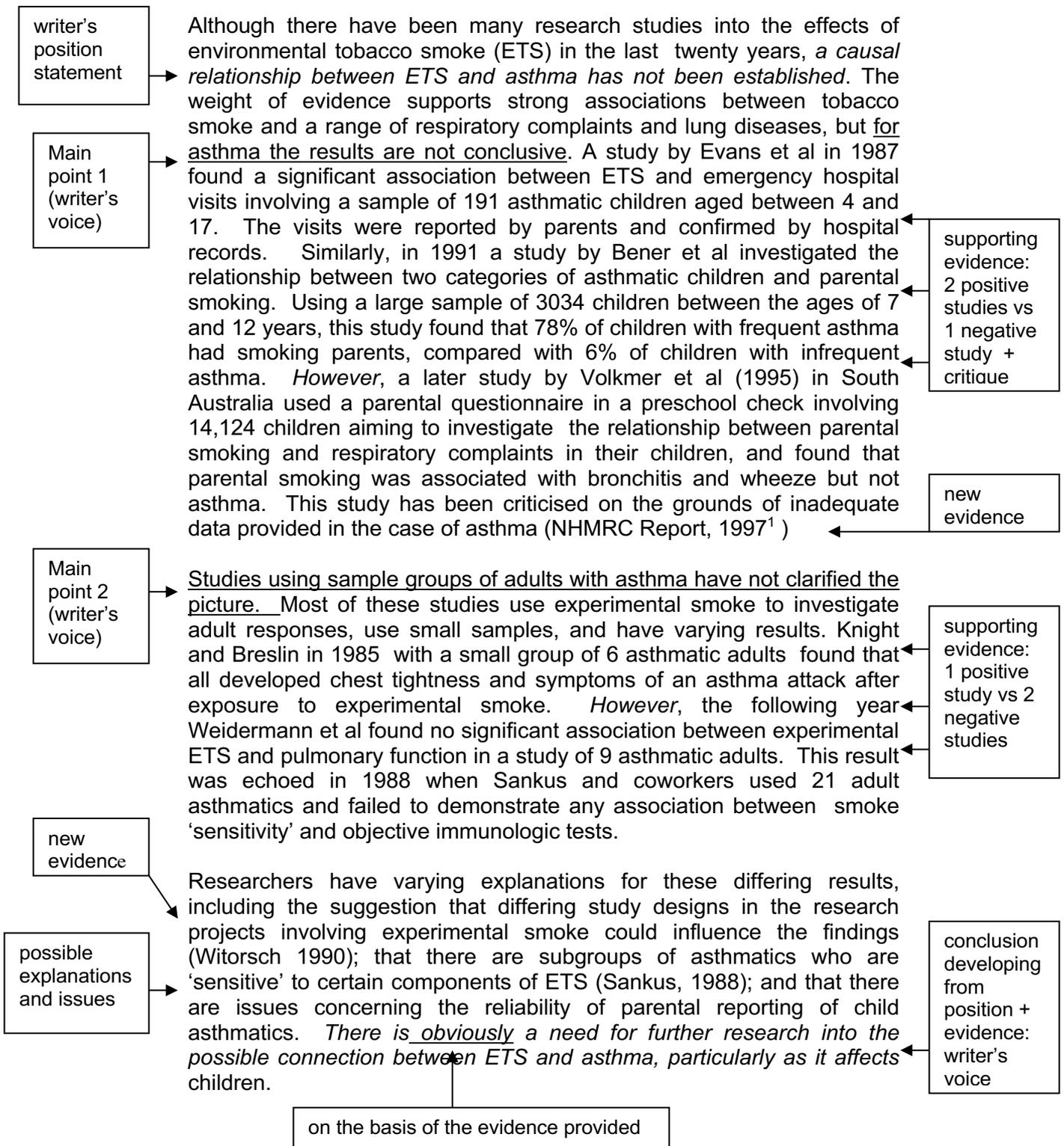
Let's have a look at how one writer has organised the above pieces of evidence from the grid to develop an argument in response to the following task.

“What is the connection between environmental tobacco smoke and asthma?”

Annotations illustrate:

- (a) the writer's position
- (b) how the writer has incorporated and sequenced the supporting evidence
- (c) the new pieces of evidence the writer has added, to critique and explain
- (d) how the writer has developed a conclusion from the main points plus the evidence

“What is the connection between environmental tobacco smoke and asthma?”



¹ The health effects of passive smoking, National Health and Medical Research Council, Commonwealth of Australia, 1997

How can the information in this booklet help you?

We assume that you have a writing assignment in progress. Here is a checklist of questions to help you apply what you have learned today.

- Underline the focus of your sentences (the first part of the sentence before the main verb).
- Is the focus on the author or on the ideas? Is this what you want?
- Is there a balance between your author focus and your focus on ideas (i.e. you are not focussing always on the author)?
- Are the relationships between the pieces of information clear to the reader? Do you want to include them in your sentence focus? (e.g. *As a result*)
- Have you made the points of your argument yourself before you bring in the evidence as support?
- Does the body of your essay progress so that you can come to some sort of conclusion that relates to the position statement in your introduction?

Glossary of terms

As used in this booklet, the following terms mean:

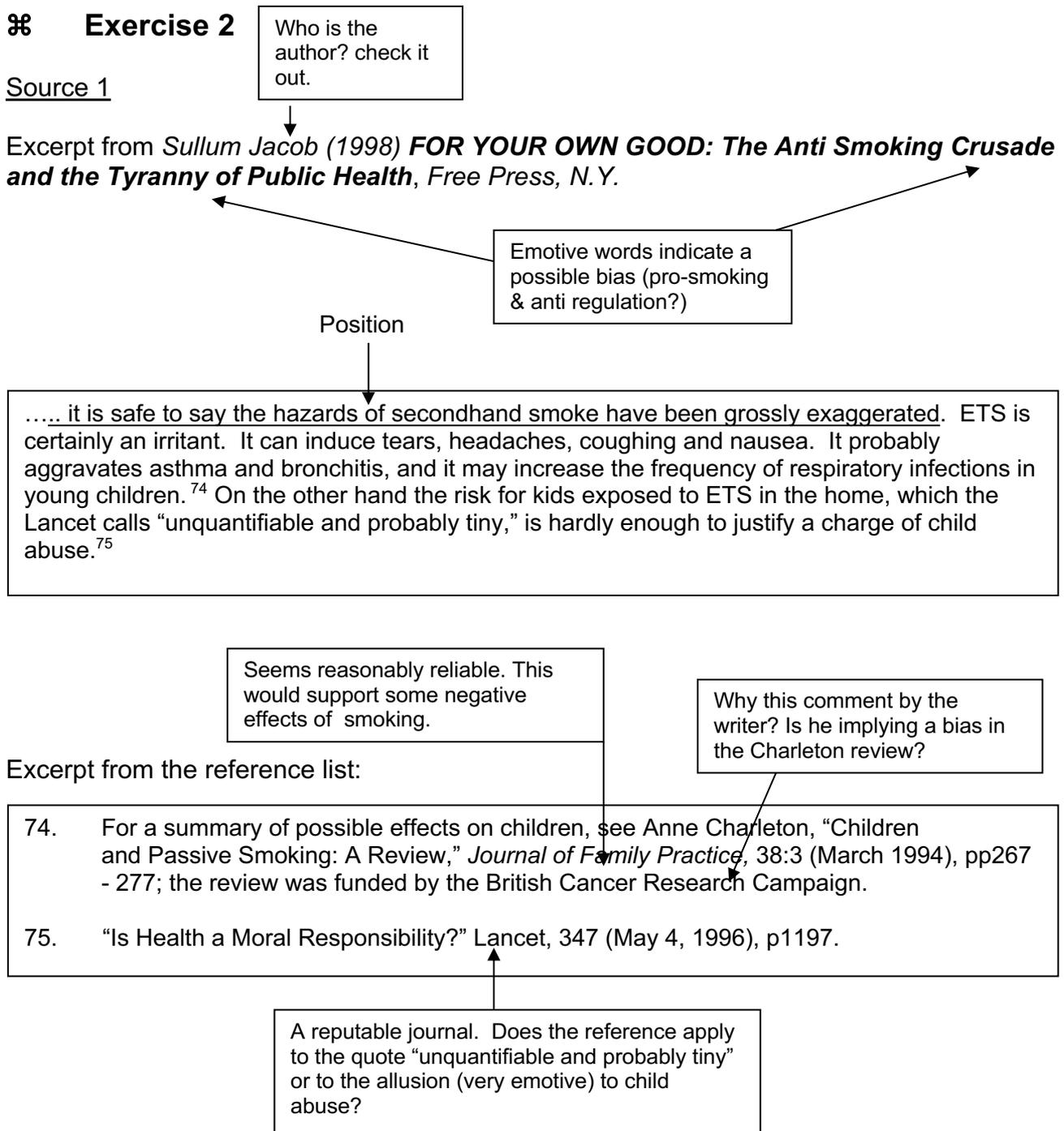
opinion	what you think. In academic writing you usually need the support of experts who think the same thing, but in some assignments, e.g. reflective journals, you can base your opinion on experience.
position	your starting point for presenting a convincing case for your point of view - usually expressed in a statement in the introduction of the essay ("position statement")
argument	the stages through which you build up a case; usually a logical sequence of points in the body of the essay
focus information	the information before the main verb in a sentence. Your reader will focus on this.
persuasive	convincing. Used of writing which puts forward a position and develops a logical argument to support it. If your writing is persuasive, it means that the reader will accept your argument as logical even if s/he does not personally agree with it.

Key to Exercises

- ⌘ **Exercise 1** (a) uses evidence from the personal experience of the writer.
 (b) uses expert academic evidence.

[This does not mean that examples of violent programs would always be inappropriate, but these need to be used within a more abstract context.]

⌘ **Exercise 2**

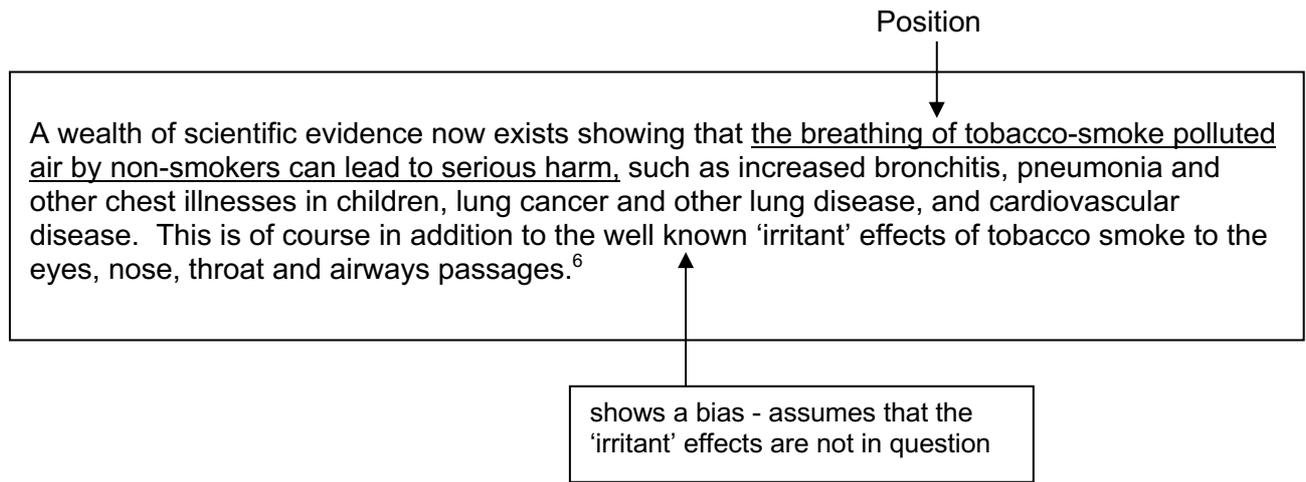


- (a) Position: *Passive smoking is not as dangerous as we are led to believe.*
 (b) Reliable? Maybe. Need to check the writer. Can probably still use it.
 (c) Valid? Reference information is from reliable sources but is used inexactly.

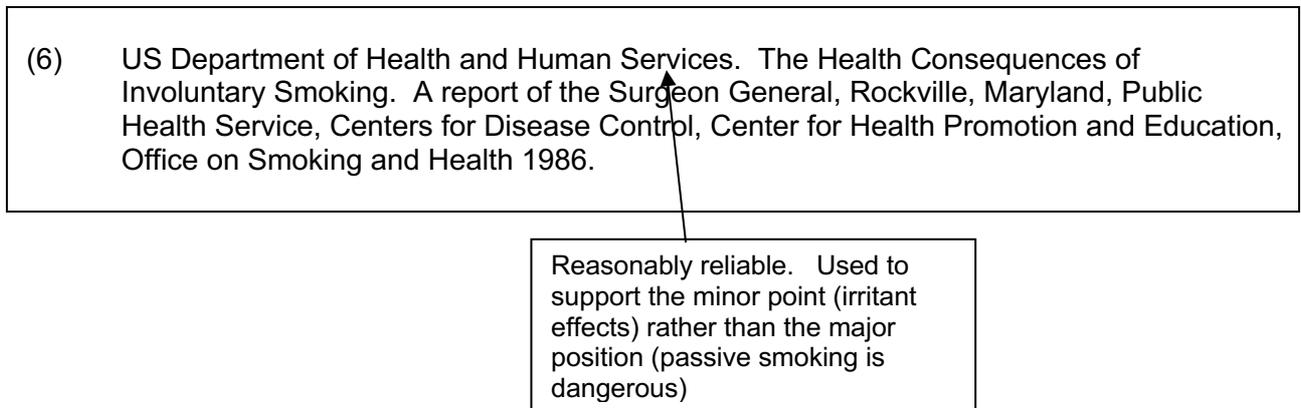
A lobby group: therefore we can expect a bias - anti passive smoking ?

Source 2

Excerpt from *Winstanley, M [Ed] (1995) Tobacco in Australia: Facts and Issues, (2nd Ed. p.77) Action on Smoking and Health Limited (ASH Australia), 5th Floor 64 Kippax Street, Surry Hills, Sydney.*



Excerpt from the reference list:



- (a) Position: *Passive smoking can cause serious illness*
- (b) Reliable? Probably OK.
- (c) Valid? Yes, reasonably.
Check the evidence used for the major statements in the argument.

⌘ Exercise 3

Item	Relevant?	Reputable?	Position
1	yes	reasonably	information - neutral lobby group - anti-smoking
2	yes	yes	neutral
3	?	? (stakeholder)	implied: <i>PM is a great contributor to aid for groups in need</i>
4	yes	reasonably	information - neutral commissioned by stakeholder
5	yes	? (stakeholder)	implied: <i>the tobacco industry is a great employer and creator of employment</i>
6	yes	reasonably	neutral
7	?	yes	neutral
8	yes	reasonably	information neutral stakeholder - pro tobacco
9	possibly	yes	neutral

A possible taxonomy

Positive economic aspects

- total output (4)
- employment (5)
- Federal/State revenues (6)
- incentives for farmers (7)
- opportunity for developing countries (8)

Negative economic aspects

- total costs to community (2)
- healthcare costs (2)
- difficulties of crop substitution (7)
- difficulties of government action to control (9)
- tempting for developing countries - future health problems (8)

⌘ Exercise 4

Gap-filling exercise

There is no doubt that in many countries the tobacco industry plays a major economic role in terms of generating income and employment. However it is questionable as to whether these benefits outweigh the costs to society of tobacco use.

Tobacco use results in a number of costs to society, primarily health costs.

(Gap a)

(2) *(smokers' health care costs)*

These costs are largely born by governments who are responsible for funding health care systems. However it is really society as a whole which contributes through tax revenue to these health care systems.

On the other hand it must also be remembered that governments themselves benefit

(Gap b)

(6) *(income from excise and licence fees)*

It is certainly the case that tobacco production generates economic activity, employment and large revenues. Most of the world's tobacco is produced in the developing world.

(Gap c)

(8) *(top producers)*

and this area is amongst the greatest tobacco exporters.

(Gap d)

(8) *(major exporters)*

The tobacco industry employs a large number of people worldwide, for example, in the US....

(Gap e)

(5) *(direct employment)*

In addition the distribution of the finished product supports ...

(Gap f)

(5) *(related sectors)*

Governments may be slow to act because of these benefits,

(Gap g)

(9) *(resulting loss of jobs)*

However, total benefits must be compared to the total costs of tobacco use.

(Gap h)

(1) & (4) *(figures for Australia)*

Therefore, in economic terms, the tobacco industry has become a financial burden to the community since it generates far greater costs which affect all members of a society through their tax support of health care systems.

⌘ Exercise 5: The synthesis grid:

Source (by author)	Dates	Aim of study topic	Study subject(s)	Outcomes
Sankus et al	1988	to investigate the effect of experimental EST on asthmatics	21 adult asthmatics	failed to demonstrate any association between 'sensitivity' and objective immunologic tests
Ugnat et al	1990	used a national survey in Canada to look for association between asthma as reported by parents and residential exposure to ETS	Children under 17	no association found between parent reported asthma and residential exposure to ETS
Knight and Breslin	1985	to study effects of experimental EST on asthmatic adults	6 asthmatic adults	all developed chest tightness and symptoms of an asthma attack
Volkmer et al	1995	used a parental questionnaire in a preschool check to look at the relationship between parental smoking and respiratory complaints	14124 preschool children	parental smoking was associated with bronchitis and wheeze but not asthma
Weidermann et al	1986	to investigate the relationship between experimental ETS and pulmonary function in asthmatic adults	9 asthmatic adults	no significant effects on pulmonary function
Evans et al	1987	to look for association between ETS and emergency hospital visits (reported by parents and confirmed by medical records)	191 asthmatic children aged between 4 and 17	a significant association found
Bener et al	1991	to look at the relationship between two categories of asthmatic children and parental smoking	3034 children with asthma between ages 7 - 12	78% of children with frequent asthma had smoking parents compared with 6% of children with infrequent asthma