

"We have arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces"

- Carl Sagan -

How to use the Insciout coding sheet:

Introduction:

We use the coding sheet to store and analyse information we are interested in from journal articles, press releases and news reports. Specifically we look at 7 **areas**:

- (1) General information (e.g. title, date of publication etc.).
- (2) The **title** information.
- (3) The **IV** (what is being manipulated) and the **DV** (what is being measured).
- (4) The **sample** information (e.g. whether the study looks at animals or humans).
- (5) The **statements of relationship** (a word or phrase that tells us how the IVs and DVs relate to each other e.g. for the statement "wine <u>causes</u> cancer" *wine* is the IV, *causes* is the statement of relationship, and *cancer* is the DV).
- **(6) Advice** (e.g. a quote from the scientist saying "based on these results I would not recommend the public to drink wine").
- (7) **Study facts** (e.g. study design, funding bodies, etc).

By comparing the differences between the journal article, press release, and news reports we can start to understand which of these three sources are most associated with misreports of science in the news.

This step-by-step guide is designed to reduce the subjective nature of this type of research. However, every article will have it's own unique problems to overcome. If you are in doubt just ask your supervisor – they will likely have come across the problem before and are there to help:)

(1): General:

Rows 1-14 contain general information more for administrative purposes than anything else.

NB: Any grey cells should be left blank.

NB: We use -9 to code "not applicable".

Row 1 – "Press Release Title": Enter the press release title e.g. "Wine causes cancer". Make sure to only put the title, and not the tagline which is the sentence often following immediately after the title.

Row 2 – "Study Title: Original Research": Enter the journal article title e.g. "Carcinogens in wine may be linked to cancer".

Row 3 – "Discipline": Enter a discipline from the table:

Childhood	1	Treatment	3	Observational Identification	5	Mental Health	7
Life-style	2	Policy	4	Ageing	6	Physical Disease	8

Row 4 – "Sub-discipline": Enter a discipline or -9

Row 5 – "Sub-discipline 2": Enter a discipline or -9

Row 6 – "Notes": When the sheet is complete write "Complete" here.

Row 7 – "Coder": Put your unique coder number here.

Row 8 – "Reference": Write the 7 digit reference code here (e.g. 08-11-019). The first two digits are the journal number, the next two the year the press release was published, the final three are the press release number.

Row 8 – "Available for Coding?": Put an 1 in all the columns you will be coding – this will always include the journal article, abstract, and press release. Add the relevant news reports.

Row 9 – "Date Published": Enter the date in the format dd/mm/yyyy.

Row 10 – "Word Count – Title": Enter the exact number of words in the title.

Row 11 – "Word Count – Body": For the journal article <u>round</u> the number of words to the nearest 1,000 words (NB: if there are 500 words, round <u>up</u> to 1,000 words). For the abstract, press release, and news reports <u>round</u> to the nearest 10 words (NB: if there are 5 words, round <u>up</u> to 10 words).

Row 12 – "Sentence Count": The <u>exact</u> number of sentences for the press release and news reports.

Row 13 – "Who is it written by?": There are many types of journalist. This row is to identify which type wrote the news report (if there are any news reports). "1" = science journalist, "2" = health / medical journalist, "3" = other journalist / they do not specify what type of journalist but a name is given, "4" = no name of a journalist is given.

Row 14 - "Who is it written by (2)?": If the answer to the row above is 3 then google the

journalist's name along with the name of the news report (e.g. Jack London Daily Mail). This will often tell you the type of journalist they are. Put the answer here if it is 1 or 2. If you still cannot find the answer enter 3. If the answer to the row above was 1, 2, or 4 enter -9 (which is how we code "not applicable").

(2): Title:

Rows 15-19 code information specific to the title of the press release, journal article, and news reports.

Row 15 – "IV(s) in title": Identify the IV in the title. Tips: The IV is what is being manipulated e.g. in the following title it is wine: "<u>wine</u> causes cancer". There may be no IV in the title, if so put a "0". Strictly speaking correlational studies have no IV but rather quasi-IVs. In this case check the order with your supervisor. If there are multiple IVs / quasi-IVs enter each separated by a ";"

Row 16 – "DV(s) in title": Identify the DV in the title. Tips: The DV is what is being measured e.g. in the following title it is cancer: "wine causes <u>cancer</u>". There may be no DV in the title, if so put a "0". If there are multiple DVs enter each separated by a ";"

Row 17 – "Who is it about?": Identify the sample in the title. Use the following number codes rather than words: NB: Be especially wary of context for "implicitly human" codes.

- 1. Explicitly human e.g. Wine causes cancer in men / women / people / humans/us/them.
- 2. Implicitly human e.g. Bad news: Wine causes cancer.

- 3. Non-human primates e.g. Wine causes cancer in monkeys / apes / gorillas.
- 4. Rodents e.g. Wine causes cancer in **mice / rats**.
- 5. Other beasties e.g. Wine causes cancer in flies / pigs / horses.
- Cells, In Vivo e.g. Wine causes cancer in <u>bacteria / blood cells / human pancreatic</u> cells.
- 7. Simulations e.g. Wine causes cancer in **computer models / computer simulations**.
- 8. Other / More Than One e.g. Wine causes cancer in clothing fabrics / mice and flies.
- -9. Sample not explicit e.g. Delphinidin acetyl-3O glucoside causes cancer. (no sample stated)

Row 18 – "Are there quotes in the title?": Press release and news report titles often contain quotes, though sometimes these are inaccurate or misleading. This row catches this information. Use the following codes:

- 1. No quotes used.
- 2. Quotes are used but are not accurate / not referring to quotes from the journal article / press release.
- 3. Quotes are used and are accurate / referring to the journal article / press release.

Row 19 – "Statement of cause": This is the statement which links the IV to the DV e.g. in the statement "wine <u>causes</u> cancer" <u>causes</u> is the statement of relationship. There are many different types of relationship statements. We grade these according to the strength of relationships they describe (from no relationship mentioned / statement of no relationship → explicit statement of causation). It is very important that you know what these are and why. If any of the descriptions below are unclear to you please ask your supervisors – you will never be judged if you are unclear,

it's our job to make things clear:)

- **0.** No relationship mentioned No relationship is mentioned e.g. "wine and cancer".
- Statement of no relationship Explicitly stating there is no relationship e.g. "wine <u>does not</u> cause cancer".
- 2. Statements of correlation The IV and DV are associated, but causation cannot be explicitly stated e.g. "wine **is associated with** cancer".
- 3. Ambiguous statement of relationship It is unclear what the strength of relationship of these statement is e.g. "wine **is linked to** cancer". This could mean that wine **causes** cancer, or that wine **is associated with** cancer either would be applicable.
- 4. Conditional statement of causation Causal statements show that the IV directly changes the DV. Conditional causal statements carry an element of doubt in them e.g. "wine <u>might</u> cause cancer".
- 5. Statement of "can" The word "can" is unique as a statement of relationship in that it implies that the IV always has the potential to directly change the DV e.g. "wine **can cause** cancer". Therefore it is a stronger statement than any conditional statement of causation.
- **6.** Statements of causation The strongest statements are statements of causation e.g. "wine **causes** cancer". This statement says that the IV definitely and directly alters the DV.

(3): IV:

Row 20 – "Main IV of Conclusions": State the main IV from the conclusions. This should be the IV that is the **main focus** of the journal article, journal abstract, press release, or news report(s).

Coding Sheet Guidelines 13/05/13

Row 21 – "IV Code": The "NEW IV DV Discipline Codes" document contains a list of IV codes. Choose the code that relates most closely to the IV you have selected e.g. if the IV is "wine" choose the code "7" (alcohol).

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<u>Name</u>	<u>Example</u>	Code
Pregnancy (childhood)		1
Non-Educational (childhood)	Behaviour problems in infancy e.g excessive crying,	2
Educational (childhood)	Learning to read	3
Diet (life-style)		4
Exercise (life-style)		5
Smoking (life-style)		6
Alcohol (life-style)		7
Illicit Drugs (life-style)		8
Pharmacological (treatment)	Aspirin	9
Non-Pharmalogical (treatment without drugs)	Acupuncture	10
Psychiatric e.g. depression (mental health)	Suicide rates,	11
Neurodegenerative e.g. Alzheimer's (mental health)		12
Mental processes (mental health)	Decision making, intelligence, life satisfaction, confidence ratings,	13
Cardiovascular (physical health)		14
Respiratory (physical health)		15
Musculoskeletal (physical health)		16
Immune (physical health)		17
Homeostatic (physical health)	Glucose levels, diabetes, hormonal disease	18
Genetic (identification)	genes	19
Non-Genetic (identification)	Everything else category	20
Mortality (physical health)		21
Other e.g. reproductive, skin etc. (physical health)		22
Cancer (physical health)		23
Other Behaviour (life-style)	Transport to work, job type,	24
Obesity (physical health)		25
Age		26
Gender		27

Row 22 – "Is this IV in the first 2 sentences?": If the IV is stated in the title or either of the two sentences occurring immediately after the title then put a "1" in this cell. Mentions of the IV should include the name itself e.g. "wine" or any synonyms e.g. "the alcohol drink". We do this so as not to punish journalists for changing scientific language to allow the public to understand it more easily.

Row 23 – "Number of sentences the IV is mentioned in": As above, mentions of the IV should include the name itself e.g. "wine" or any synonyms e.g. "the alcohol drink". Tip: We have found the best way to work through the number of mentions is to highlight the document. In the example below the IV has been highlighted in yellow. Each sentence has a mention of the IV, therefore you would enter "3" into this cell.

Wine causes cancer.

Researchers have found that the alcoholic drink might cause us to develop the deadly disease.

They looked at how much of the tipple 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

Row 24 – "Words to first mention": If the IV is first mentioned in the title (as in the example above) enter "0" into this cell. If the IV is first mentioned in the first sentence then enter "1" into this cell e.g. if the first mention of the IV were "the alcoholic drink" in the example above. If the IV is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the IV is mentioned in, check the word count and enter it into this cell. The example below shows the text I highlighted in grey to get the words to

first mention: in this case the answer was "16".

Something causes cancer.

Researchers have found that something might cause us to develop the deadly disease.

They looked at how much of wine 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

Row 25 – "What terms were included in the count?": In this cell enter every word you included in the IV count e.g. wine / alcoholic drink / tipple.

Row 26 – "Is there ambiguity?": Is it clear from your first read through what the abstract, press release, or news report(s) was? If yes enter a "0". If it became clear after multiple read throughs, enter a "1". If it remained unclear, enter a "2".

Row 27 – "If yes describe": If you entered a "1" or a "2" in **Row 26** write a brief description of why the IV is not clear in this cell. If you entered a "0" in **Row 26** this row is not applicable so enter "-9".

Row 28 – "Is the same IV being coded here as the abstract?": Check whether the press release or news report(s) state the same main IV as the abstract. Enter a "0" if the IV is the same type as the abstract e.g. if the abstract states the IV as "wine" and the press release states the IV as "alcoholic drink" enter a "0". Enter a "1" if the IV in the press release or news report(s) is the same type as the second IV mentioned in the abstract. Enter a "2" if the IV in the press release or news report(s) is the same type as another IV mentioned in the abstract. Enter a "3" if the IV in the press release

or news report(s) was not manipulated in the abstract, or is new. Enter a "4" if the IV in the press release or news report(s) is not mentioned in the abstract.

Row 29 – "Note differences here": If you entered a "0" in **Row 28** then this row is not applicable so enter "-9" in this cell. If you entered anything other than a "0" in **Row 28** then give a brief explanation of the differences between the IV in the press release and/or new report(s) and the abstract.

Row 30 – "Actual IV for this": Check the **journal article** for the main IV they report. This can usually be found at the end of the introduction, the start of the discussion, or the end of the discussion.

Row 31 – "IV code": The "NEW IV DV Discipline Codes" document contains a list of IV codes. Choose the code that relates most closely to the IV you have selected e.g. if the IV is "wine" choose the code "7" (alcohol).

Row 32 – "Is there a generalisation?": The next 8 rows provide information on whether exaggerations have occurred between the journal article and abstract, press release, or news report(s). If no exaggeration has occurred enter "0" into this cell and then "-9" into all non-grey cells up to **Row 39** and continue from **Row 40**. An example of this is if the IV in the journal article is the same type as the abstract, press release, or news report(s) e.g. journal article = "wine", abstract, = "wine", and press release = "the alcoholic grape drink".

If a minor generalisation has occurred enter a "1" into this cell and then "-9" into all non-grey cells up to **Row 39** and continue from **Row 40**. An example of this is if the IV in the journal article is

similar to the abstract, press release, or news report(s) but an exaggeration has been made e.g. journal article = "wine", abstract, = "wine", and press release = "alcoholic drinks". Here the press release has made a generalisation to *all* alcoholic drinks. As wine is still an alcoholic drink this is only a minor generalisation.

If a major generalisation has occurred enter a "2" into this cell and then proceed to **Row 33**. An example of this is if the IV in the journal article is different to the abstract, press release, or news report(s) e.g. journal article = "wine", abstract, = "wine", and press release = "beer". Here the press release has made a generalisation to a *different* alcoholic drink which was not directly manipulated, therefore the generalisation is considered major.

Row 33 – "Number of sentences the actual IV is mentioned in": Here copy the format of **Row 23** but only include mentions of the *actual IV* only.

Row 34 – "Words to first mention": If the actual IV is first mentioned in the title enter "0" into this cell. If the actual IV is first mentioned in the first sentence then enter "1" into this cell. If the IV is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the actual IV is mentioned in, check the word count and enter it into this cell.

Row 35 – "What terms were included in the count?": In this cell enter every word you included in the actual IV count.

Row 36 – "Justification offered for generalisation between actual IV and abstract / press release / news report": It is important for us to be fair and acknowledge when writers justify their

generalisations. An example is if "wine" is the IV in the journal article and abstract but "beer" is the IV in the press release. If the press release explicitly states that "beer is not the same as wine, but both are alcoholic so we imagine the effects will be similar" they have justified their generalisation and you should enter a "1" in this cell. If no such justification exists enter a "0". NB: It does not matter if the justification is technically correct or not. We are only coding whether or not it is there and trying to remain objective.

Row 37 – "Words to first mention": If there is a justification enter the words to first mention for it using the following format. If the justification is first mentioned in the title enter "0" into this cell. If the justification is first mentioned in the first sentence then enter "1" into this cell. If the justification is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the justification is mentioned in, check the word count and enter it into this cell.

If there is no justification this row is not applicable so enter "-9".

Row 38 – "Caveats mentioned": Do the authors provide caveats when they generalize from one IV to the other? If press release generalized form wine to beer, they might say: "Future studies are needed to make sure that beer has the same effect on cancer as wine". If you find a sentence like this, code the cell as "1", otherwise, it's "0".

Row 39 – "Words to first mention": If there is a caveat enter the words to first mention for it using the following format. If the caveat is first mentioned in the title enter "0" into this cell. If the caveat is first mentioned in the first sentence then enter "1" into this cell. If the caveat is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and

including the 1st word of the 1st sentence the caveat is mentioned in, check the word count and enter it into this cell.

(4): DV:

Row 40 – "Main DV of Conclusions": State the main DV from the conclusions. This should be the DV that is the **main focus** of the journal article, journal abstract, press release, or news report(s).

Row 41 – "DV Code": The "Phase 2" folder contains a list of DV codes. Choose the code that relates most closely to the DV you have selected e.g. if the DV is "cancer" choose the code "23" (cancer).

Row 42 – "Is this DV in the first 2 sentences?": If the DV is stated in the title or either of the two sentences occurring immediately after the title then put a "1" in this cell. Mentions of the DV should include the name itself e.g. "cancer" or any synonyms e.g. "the deadly disease". We do this so as not to punish journalists for changing scientific language to allow the public to understand it more easily.

Row 43 – "Number of sentences the DV is mentioned in": As above, mentions of the DV should include the name itself e.g. "cancer" or any synonyms e.g. "the deadly disease". Tip: We have found the best way to work through the number of mentions is to highlight the document. In the example below the DV has been highlighted in green. Each sentence has a mention of the DV, therefore you would enter "3" into this cell.

Wine causes cancer.

Researchers have found that the alcoholic drink might cause us to develop the deadly disease.

They looked at how much of the tipple 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

Row 44 – "Words to first mention": If the DV is first mentioned in the title (as in the example above) enter "0" into this cell. If the DV is first mentioned in the first sentence then enter "1" into this cell e.g. if the first mention of the DV were "the deadly disease" in the example above. If the DV is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the DV is mentioned in, check the word count and enter it into this cell. The example below shows the text I highlighted in grey to get the words to first mention: in this case the answer was "16".

Wine causes something.

Researchers have found that the alcoholic drink might cause us to develop something.

They looked at how much of wine 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

Row 45 – "What terms were included in the count?": In this cell enter every word you included in the DV count e.g. cancer / the deadly disease.

Row 46 – "Is there ambiguity?": Is it clear from your first read through what the abstract, press release, or news report(s) was? If yes enter a "0". If it became clear after multiple read throughs, enter a "1". If it remained unclear, enter a "2".

Row 47 – "If yes describe": If you entered a "1" or a "2" in **Row 46** write a brief description of why the IV is not clear in this cell. If you entered a "0" in **Row 46** this row is not applicable so enter "-9".

Row 48 – "Is the same DV being coded here as the abstract?": Check whether the press release or news report(s) state the same main DV as the abstract. Enter a "0" if the DV is the same type as the abstract e.g. if the abstract states the DV as "cancer" and the press release states the DV as "the deadly disease" enter a "0". Enter a "1" if the DV in the press release or news report(s) is the same type as the second IV mentioned in the abstract. Enter a "2" if the DV in the press release or news report(s) is the same type as another DV mentioned in the abstract. Enter a "3" if the DV in the press release or news report(s) was not manipulated in the abstract, or is new. Enter a "4" if the DV in the press release or news report(s) is not mentioned in the abstract.

Row 49 – "Note differences here": If you entered a "0" in **Row 48** then this row is not applicable so enter "-9" in this cell. If you entered anything other than a "0" in **Row 48** then give a brief explanation of the differences between the IV in the press release and/or new report(s) and the abstract.

Row 50 – "Actual DV for this": Check the **journal article** for the main DV they report. This can usually be found at the end of the introduction, the start of the discussion, or the end of the discussion.

Row 51 – "DV code": The "Phase 2" folder contains a list of DV codes. Choose the code that relates most closely to the DV you have selected e.g. if the DV is "cancer" choose the code "23" (cancer).

Row 52 – "Is there a generalisation?": The next 8 rows provide information on whether exaggerations have occurred between the journal article and abstract, press release, or news report(s). If no exaggeration has occurred enter "0" into this cell and then "-9" into all non-grey cells up to **Row 59** and continue from **Row 62**. An example of this is if the DV in the journal article is the same type as the abstract, press release, or news report(s) e.g. journal article = "brain cancer", abstract, = "brain cancer", and press release = "brain cancer".

If a minor generalisation has occurred enter a "1" into this cell and then "-9" into all non-grey cells up to **Row 59** and continue from **Row 62**. An example of this is if the DV in the journal article is similar to the abstract, press release, or news report(s) but an exaggeration has been made e.g. journal article = "brain cancer", abstract, = "brain cancer", and press release = "all cancers". Here the press release has made a generalisation to *all* cancers. As brain cancer is still a type of cancer this is only a minor generalisation.

If a major generalisation has occurred enter a "2" into this cell and then proceed to **Row 53**. An example of this is if the DV in the journal article is different to the abstract, press release, or news report(s) e.g. journal article = "brain cancer", abstract, = "brain cancer", and press release = "stroke". Here the press release has made a generalisation to a *different* disease which was not directly measured, therefore the generalisation is considered major.

Row 53 – "Number of sentences the actual DV is mentioned in": Here copy the format of **Row 53** but only include mentions of the *actual DV* only.

Row 54 – "Words to first mention": If the actual DV is first mentioned in the title enter "0" into this cell. If the actual DV is first mentioned in the first sentence then enter "1" into this cell. If the DV is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the actual DV is mentioned in, check the word count and enter it into this cell.

Row 55 – "What terms were included in the count?": In this cell enter every word you included in the actual DV count.

Row 56 – "Justification offered for generalisation between actual DV and abstract / press release / news report": It is important for us to be fair and acknowledge when writers justify their generalisations. An example is if "cancer" is the DV in the journal article and abstract but "stroke" is the DV in the press release. If the press release explicitly states that "stroke is not the same as brain cancer, but both occur in the brain so stroke might occur as well as brain cancer" they have justified their generalisation and you should enter a "1" in this cell. If no such justification exists enter a "0". NB: It does not matter if the justification is technically correct or not. We are only coding whether or not it is there and trying to remain objective.

Row 57 – "Words to first mention": If there is a justification enter the words to first mention for it using the following format. If the justification is first mentioned in the title enter "0" into this cell. If the justification is first mentioned in the first sentence then enter "1" into this cell. If the justification is mentioned in a later sentence, starting from the 1st word after the title, highlight the

text up to and including the 1st word of the 1st sentence the justification is mentioned in, check the word count and enter it into this cell.

If there is no justification this row is not applicable so enter "-9".

Row 58 – "Caveats mentioned": Do the authors provide caveats when they generalize from one DV to the other? If press release generalized form cancer to stroke, they might say: "No studies so far have shown that strokes are related to brain cancers". If you find a sentence like this, code the cell as "1", otherwise, it's "0".

Row 59 – "Words to first mention": If there is a caveat enter the words to first mention for it using the following format. If the caveat is first mentioned in the title enter "0" into this cell. If the caveat is first mentioned in the first sentence then enter "1" into this cell. If the caveat is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the caveat is mentioned in, check the word count and enter it into this cell.

Row 60 – "Is the DV quantified?": A DV is quantified when it has a numerical relationship attached to it. e.g. "drinking wine **doubles** your risk of cancer".

Row 61 – "Is the base rate mentioned?": Quantifying the DV can be useful but it can also be misleading. Therefore, we also want to know whether the base rate is mentioned. The base rate is the probability something will occur. For example, "drinking wine doubles your risk of cancer, from <u>0.0000001%</u> to <u>0.0000002%</u>". In this case the increase in risk is actually tiny, so stating that it doubles may imply a bigger risk than the numerical values predict. Compare this to "drinking

wine doubles your risk of cancer, from $\underline{25\%}$ to $\underline{50\%}$ " and you can see why we are interested in whether base rates are mentioned.

Row 61 – "Words to first mention": If the base rate is mentioned enter the words to first mention for it using the following format. If the base rate is first mentioned in the title enter "0" into this cell. If the base rate is first mentioned in the first sentence then enter "1" into this cell. If the base rate is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the base rate is mentioned in, check the word count and enter it into this cell.

THE SECOND IV (ROWS 63 - 82) AND SECOND DV (ROWS 83 - 105) SECTIONS ARE FILLED OUT EXACTLY THE SAME AS FOR (3) IV AND (4) DV RESPECTIVELY. AN EXAMPLE OF A SECOND IV WOULD BE "WINE AND CHOCOLATE CAUSE CANCER". AN EXAMPLE OF A SECOND DV WOULD BE "WINE CAUSES CANCER AND HEART ATTACK".

(5): Sample:

Row 106 – "Who are the main conclusions about?": Write in words the name of the sample used. It is important to note here that if multiple types of sample are mentioned, we always enter the one with the lowest sample code (see **Row 107** and the example below).

Row 107 – "Sample code": Identify the main sample. Use the following number codes rather than words: NB: Be especially wary of context for "implicitly human" codes.

- 1. Explicitly human e.g. Wine causes cancer in men / women / undergraduates/us/them.
- 2. Implicitly human e.g. Bad news: Wine causes cancer.
- 3. Non-human primates e.g. Wine causes cancer in monkeys / apes / gorillas.
- 4. Rodents e.g. Wine causes cancer in **mice / rats**.
- 5. Other beasties e.g. Wine causes cancer in flies / pigs / horses.
- Cells, In Vivo e.g. Wine causes cancer in <u>bacteria / blood cells / human pancreatic</u> cells.
- 7. Simulations e.g. Wine causes cancer in **computer models / computer simulations**.
- 8. Other / More Than One e.g. Wine causes cancer in clothing fabrics / mice and flies.
- -9. Sample not explicit e.g. Wine causes cancer. (no sample stated)

As the example above shows, "us" is coded as a "2" (implicitly human – as using "us" implies the sample relates to people), while "undergraduates" is coded as a "1" (explicitly human – as "undergraduates" cannot be anything other than humans). We always code the <u>lowest</u> coded sample. Take the example below. "Us" is mentioned in the 1st sentence. While "undergraduate" is mentioned in the second sentence. Even though "us" is mentioned first, the answer to **Row 106** would be "undergraduates" and the answer to **Row 107** would be "1" because "undergraduates" (1) trumps "us" (2). As you will see later, we use this same trump system in the statements of relationship section.

Wine causes cancer.

Researchers have found that the alcoholic drink might cause us to develop the deadly disease.

They looked at how much of the tipple 13 undergraduates drank and found that those who drank

more were more likely to develop cancer.

Row 108 – "Note here in case above is 8": If the answer to **Row 107** was "8" (other) enter your reason why in this cell. If not, this row is not applicable so enter "-9".

Row 109 – "Number of sentences the sample is mentioned in": Mentions of the sample should include the name itself e.g. "undergraduates" or any synonyms e.g. "students". Tip: We have found the best way to work through the number of mentions is to highlight the document. In the example below the sample has been highlighted in red. The 1st and 2nd sentence mention the sample, therefore you would enter "2" into this cell.

Wine causes cancer.

Researchers have found that the alcoholic drink might cause us to develop the deadly disease.

They looked at how much of the tipple 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

Row 110 – "Words to first mention": Enter the words to first mention for the sample using the following format. If the sample is first mentioned in the title enter "0" into this cell. If the sample is first mentioned in the first sentence then enter "1" into this cell. If the sample is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the sample is mentioned in, check the word count and enter it into this cell.

Row 111 – "What terms were included in the count?": In this cell enter every word you included in the sample count.

Row 112 – "Is the same sample being coded here as the abstract?": Check whether the press release or news report(s) state the same main sample as the abstract. Enter a "0" if the sample is the same type as the abstract e.g. if the abstract states the sample as "undergraduates" and the press release or news report(s) states the sample as "students" enter a "0". Enter a "1" if the sample in the press release or news report(s) is the same type as the second mentioned in the abstract e.g. abstract states "undergraduates" and the press release or news report(s) states "academics". Enter a "2" if the sample in the press release or news report(s) is different to that mentioned in the abstract e.g. if the abstract states the sample as "undergraduates" and the press release or news report(s) states the sample as "undergraduates" and the press release or news report(s) states the sample as "undergraduates" and the press release or news report(s) states the sample as "undergraduates" and the press release or news report(s) states the sample as "mice".

Row 113 – "Note differences here": If you entered a "0" in **Row 112** then this row is not applicable so enter "-9" in this cell. If you entered anything other than a "0" in **Row 112** then give a brief explanation of the differences between the sample in the press release and/or news report(s) and the abstract.

Row 114 – "Actual sample for this": Check the **journal article** for the main sample they report. This can usually be found at the end of the introduction, the start of the discussion, or the end of the discussion.

Row 115 – "sample code": As with previous rows, use the following codes the define the actual sample.

- 1. Explicitly human e.g. Wine causes cancer in men / women / undergraduates.
- 2. Implicitly human e.g. Wine causes cancer in **us / them**.

- 3. Non-human primates e.g. Wine causes cancer in monkeys / apes / gorillas.
- 4. Rodents e.g. Wine causes cancer in <u>mice / rats</u>.
- 5. Other beasties e.g. Wine causes cancer in flies / pigs / horses.
- Cells, In Vivo e.g. Wine causes cancer in <u>bacteria / blood cells / human pancreatic</u> cells.
- 7. Simulations e.g. Wine causes cancer in **computer models / computer simulations**.
- 8. Other / More Than One e.g. Wine causes cancer in clothing fabrics / mice and flies.
- -9. Sample not explicit e.g. Delphinidin acetyl-3O glucoside causes cancer. (no sample stated)

Row 116 – "Note here in case above is 8": If the answer to **Row 107** was "8" (other) enter your reason why in this cell. If not, this row is not applicable so enter "-9".

Row 117 – "Is there a generalisation?": The next 8 rows provide information on whether exaggerations have occurred between the journal article and abstract, press release, or news report(s). If no exaggeration has occurred enter "0" into this cell and then "-9" into all non-grey cells up to **Row 59** and continue from **Row 62**. An example of this is if the sample in the journal article is the same type as the abstract, press release, or news report(s) e.g. journal article = "people", abstract, = "people", and press release = "people".

If a minor generalisation has occurred enter a "1" into this cell and then "-9" into all non-grey cells up to **Row 59** and continue from **Row 62**. An example of this is if the Sample in the journal article is similar to the abstract, press release, or news report(s) but an exaggeration has been made e.g. journal article = "drinkers", abstract, = "drinkers", and press release = "people". Here the press release has made a generalisation to *all* people. As drinkers are still people this is only a minor

generalisation.

If a major generalisation has occurred enter a "2" into this cell and then proceed to **Row 53**. An example of this is if the sample in the journal article is different to the abstract, press release, or news report(s) e.g. journal article = "mice", abstract, = "mice", and press release = "people". Here the press release has made a generalisation to a *different* sample which was not directly tested, therefore the generalisation is considered major.

Row 118 – "Number of sentences the actual sample is mentioned in": Here copy the format of **Row 53** but only include mentions of the *actual Sample* only.

Row 119 – "Words to first mention": If the actual Sample is first mentioned in the title enter "0" into this cell. If the actual Sample is first mentioned in the first sentence then enter "1" into this cell. If the Sample is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the actual Sample is mentioned in, check the word count and enter it into this cell.

Row 120 – "What terms were included in the count?": In this cell enter every word you included in the actual Sample count.

Row 121 – "Justification offered for generalisation between actual Sample and abstract / press release / news report": It is important for us to be fair and acknowledge when writers justify their generalisations. An example is if "mice" is the sample in the journal article and abstract but "people" is the sample in the press release. If the press release explicitly states that "people is not the same as mice, but both are mammals" they have justified their generalisation and you should

enter a "1" in this cell. If no such justification exists enter a "0". NB: It does not matter if the justification is technically correct or not. We are only coding whether or not it is there and trying to remain objective.

Row 122 – "Words to first mention": If there is a justification enter the words to first mention for it using the following format. If the justification is first mentioned in the title enter "0" into this cell. If the justification is first mentioned in the first sentence then enter "1" into this cell. If the justification is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the justification is mentioned in, check the word count and enter it into this cell.

If there is no justification this row is not applicable so enter "-9".

Row 123 – "Caveats mentioned": Do the authors provide caveats when they generalize from one sample to the other? If press release generalized form mice to people, they might say: "Even though mice and people are both mammals, more studies in people are needed". If you find a sentence like this, code the cell as "1", otherwise, it's "0".

Row 124 – "Words to first mention": If there is a caveat enter the words to first mention for it using the following format. If the caveat is first mentioned in the title enter "0" into this cell. If the caveat is first mentioned in the first sentence then enter "1" into this cell. If the caveat is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the caveat is mentioned in, check the word count and enter it into this cell.

(5): Primary Statement of Relationship:

NB: If no statement of relationship exists enter "0" into **Row 125** and "0" into **Row 126** then "-9" into the rest of the rows in this section.

Row 125 – "Primary statement of relationship": Copy the sentence containing the statement of relationship into this row, putting the statement itself in bold. e.g. "Wine **causes** cancer". If no statements of relationship are mentioned put a "0".

Row 126 – "Statement of relationship code": This is the statement which links the IV to the DV e.g. in the statement "wine <u>causes</u> cancer" <u>causes</u> is the statement of relationship. There are many different types of relationship statements. We grade these according to the strength of relationships they describe (from no relationship mentioned / statement of no relationship → explicit statement of causation). It is very important that you know what these are and why. If any of the descriptions below are unclear to you please ask your supervisors – you will never be judged if you are unclear, it's our job to make things clear:)

- **0.** No relationship mentioned No relationship is mentioned e.g. "wine and cancer".
- Statement of no relationship Explicitly stating there is no relationship e.g. "wine <u>does not</u> <u>cause</u> cancer".
- 2. Statements of correlation The IV and DV are associated, but causation cannot be explicitly stated e.g. "wine **is associated with** cancer".
- 3. Ambiguous statement of relationship It is unclear what the strength of relationship of these statement is e.g. "wine **is linked to** cancer". This could mean that wine **causes** caner, or that wine **is associated with** cancer either would be applicable.

- 4. Conditional statement of causation Causal statements show that the IV directly changes the DV. Conditional causal statements carry an element of doubt in them e.g. "wine <u>might</u> cause cancer".
- 5. Statement of "can" The word "can" is unique as a statement of relationship in that it implies that the IV always has the potential to directly change the DV e.g. "wine can cause cancer". Therefore it is a stronger statement than any conditional statement of causation.
- 6. Statements of causation The strongest statements are statements of causation e.g. "wine causes cancer". This statement says that the IV definitely and directly alters the DV.

If multiple statements of relationship are mentioned we use a "top trumps" system where the highest statement takes priority of lower statements. Look at the example below:

Wine causes cancer.

Researchers have found that the alcoholic drink might cause us to develop the deadly disease.

They looked at how much of the tipple 13 undergraduates drank and found that those who drank more were more likely to develop cancer.

There are three statements of relationship in three different sentences (including the title). Using our system we would code this as a "6" because **causes** trumps **might cause** and **were more likely to develop**.

Row 127 – "Is the statement probabilistic?": If the statement you entered in row 125 has words from the list below, code as "1", otherwise code as "0".

Probabilistic words: RISK, CHANCE, PROBABILITY, LIKELIHOOD, TENDENCY, MORE

LIKELY.

Row 128 – "Number of mentions": If the statement of relationship is first mentioned in the title enter "0" into this cell. If the statement of relationship is first mentioned in the first sentence then enter "1" into this cell. If the statement of relationship is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the statement of relationship is mentioned in, check the word count and enter it into this cell.

Row 129 – "Words to first mention": If there is a statement of relationship enter the words to first mention for it using the following format. If the statement of relationship is first mentioned in the title enter "0" into this cell. If the statement of relationship is first mentioned in the first sentence then enter "1" into this cell. If the statement of relationship is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the statement of relationship is mentioned in, check the word count and enter it into this cell.

Row 130 – "What terms were included in the count?": In this cell enter every word you included in the statement of relationship count.

Row 131 – "Is the press release or news story concordant with the journal article body?": Is the statement of relationship code the same or different for the press release / news report to the journal article body? If it is the same code a "0", if the statement in the PR or newspaper report is lower e.g. going from a causation "6" to an association "2" then code as a "1", if the statement in the PR or newspaper report is higher e.g. going from an association "2" to a causation "6" then code as a "2". If there is no statement in either of the cells (coded as 0) enter "3". We also use

code "3" if the statements relate to statements between different variables, e.g. if the press release states "wine causes cancer" and the journal article says "smoking causes birth defects", the statement codes are the same, but because the IVs and DVs are different, we would code it as "3".

Row 132 – "Is the press release or news story concordant with the abstract?": Is the statement of relationship code the same or different for the press release / news report to the journal article abstract? If it is the same code a "0", if the statement in the PR or newspaper report is <u>lower</u> e.g. going from a causation "6" to an association "2" then code as a "1", if the statement in the PR or newspaper report is <u>higher</u> e.g. going from an association "2" to a causation "6" then code as a "2". If there is no statement in either of the cells (coded as 0) enter "3". We also use code "3" if the statements relate to statements between different variables, e.g. if the press release states "wine causes cancer" and the abstract says "smoking causes birth defects", the statement codes are the same, but because the IVs and DVs are different, we would code it as "3".

Row 133 – "Justification offered for statement of relationship?": Have the statement of relationship in the press release or news report been justified e.g. by ruling out other explanations or talking about the randomised design? If no enter a "0", if yes enter a "1". We are looking for explicit statements, like "this is the first randomised control trial". NB: It does not matter if the justification is technically correct or not. We are only coding whether or not it is there and trying to remain objective.

Row 134 – "Words to first mention": If there is a justification enter the words to first mention for it using the following format. If the justification is first mentioned in the title enter "0" into this cell. If the justification is first mentioned in the first sentence then enter "1" into this cell. If the justification is mentioned in a later sentence, starting from the 1st word after the title, highlight the

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text up to and including the 1st word of the 1st sentence the justification is mentioned in, check the word count and enter it into this cell.

Row 135 – "Caveats mentioned?": Are any caveats mentioned e.g. limitations of the study design, sample, confounding variables, or alternative explanations offered? If no enter "0", if yes enter "1".

Row 136 – "Words to first mention": If there is a caveat enter the words to first mention for it using the following format. If the caveat is first mentioned in the title enter "0" into this cell. If the caveat is first mentioned in the first sentence then enter "1" into this cell. If the caveat is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the caveat is mentioned in, check the word count and enter it into this cell.

NB: If a second relationship is mentioned e.g. between IV2 and DV2 (or IV1 and DV2, or IV2 and DV1). Then enter it in exactly the same way as stated above into **Row 137** to **Row 148**. If no second statement of relationship exists, then enter "-9" into every row (including **Row 137** and **Row 138 and Row 139**).

Row 149 – "Is 'cure' present in the text?": "Cure" is a highly emotive word in medical journalism. Many patients seek a cure to ease their suffering. Therefore, we want to know if this word is being used. Tip: Use search tools in Microsoft Word / Adobe Reader to see if "cure" is in the text. Holding ctrl + F will usually bring this tool up. Enter "cure" and press enter to find any instances of "cure" in the text. If none come up enter "0". If some come up but they're neutral / unrelated to the IV / DV then enter "1". If a mention of "no cure" comes up specific to the IV / DV then enter

a "2". If a mention of "cure" comes up specific to the IV / DV then enter a "3". As usual a "top trumps" system is used where a higher number code takes priority over anything lower than it.

(6): Advice:

NB: If no advice is given enter "0" into Row 150 and Row 151. Then "-9" from Row 152 to Row 160.

Row 150 – "Advice to change behaviour": If advice is given write the full sentence that mentions it here with the key words relating to advice in bold. e.g. "Drinking wine causes cancer and as such **I do not recommend that the public drink wine**." If no advice is given enter a "0".

Row 151 – "Code": If advice is implicit and hints that behaviour needs changing enter a "1" (e.g. "drinking wine causes cancer therefore drinking wine is harmful". This implies the pubic should not drink wine but does not directly / explicitly state it). If you have entered a "1" then enter "-9" from Row 152 to Row 160. If the advice is explicit but not to the public (e.g. "drinking wine causes cancer, therefore Governments should advise their citizens not to drink wine") enter a "2" and complete Row 152 to Row 160. If the advice is explicit and directly to the public (e.g. drinking wine causes cancer, so we should not drink it) enter a "3" and complete Row 152 to Row 160.

Row 152 – "Number of mentions": If the advice is first mentioned in the title enter "0" into this cell. If the advice is first mentioned in the first sentence then enter "1" into this cell. If the advice is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the advice is mentioned in, check the word count and

enter it into this cell.

Row 153 – "Words to first mention": If there is advice enter the words to first mention for it using the following format. If the advice is first mentioned in the title enter "0" into this cell. If the advice is first mentioned in the first sentence then enter "1" into this cell. If the advice is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the advice is mentioned in, check the word count and enter it into this cell.

Row 154 – "What terms were included in the count?": In this cell enter every word you included in the advice count.

Row 155 – "Is the same advice being coded here?": If the advice in the press release / news report is concordant [the same as] with the advice in the abstract / body then enter a "0" here. If the advice is the same as advice from another part of the research then enter a "1" here. If the advice is in the article but is not actually the thing being tested or is new enter a "2" here. If the advice is not mentioned in the article enter a "3" here. For newspapers, if the advice is concordant with the press release enter a "4" here.

Row 156 – "Note differences here": If you did not enter a "0" or "-9" above then give a brief explanation of why here.

Row 157 – "Justification offered for changing behaviour?": Has the advice been justified? If no enter a "0". If the advice is justified by the statement of relationship (e.g. Wine **causes** cancer, therefore, **don't drink wine**) enter a "1". If extra justification is offered (e.g. Wine **causes** cancer

and **cancer causes death**, therefore, **don't drink wine**) enter a "2". NB: It does not matter if the justification is technically correct or not. We are only coding whether or not it is there and trying to remain objective.

Row 158 – "Words to first mention": If there is a justification enter the words to first mention for it using the following format. If the justification is first mentioned in the title enter "0" into this cell. If the justification is first mentioned in the first sentence then enter "1" into this cell. If the justification is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the justification is mentioned in, check the word count and enter it into this cell.

Row 159 – "Caveats mentioned?": Is a caveat mentioned (e.g. Drinking wine causes cancer, therefore, we shouldn't drink wine. However, wine prevents stroke, so we should make an informed decision by weighing up the costs and benefits).

Row 160 – "Words to first mention": If there is a caveat enter the words to first mention for it using the following format. If the caveat is first mentioned in the title enter "0" into this cell. If the caveat is first mentioned in the first sentence then enter "1" into this cell. If the caveat is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the caveat is mentioned in, check the word count and enter it into this cell.

(7): Study Design:

Row 161 - "Study Design": Which scientific design did the study use?

- 0 = Qualitative.
- 1 = Correlational cross-sectional.
- 2 = Correlational longitudinal.
- 3 = Intervention (not full RCT).
- 4 = Full randomised control trial (RCT).
- 5 = Model / Simulation.

Row 162 – "Reported?": Enter a "0" if the study design is not mentioned in the abstract, press release, or news reports (respectively).

Row 163 – "Words to first mention": If there is a design reported enter the words to first mention for it using the following format. If the design is first mentioned in the title enter "0" into this cell. If the design is first mentioned in the first sentence then enter "1" into this cell. If the design is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the design is mentioned in, check the word count and enter it into this cell.

Row 164 – "Study Design (2nd IV / DV)": Which scientific design did the study use?

- 0 = Qualitative.
- 1 = Correlational cross-sectional.
- 2 = Correlational longitudinal.
- 3 = Intervention (not full RCT).
- 4 = Full randomised control trial (RCT).

5 = Model / Simulation.

Row 165 – "Reported? (2nd IV/ DV)": Enter a "0" if the study design is not mentioned in the abstract, press release, or news reports (respectively).

Row 166 – "Words to first mention (2nd IV/ DV)": If there is a design reported enter the words to first mention for it using the following format. If the design is first mentioned in the title enter "0" into this cell. If the design is first mentioned in the first sentence then enter "1" into this cell. If the design is mentioned in a later sentence, starting from the 1st word after the title, highlight the text up to and including the 1st word of the 1st sentence the design is mentioned in, check the word count and enter it into this cell.

Row 167 – "N": Add the total number of participant units (e.g. a mother and daughter are two separate participants but count as only 1 participant unit). If there are multiple experiments add these together. Only report N if the sample is human. If the sample is non-human enter a "-9".

Row 168 – "Reported?": Enter a "0" if N is not reported. "1" if it is <u>exactly</u> reported. "2" if it is incorrectly reported (greater than 20% wrong e.g. N is 100, and they report more than 120 or less than 80). "3" if it less than 20% wrong e.g. N is 100, and they report any value from 80-120 [excluding 100]. "4" if the N value is described e.g. small or large. "-9" if the sample is not human.

Row 169 – "Completion rate": Identify whether any participants dropped out and calculate the completion rate by dividing the original N by the final N. Report the value from 0-1 rather than a percentage, so that a 68% completion rate would be written as 0.68. Once again, if the sample is

not human, enter "-9".

Row 170 – "Reported?": Enter "0" if the completion rate is not mentioned. Enter "1" if it is. Once again, if the sample is not human, enter "-9".

Row 171 – "Small or large based on what they say": If the sample size is not described enter a "0". If it is described as "small" enter "1". If "medium" enter "2". If "large" enter "3". NB: Any similar word to small, medium, or large should be assigned the relevant number e.g. tiny = 1, gigantic = 3 etc.

Row 172 – "Duration of study": If the duration is not reported enter "0". Enter "1" if it is reported in hours. Enter "2" if it is reported in days. Enter "3" if it is reported in weeks. Enter "4" if it is reported in months. Enter "5" if it is reported in years.

Row 173 – "Reported?": Enter "0" if the duration of study is not mentioned. Enter "1" if it is.

Row 174 – "Number of time points for longitudinal studies": If the study design is not longitudinal enter a "-9". If it is, enter the number of time points here. The time points are the key times when they obtain data which is used to create the conclusions from the study. For example, if a study investigated drinking wine in university and cancer rates at the age of 60, there would be 2 times points.

Row 175 – "Reported?": Enter "0" if the number of time points are not mentioned. Enter "1" if it is.

Row 176 – "Open access": Can the journal be accessed by anyone or are payments / permissions required? Tips: PLoS (public library of science) is always open access. Open access journals often report it on the journal itself. Also, Google Scholar, PubMed, PsychInfo etc. will usually report if a journal is open access. If the journal is open access enter a "1". If not, enter a "0".

Row 177 – "Link or reference to original research": If a hyperlink / full reference for the journal article are present (e.g. Science et al. (2011). Science is cool. *Science*, *42*, 483-484) enter a "2". If the journal is mentioned (e.g. "The study was published in the journal Science") enter "1". If there is no mention of the journal enter a "0".

Row 178 – "Link or reference to PR and other": Sometimes articles have links to other relevant material. If there is a link to an external source other than the press release (e.g. www.thedangersofdrinkingwine.org.uk) enter a "1". If there is a link to the press release itself enter a "2". If there is a link to both an external source <u>and</u> the press release enter a "3". If there are no additional links enter a "0".

Row 179 – "Present": If any quotes are present enter a "1". Enter a "0" if there are none.

Row 180 – "Quotes 1 source": Use the following codes to define the type of quotes used. Only code each type of quote once (e.g. if there are two different quotes which could be coded as a "1" only enter "1" in one of the quote rows).

1 = Quote comes directly from the press release.

2 = Quote comes from the authors but did not originate from the press release (e.g. it comes from an interview with the news reporter) (search the press release for key words from the quote using

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the ctrl + F search tool).

- 3 = Quotes directly from the journal article (search the journal for key words from the quote using the ctrl + F search tool).
- 4 = Information from an expert source that is related to the research other than the journal article authors (e.g. participants of the study, someone from the charity that funded the research).
- 5 = Information from an expert source that is NOT related to the (e.g. independent scientists, heads of various organizations, e.g. wine lovers association).
- 6 = Information that is not relevant to the article (e.g. the opinions of an unqualified individual). -9 = Not applicable.

Row 181 – "Quotes 2 source": See above.

Row 182 – "Quotes 3 source": See above.

Row 183 – "Quotes 4 source": See above.

Row 184 – "Quotes 5 source": See above.

Row 185 – "First mentioned funding source": Enter the first source of funding mentioned here. Enter "0" for none mentioned. "1" for internal (e.g. self- or university-funded). "2" for government funded (e.g. the research councils such as the MRC, BBSRC, ESRC etc.). "3" for Charity funded (e.g. Cancer Research UK, the British Heart Foundation etc.). "4" for industry (e.g. GlaxoSmithKlein, Pfizer etc.).

Row 186 – "Second funding source": See above with the following exceptions. If there is only

one source of funding enter a "0". If there are more than two sources of funding, prioritise those with the highest scores (e.g. if there are four government funding sources first, followed by an industry source, and then a charity source, you would code the previous row as 4 and this row as 3).

Row 187 – "Reported?": If press release/news article reports all coded funding sources, enter "2" If they report only one, enter "1". If they report none, enter "0".

Row 188 – "Conflict of interest": Most journals will have a section where the authors report conflicts of interest (e.g. performing a study on wine and being paid by a wine company). This section is given different names by different journals. Some call it "conflict of interest", others "competing interests". It can usually be found on the first or last page of the journal article. If no declaration can be found enter a "0" (be sure to check the journal thoroughly as a declaration will almost always exist, whether there is a conflict of interest or not). Enter a "1" if it is reported that there isn't a conflict of interest (usually reported as "The authors declare no conflict of interest"). Enter a "2" if a conflict of interest is reported (e.g. "Author X is a paid consultant to Y wine company).

Row 189 – "Reported?": If the conflict of interest is present enter a "1". Enter a "0" if there are none.