

Making statements about demographic groups

If you were born in the 1980s or 1990s then you are a Millennial, and that probably means you often see derogatory statements about Millennials generally, which includes you. If you are a self-motivated, self-reliant, hard-working person who gets up before 7 am most days to work and barely has time to consult your smart phone then almost none of the common criticisms of Millennials apply to you. This probably leaves you feeling a bit insulted and annoyed.

You are not the only demographic group to come under fire in the news media and on social media. Most days the BBC News website, for example, will carry at least one story that includes, somewhere in it if not in the headline, someone making a general statement about 'people', 'whites', 'blacks', 'males', 'females', and so on and on. News media tend to be careful about negative statements concerning some groups, but less careful over others. As a straight white man who is middle class, intellectual, well educated, and English (south of England), I am accused by negative statements about one or more of these demographics almost daily.

If you don't like being on the receiving end of this kind of implied criticism then you probably don't want to do it to other

people accidentally. This article is about how to avoid accidentally insulting people by talking or writing carelessly about groups. It's relevant to anyone who does statistical work or uses probabilities in decision making about people.

As you read through the issues and examples in the following pages you may start to wonder if a few words can really make much difference. Some of the faults will seem particularly minor, with tiny ambiguities being identified and given as a reason for using alternative words.

But even the tiny faults can have immediate and powerful effects, especially when the topic under discussion is a sensitive one. People react without even realising why they are becoming angry. The tiny, accidental insults can derail a conversation or debate that would otherwise have been polite and might even have been helpful.

To see the impact it may help to take an article you have seen that particularly annoyed you and rewrite sections of it using the advice below. See how much difference you can make.

Alternatively, consider these examples, based on a fictitious study and worded to be annoying. Compare them with the less annoying version that follows.

Annoying to men: 'In the survey, men reported taking more risks than women in all domains except for the social domain. It is not clear why women are more adept at handling difficult social situations but it may be their greater emotional literacy and stronger interpersonal relationships. The male tendency towards more aggressive, impulsive behaviour is the most likely explanation for their worrying scores in other domains, and may be exacerbated by a culture of masculinity.'

Annoying to women: 'In the survey, women reported taking fewer risks than men in all domains except for the social domain. It is not clear why women are timid in most risk taking domains, or why men seem to be more courageous. The female tendency to let men deal with dangerous situations is the most likely explanation for their low scores in most domains, and may be exacerbated by a culture of dependency on men.'

Less annoying: 'In the survey, risk taking scores for men and women varied considerably within each sex and there was a substantial overlap. However, average risk taking scores across all men were slightly higher than for women in all domains except for the social domain, where they were slightly lower. There are many possible reasons for these differences in the overall averages. It may be that different interpretations of the survey questions were distributed differently between the sexes. It may be that competence in different situations is differently distributed and that this affects actual and perceived risk and so also willingness to perform particular behaviours. Other explanations are possible.'

These illustrations also highlight the fact that statements about demographic groups are often related to issues that

are already contentious and emotionally charged. People are super-sensitive around these issues.

Another reason that subtle implications can be so inflammatory is that they feel underhand and potentially deceptive. For example, imagine someone who honestly believes that all men are inherently courageous and all women are inherently timid, and that this is entirely due to biology. Would you rather they argued for this odd position in an open and honest manner, stating it up front in plain language and then offering evidence? Or would you prefer them to hide their position and use snide innuendoes to run down women and paint men as heroes? Accidental insults can look like those snide innuendoes.

One of the most serious types of statement about demographic groups is to accuse them of unfairly discriminating against another. Sometimes careers can be destroyed by well-timed allegations of this nature, even if untrue.

Opinions differ on this. Some people argue that the 'dominant' group is the only one, in principle, that can be racist, sexist, and so on because its members form a system of oppression. Anything the underdogs do is just legitimately trying to level the playing field. This usually goes with saying that every individual member of the oppressor demographic group is guilty, without exception.

The more common view, and the legal position in the United Kingdom (as of 2018), is that not everyone in a demographic group is necessarily guilty, and that both groups where there is contention can be guilty of unfair treatment. For example, women can be sexist just as men can be.

Whatever your views, the value of this article is in highlighting particular

wordings and encouraging conscious choices. For example, if you think all men are sexist pigs then go ahead and use the words that convey that message, but if you think just some men are sexist pigs then make sure your words do not convey more than that, accidentally.

Accidentally annoying words can do more than just make an article or discussion worthless. They can do damage. Here is an illustration of that problem.

Imagine that an author is concerned at the bad behaviour of a few individuals in a demographic group. The proportion of such individuals in the group is a bit higher than for other groups, and nothing is known to identify those who do the bad behaviours other than their group membership. That's why this group is getting a reputation for bad behaviour. The author writes an article about this bad behaviour but mistakenly uses words that suggest that *everyone* in the group behaves badly. This antagonises well-behaved people in the group who lash out at the author but mistakenly use words that suggest that *everyone* in their group is blameless.

As a result, the article fails to prompt any action to reform the badly-behaved individuals and they even escape criticism. The article achieves nothing and, on top of that, damage is done. The well-behaved people in the group now resent the author, the author resents the whole group, many outside the group start to see the group as in denial about the bad behaviour in its midst, and the badly-behaved in the group feel they have the support of the others in their group. All of this is unhelpful.

The rest of this article is structured into a section on good and bad wordings to use, a section with tips for complying with the law, and a final section with published

examples of writing about groups that illustrate the problems.

Reliance on weak demographic links

Before discussing ways to word statements about groups I should point out that one of the best ways to avoid problems in this area is to avoid using weak statistical tendencies based on demographics. For example, imagine that applicants for a job need to be less than 1.6 metres tall because of the small work space within a large machine far too expensive to modify.

You could reject all candidates who are male because men are, on average, taller than women. However, if you ask candidates their height then there is no value in asking their sex, which would only be statistically relevant anyway. Getting individual information directly relevant to the job is much better, and fairer, than using indirect, weakly relevant demographic information.

Writing faults and fixes

Over-homogenization of characteristics

The problem

To illustrate this problem, imagine a headline from a news website that read: 'Men drive faster than women.' What does that mean? While this may not be the intention, it *sounds* like it means that all men drive faster than all women.

If you are a man and drive quite slowly, nearly always staying within the legal speed limit, then this headline is annoying. It is wrongly accusing you of being a fast driver. If the article beneath the headline continues in this vein, talking about how men are involved in

more accidents on the road and they tend to be more serious, you will probably be further annoyed. That is because this is describing a pattern of driving that does not apply to you personally but is being talked about as if it applies to all men, and so applies to you.

This is the problem of over-homogenization of characteristics. A characteristic that varies widely within a group is presented as if it does not. This might be in comparison with another group. In many real situations the characteristic involved varies greatly within each group and there is an overlap. The same would be true for the body weight of men and women, the income of households in the North and South of England, and so on.

Quite often a statement is ambiguous as to whether it is saying the characteristic is true for all or just some members of a group. However, if there is no difference between the statement and something that might be said by someone who really does believe that the characteristic is true for all members of the group then over-homogenization has occurred. In many real situations the issues concerned are so sensitive that readers tend to jump to the most negative interpretation and are offended by an ambiguous statement even if the author knows the true situation and did not mean to give offence unfairly.

Here are some of the main writing techniques that give rise to over-homogenization of characteristics.

Implicit All: For example, in the statement 'Men drive faster than women' the word 'all' is implied though not actually stated. The interpretation that causes the problem is 'All men drive faster than women.'

Universal Tendency: In this method the idea is that all people in a group have

a tendency, presumably the same tendency, towards something. For example:

'Men **tend to** drive faster than women.'

'Men **tend to be** faster drivers than women.'

'Men **have a tendency** to drive fast.'

Universal Probability: In a similar way, wordings in terms of probabilities usually suggest that each person has the same probability of something, or the words can be interpreted that way.

'Men are **more likely to become** fast drivers than women.'

'Men are **more likely to** commit suicide than women.'

'Men are **less likely to** become speech therapists than women.'

These wordings suggest probabilities for future events that are the same for all men.

Universal Characteristic: To say something is characteristic of members of a group is to say that they all have it. Other words can have that meaning too. For example:

'Fast driving is a male **characteristic**.'

'Fast driving is **characteristically** male.'

'Fast driving is a male **trait**.'

'Driving fast is a **sign of** masculinity.'

The reality is just that more men are fast drivers than women, and some men are safe, patient, legal drivers.

The Average Person: Other wordings present the idea of an average or typical person who then becomes the universal representative of the group.

'The **typical** man drives too fast.'

'Men **typically** drive too fast.'

'Driving too fast is **typically** male.'

'The **average** man drives too fast.'

Usually there are very few people who are average in a group, and usually there are few who are really typical.

Stereotype Characters: A picture or video that depicts stereotypes of a group can be an example of over-homogenizing a characteristic. Can you spot the stereotypes in this scene? A man and a woman are at home. He is overweight and sat in an armchair, obviously watching the TV, while a small fat dog sits near his feet. A slim woman stands nearby looking angry with him and spraying air freshener around.

In theory these could be just any two people picked at random, but the way each character captures so many elements of well-known gender stereotypes (male slob, hard-working female) makes this an example of depicting stereotypes.

For every...: In this technique a difference of overall averages is misrepresented as something that applies to averages of every subset. For example, suppose it is found that in a written examination for teenagers the girls wrote on average 11% more words than the boys. The 'for every' version of this says:

'**For every** hundred words a boy writes in an exam a girl writes 111.'

This is not equivalent because there could still be a boy who wrote more words than any girl. For that boy it is not true to say that for every 100 words he wrote a girl wrote 111.

Implicit: Although distinctive wordings are associated with most techniques involving over-homogenization of characteristics, some examples of the problem do not involve distinctive wordings. For example, the book title

'Why I no longer talk to white people about race' at least hints that white people – all of them – are racists with whom it is impossible to have a useful conversation about race. In this real case the implication is not an accident and the book itself elaborates this position at length.

Better wording

To deal with this properly we need forms of words for three elements of a communication:

- The headline (if there is one).
- A context statement that precedes the statement about group characteristics.
- A statement of group characteristic(s).

Headline wordings

In a blog posting or article a headline is needed. Conveying group characteristics accurately and with adequate context is difficult in just a few words so the headline needs to be neutral as to the results.

Two neutral wordings are:

'New study compares male and female driving'

'Data on male and female driving'.

Do not write something like this:

'A study of gender **differences** in driving'.

The word 'differences' used this way hints that differences were found. The idea is to keep the headline neutral, even if differences are explained later.

If the study shows no differences between male and female driving it is still not safe to use the headline 'No difference between male and female driving'. That is because this is only true for the particular comparisons made. It may still be true that there are

differences but on aspects of driving not considered in the study to be reported.

Context wordings

The next element needed is context. This will include the following:

- **Information about the data used**, such as the sample size, means of selection (e.g. random, volunteers), time of selection (e.g. between the years 2000 and 2005), and method of measurement.
- **Information about the overall distribution(s)** of the characteristic for the demographic group(s) considered. For example, where true you should point out that the characteristic is widely distributed for both demographic groups in a comparison, and that there is a large overlap between them. This might be underlined by explaining that there are individuals within each group near both ends of the overall, pooled population.

Statement of characteristic or comparison

Having set up a context in which misunderstanding and over-reaction are much less likely you can make the statement about the demographic characteristic, or make the comparison. Here are some ways to do that.

Statistically Literal Comparatives:

Stick to the calculation used to make the comparison and name or explain it accurately. For example:

'In the study, the average number of fatal incidents per mile driven for male drivers was higher than for female drivers.'

'The median height of male students was higher than for female students.'

'A higher proportion of male than female drivers exceeded the legal speed limit frequently.'

Statistically Literal Numbers: Again, name the calculation used to make the comparison, but this time provide the numbers. For example:

'Current taxes on income and wealth per head in London were £5,366, while for Northern Ireland they were £2,039.'

Random Selection: Although talking in terms of probabilities often leads to the problem of implied Universal Probabilities, they can be safely used in some ways. If you make it clear that you are talking about randomly selected individuals from groups (in a statistically literal sense) then the statement can work. For example:

'The probability of a randomly selected Londoner between the ages of 16 and 64 being unemployed was 5%, while for Northern Ireland it was 3.2%.'

This seems a bit pointless as it is easier to say the percentages unemployed. However, a less blatant example of this is as follows:

'In the study, men **typically** were able to lift more than women.'

This use of 'typically' is different from writing about a 'typical' group member. The idea is that, if we were to pick male-female pairs at random, then, typically (at least 80% of the time), the man would be able to lift more than the woman.

'Men were **more likely to be** fast drivers than women.'

The 'were more likely to be' wording implies a random selection procedure and the 'fast' implies some criterion that defines this level of driving speed.

The phrase 'more likely' has to be used very carefully. If the probability involved

refers to the probability of something that is true now or in the past then it implies a sampling procedure and is acceptable. However, if the probability refers to something that has yet to happen then it implies something else – a probability of a future that applies equally to all group members, which could be a problem.

No difference: If there is no difference between two groups then the statement needs to make clear exactly what characteristic it was on which there was no difference. For example:

'After training, there was no significant difference between the average dexterity scores of young and old participant groups.'

Making sure you have used a clear and accurate wording is not easy. The temptation is to over-generalize or to use a familiar wording that turns a group average difference into something that applies to every individual.

Careful reasoning

The main thrust of this article is to encourage you to take care when making statements about groups so that you do not say things that are insulting *by accident*. However, there is a bit more to this.

In practice very few statements about demographic groups are true for everyone in the group(s) involved.

For example, do all men like beer? No. What about football, fast cars, or guns? No, no, and no. Do all men like attractive looking women with lovely bodies? Again, no, and that's even if we take gay men out of consideration. Do all women like trying on clothes, buying shoes, going to a spa to be pampered, or drinking wine? No to all those. Do all women wear make-up? Still no.

So, if you find yourself claiming that a characteristic is true for all members of a

demographic group (or any large group of people), stop and think carefully if it is literally true.

Over-attribution of causes

The problem

It is a fairly well established fact that the total cost of motor insurance claims per male driver, on average, is more than per female driver, for equivalent age groups. Suppose a headline says 'Aggressive driving by men costs motor insurers more.' This contains over-homogenization of a characteristic because it fails to make clear that only some men drive aggressively, but it goes further. It makes the insult to safe male drivers worse by appearing to attribute the entire difference in claims to aggressive driving. In fact, there are several reasons for the difference and another big one is that the average distance driven per year per man is more than for women.

Taken literally, that particular headline does not say that aggressive driving is the sole cause. However, it does not say it is not; the ambiguity, as before, makes this a problematic statement.

Over-attribution of causes is presenting a cause as if it is the only cause of some group characteristic or difference, or the only significant cause, when that is not true.

A number of techniques can have this effect.

Ignoring Other Causes: This is the technique just described. Simply discuss one cause and say nothing about others.

Another illustration would be simply claiming that there are very few men working as speech therapists because of unfair hiring discrimination against men. There might have been examples of this happening but it is unlikely to be the sole cause.

Explicit limitation: Sometimes the wording explicitly says there is only one reason, but these words might have been chosen carelessly. For example:

'The problem is that ...'

Responsibility Framing: In this type, a specific cause is not picked out, but responsibility is stated or suggested, which limits the set of possible causes. For example:

'What should men do about their low scores?'

'...aggressive male driving.' (Used when all we know is that the average speed is higher.)

This is a very common issue.

Pejorative Framing: In this technique a specific cause is not claimed, but a pejorative term is used that limits the possible causes.

Talking in terms of better or worse is the simplest way to imply things about causation. For example:

'The pay difference is **worse** at larger firms.'

This implies that the pay difference in question is something bad or that its cause is something to be critical of. Perhaps the pay difference is perfectly reasonable, legal, and economically justified. The point is that the causes are being implied by the use of 'worse'. In this example 'larger' would be a neutral alternative.

A widely used pejorative term is 'inequality', which suggests that a difference is a bad thing. It also subtly suggests that the difference is the result of unfairness. For example:

'Income **inequality** is important in this country.'

This wording suggests that differences in income are bad, and hints that they are

the result of someone being unfair to someone else.

Praise Framing: This is just the opposite of Pejorative Framing. Suggesting that some effect is a good thing limits the set of possible causes.

Dominance Framing: This is another way to hint at particular causes accidentally. For example:

'Women **dominate** nursing.'

'Women **predominate** in nursing.'

These are bad ways to express the idea that there are more women than men working as nurses because they suggest the women in some way dominate or control nursing. That might or might not be true, but if the intention is just to say that there are more women than men then the suggestion of domination should be avoided. Suggesting domination also tends to imply that the reason for this might be unfair discrimination by women against men.

Representation Framing: This is another way to indicate causes accidentally. There are two senses of 'representation' that cause problems. The first is where it hints at a democratic failure. For example:

'Men are **under-represented** among nurses.'

This is another bad way to say that there are more women than men in nursing. The mention of representation suggests some kind of democratic failure, and that again implies that unfair discrimination by women against men is the reason for the difference in numbers.

A more subtle form of this is where the so-called 'under-representation' is among members of parliament, judges, business leaders, or school governors, for example. With these roles there is often a sense in which individuals are

representatives of groups. However, care needs to be taken if the intention is only to say that there is a difference in numbers.

It is usually the case that the individuals are representatives, but not of their gender or ethnic group, for example. An MP is a representative of residents in a geographically defined constituency, not a representative of every demographic group to which the MP belongs. The MP is expected to represent the interests and views of all their constituents, not just those of the same gender, skin colour, or religion as the MP.

The second problematic sense of 'representation' is as a goal for statistical sampling. For example:

'Men are **over-represented** in dangerous jobs.'

This time the word 'represented' suggests that men were somehow statistically sampled but the process was flawed and men were picked too often for dangerous jobs.

Which interpretation of 'represented' is most relevant depends on subtle details of the context. Too few people getting something desirable, especially where influence is involved, will tend to hint at democratic failure. Too many people getting something undesirable will hint at them being the victims of unfair bias in a process that should result in representative sampling.

Better wording

Headline wordings

Again, the heading should be neutral. This time it is specific causes that should be left out. For example:

'New study explores the causes of insurance claim costs'

Context wordings

The context should, again, cover the source of information. It should also discuss the existence of multiple causes, where this is the case. For example:

'Many factors are likely to account for the difference in motor insurance claims between male and female drivers.'

'The study did not consider other factors that drive the difference in motor insurance claims between male and female drivers.'

'The analysis controlled for other factors that drive the difference in motor insurance claims between male and female drivers.'

Statement on causation

The wording needs to be accurate and make it clear if the cause is being presented as the only cause or just one cause. For example:

'One cause of the difference in motor claims between male and female drivers is the difference in average number of miles driven. Men, on average, drive further per week than women.'

'One of several reasons for the difference in motor insurance claims between male and female drivers is likely to be the higher proportion of fast drivers among men.'

Careful reasoning

Not many effects concerning demographic groups have just one cause. Multiple, complex causes of effects concerning people are much more common. Also, people vary greatly and so do the forces that shape their behaviour and their lives.

So, if you catch yourself writing words that seem to say something is the one cause of a difference between

demographic groups, stop and consider carefully what is really true.

Over-generalization across time and space

The problem

Suppose a headline claims that cars built in a particular country are often defective. That may be true, but when and where? Manufacturing prowess varies greatly over time and even countries renowned today for excellent manufacturing have had periods in the past when they were not as good. Also, it may be true on average, but is it true for all car manufacturing plants in that country? If not then this is over-generalization across space too.

This problem of over-generalization across time and/or space also has the effect of suggesting that the characteristic is due to causes that cannot be changed or do not change over time or with location, such as national genetic differences. It may amount to implied over-attribution of a cause.

Better wording

As usual, the headline should be neutral.

Within the statement of the context, the time and location should be made clear. This is clearly important for research studies, but should be done in less obvious situations too. It may also be important enough to be included in the statement of the characteristic or difference itself.

Emotive language

The problem

Some words often used to describe differences between groups have implications and/or emotional connotations that may be inaccurate and unhelpfully inflammatory.

Divisive Words: Some words tend to suggest that there is a battle between the two groups, or perhaps an emotional or other type of gap between them. For example:

'Male driving **versus** female driving'.

The word 'versus' conveys a subtle sense of competition.

Other divisive words are 'divide', 'polarised', 'chasm', 'lagging behind', 'battle', 'against', 'deprived' (implying someone deprived someone else deliberately), 'discrimination' (implied to be unfair), 'disproportional', 'discrepancy', and 'imbalance'.

Even the word 'gap' has become too emotive for use in many contexts because of its repeated use in reference to differences in average pay between groups. The debate usually centres on why a difference in average pay exists, with one side blaming it entirely on unfair discrimination while the other points to a variety of other factors that are involved in addition to, perhaps, some degree of unfair discrimination.

Exaggerating Words: The effect of exaggerating words is to exaggerate the size of a difference or the importance of a cause.

Words with this effect include 'whopping', 'thumping', 'huge', 'worrying', 'surging', and 'gulf'.

Better wording

The obvious solution is simply to avoid those emotive words. Stick to factually accurate words without incorrect or unhelpful connotations.

Collective guilt

The problem

Some words have a tendency to suggest that all members of a group are guilty of something. These include: 'cultural',

'system', 'systemic', 'systematic', 'institutional', 'institutionalised', 'patriarchy', and 'matriarchy'.

Often these words are being used quite deliberately to argue that everyone in the group really is guilty, but accidental use is also possible.

This is particularly annoying for people with a clear conscience who also have no power or influence, but still find themselves accused.

In reality, it is surely rare for literally everyone in a large demographic group to be guilty of the same thing.

Better wording

One option is to avoid these words altogether. Another is to make explicit that not everyone is being said to be part of the problem. For example:

'The drinking culture promoted by many drinkers and people who earn their living from drinking is slowing reform.'

'The culture of violence associated with football at that time was maintained by a subset of football fans.'

'Inequality was institutionalised by the rules of the club and change to those rules was resisted by most members of the committee.'

Misleading by omission

The problem

In ordinary conversations there is an understanding that we would mention something that is important and unexpected. This can be exploited deliberately or can give rise to misunderstandings accidentally if we fail to meet that expectation.

For example, 'X is not bigger than Y' on its own suggests that X and Y are equal or nearly equal, with X perhaps slightly smaller. If Y is actually much bigger than

X then the statement is still true but leaving it there is misleading.

Better wording

Make sure you give information where an intelligent reader would be likely to make the wrong inference if you did not.

Mis-statement of uncertainty

The problem

A very common fault for statements in general is to be overconfident. With group characteristics, differences, and their causes that includes a wide range of overly-confident assertions about what is true.

However, some topics are so often associated with arguments and bad feeling that we sometimes feel under pressure to err the other way. We pretend to be unsure or to think that there is no evidence on something when in fact there is evidence.

Better wording

Be accurate and detailed in describing the context, and insert words like 'could', 'may', 'might', and 'possibly' in the core statement. It may also be worth following up with further discussion that explains the limitations of the evidence and mentions other explanations.

Legal compliance

In various countries around the world there are laws designed to protect some demographic groups and those laws do not always work in an intuitive way. Consequently, even if your wordings are perfect and nothing about your statements is untrue or intended to cause mischief, you could find that you are in trouble or that your publisher, online host, or service provider is not willing to publish or distribute your work.

The existence of these laws may also be a surprise to you as they are very often not enforced even though, when they are enforced, it can be in quite a stringent way that criminalizes seemingly innocuous behaviour.

Here are some general guidelines:

Be truthful, fair, and accurate but do not assume this will avoid all trouble.

The purpose of relevant legislation may be to keep life peaceful and that means not stirring up people who are violent and unreasonable. Even saying things that are true may be enough to trigger those people to hatred and violence, so the law does not always say that truthful, reasonable conduct is legal.

Avoid statements about groups with a history of reacting very strongly to perceived criticism, even if those reactions are irrational and unreasonable.

It seems unfair that dangerous and irrational people within groups get what they want – freedom from criticism – by being dangerous and irrational. However, that's how the law sometimes works. The intention is to avoid violence and the method is to discourage provoking the most violent people.

Authors need to be aware of the legal risk involved and rely on official policing to deal directly with those who are violent and irrational. Police need to do their jobs effectively. Legislators need to write the laws that let them, while not criminalizing genuinely innocuous behaviour.

For example, imagine that a crazy political group aims to overthrow the government of their country, kill millions of people, and impose a brutal dictatorship. For years its members live apart from others in a rural area, raising their children in their own schools with

lessons covering every aspect of their ideology, including why they are right, why others are dangerous and must die, and the painful death that awaits anyone who leaves the group. There are also practical sessions for teenagers on how to make bombs, execute people, manipulate the media, and so on.

This terrifying pattern should be illegal in every country, should be detected and investigated energetically by police, and should be prosecuted wherever possible. If that does not happen then there is a risk that ordinary citizens aware of the growing danger will want to alert other citizens, which is a dangerous stage to reach.

If possible, avoid statements about groups defined by their race, nationality, religion, sex, gender, sexual orientation, transgender status, or disability.

It is much less risky, legally, to make statements about lawyers, or people with big noses, or left-handed people, than to make statements about groups defined by the characteristics listed above. These special characteristics are the ones that have, so far, had the most focus and are most likely to be written into law.

The most sensitive in different jurisdictions might be different. In the UK, race is the most protected.

Perhaps the trickiest characteristic is disability, because new disabilities are defined and recognized from time to time. Many people who, 50 years ago, would have been described as 'odd' are now considered to be on the Autistic spectrum, so now they have a disability. Children who don't pay attention at school may now have Attention Deficit Disorder (ADD) and if they are fidgety and badly behaved too then perhaps they suffer from Attention Deficit Hyperactivity Disorder (ADHD). Someone who seems to

be lazy might be clinically Depressed or suffering from Bipolar Disorder and going through one of their down phases. The obese are likely to have genetic reasons for their condition. A heartless, cruel, self-obsessed and exploitative person might be a Psychopath because of their genes and a childhood trauma. Someone who struggles to learn to read is now likely to be diagnosed as Dyslexic, and if maths is the problem then that could be Dyscalculia. The inability to think rationally, Dysrationalia, has been defined but is little known at present.

This means that many groups of people about whom negative statements seem quite natural are likely to be viewed as people with a disability that is to be respected and worked around in some way.

None of the words above should be taken as critical of the people involved or as challenging the diagnoses in use. The point is that diagnoses are changing and that is causing some confusion for people unaware of this and for people trying to decide what to do about issues such as obesity, failure at school, and unwillingness to work.

I have suggested (Leitch 2017) that punishments and shaming are interventions that need to be reconsidered in some cases. However, I have given reasons why encouragement remains relevant, even though encouragement does sometimes leave people feeling unhappy for a time. For example, a person with a genetic predisposition to obesity due to reduced feelings of satiety needs to know that and to try harder to eat properly, with encouragement from those around them. Encouragement does not include telling them they look disgusting or eat like a pig, but it could include reminding them of the benefits of being slimmer and the

health dangers of being obese, helping them measure their weight, and giving them factual feedback about their eating or physical condition.

Avoid statements about groups that can have no practical purpose other than as weak statistical indicators or filters.

Before starting a research project it makes sense to think through the end result and how it might be used. For example, if you thought that a particular upbringing practice promotes rational thinking then it makes sense to focus on that practice and try to relate it to rational thinking later in life. You might still record the sex of participants in an experiment in order to remove the effect of other factors that are sex related, but your focus would be on investigating and reporting the effect of the upbringing practice.

If you also thought that the helpful aspect of upbringing is more common for one sex then you could design the study to look at sex differences in rational thinking. But why? If you found that rational thinking was stronger in one sex on your test the difference would be weak, statistical, and not directly related to the intervention (the upbringing).

If, later, you established that the upbringing practice did indeed promote rational thinking then your recommendation to parents might be to adopt that practice. If you found that the practice was more often used with one sex, would that make any difference to your recommendation? Not really. You would still recommend adopting the practice regardless of the sex of the child.

Make your good intentions and reasonable expectations very clear and avoid irony.

In some relevant laws the intention of the author is crucial. In others it is only your awareness of what might happen or is likely that is important. Making these clear in your text may be helpful, provided it seems sincere and reasonable.

Examples of writing about groups

The following examples of writing about groups are mostly based on particular research studies or other events that triggered articles and other items about demographic groups. They illustrate some of the writing patterns, especially the mistakes, discussed above.

Male and female driving

Over the years there have been many studies of sex differences in road accident statistics. And yet this is a good example of a demographic group comparison with little or no worthwhile purpose today.

The analysis could be used as part of an algorithm for calculating insurance premiums, but no longer in the UK where this is against the law.

Could it be used to motivate people to drive more safely? Knowing that aggressive driving causes more accidents and they tend to be more deadly is important and should motivate driving less aggressively. Knowing that distractions when driving cause accidents should motivate efforts to avoid distractions. But what about sex? Would anybody decide to change their sex in order to become a safer driver? It seems unlikely.

The gender pay 'gap'

The deadline for companies in the UK to publish comparisons of male and female pay for the first time was 4th April 2018

and this event triggered a wave of news reporting on the subject.

The news reports provide many examples of potentially mistaken wording and more appeared when readers posted comments on websites. Tempers flared.

One example (Fisher 2018) appeared on the AccountingWEB website in an article entitled 'First gender pay reporting figures embarrass top six.' This headline includes Pejorative Framing and Responsibility Framing. The implication is that the biggest accounting firms are embarrassed because they have done something wrong.

Unfair pay discrimination is illegal in the UK and sexism of all kinds is considered a very bad thing. This headline is a serious smear, insult, or allegation made against all partners and managers of the top firms, and not just a factual report.

Behind the headline was an image of metal discs piled up with male and female symbols resting against them. The male pile had 36 'coins' while the female pile had 12. This image depicted a pay difference of 67% of male pay, roughly twice that reported by any of the firms discussed. This is not Exaggerating Wording but it is an exaggerating image.

The first line continued in this vein: 'Those in the higher echelons of the accountancy profession have probably been dreading the publication of figures which would finally prove whether women in our industry get as bad a deal as everyone is (sic) always imagined.'

In addition to more Pejorative Framing, this is Ignoring Other Causes and putting the entire difference in average pay down to women getting a bad deal i.e. being paid less just because they are women. This is illegal and also not revealed by the pay comparisons, which are for all

employees regardless of role, qualifications, performance, and so on.

The rest of the article continued in the same way, with many mentions of the 'gender pay **gap**' (a Divisive Word not used in the relevant law). There is even a paragraph where having no difference between average male and female pay is described as being an 'equal **opportunity**' employer.

Reader comments then followed and most, at first, were from exasperated men. In most of the comments the writers were careful not to generalize to all men or all women, but as emotions rose mistakes were made.

A female commenter wrote 'Men inexplicably think that because a woman carries a child for 9 months on her own with no input from him that forever after women are solely responsible for everything domestic. Women want equality but men are determined to hold onto their unfair advantages. Men are never going to change unless women force them to.'

In this example of the Implicit All, all men without exceptions are accused of some serious sexist behaviours and views.

A male commenter, after remembering to say 'most' through the first part of a long post finally broke down and commented 'In other words, in our culture women consider themselves entitled and have a degree of freedom to choose between a series of life options, while men, by and large, do not have these choices – they are expected just to keep on the treadmill of full-time work, and generally they (come to) prefer this or put up with it. Meanwhile they are being castigated for their "male privilege", while no-one talks about the value for women of being liberated to work part-time or take time off to bring up children (and yes, I know that is hard work too).'

The Implicit All here applies to women. The use of 'no-one' later on is also an over-generalization.

Further examples of inflammatory comments come from YouTube, where gender pay differences have also been discussed at length. The majority of these were comments by people exasperated by the issue.

Under an item from Fox News (Sky News 2018) a male commenter wrote 'If women worked more hrs and weekends and overtime like men do the money is there.' (Implicit All).

A female commenter wrote 'Why are western women never satisfied. They constantly are saying how oppressed they are it's embarrassing. Sometimes I wish that I was a man smh.' (In this comment 'smh' means 'shaking my head'.) This is an Implicit All applying to all Western women rather than just to all women.

Beneath an ITV News item (ITV News 2018) one man commented 'Men get paid more and earn more because primarily their busting their guts providing for women, yet women commit the ultimate treachery of turning this against them, denying it and trying to steal from men the very wealth men accrue to give them.' (Implicit Alls).

A woman commented that 'Every choice you make has financial implications. And women make bad ones because they don't understand they are a commodity, just like men. I'm a woman as well.' (Implicit All).

Under a video (American Enterprise Institute 2014) by Christina Hoff-Sommers, (known on YouTube as the Factual Feminist) a woman commented 'One would think that feminists would be happy to know that women aren't being discriminated against systemically and

that the gender gap is a myth. Yet that doesn't seem to be the case.'

Another woman wrote 'Exactly. Feminists should fight for the real wage gap, the one between wealthy people and the rest of the population. Oh no, wait, they won't do that because they benefit from their sugar daddies.'

The relevant problem here is not with a demographic group but with the generalization to 'feminists'. The word 'feminist' now has a wide range of meanings and these comments, even if true for some feminists, are certainly not true for all.

People thinking of themselves as 'feminists' have a wide range of beliefs. Some are in favour of equality under the law and equal opportunities. They see sexism as something that still exists in Western democracies but mostly in pockets of old-fashioned people. In the UK, remaining issues for these feminists tend to be around religious rules. For them, differences in outcomes (e.g. pay) do not necessarily mean that there is a problem. They think women can be sexist too.

Others who think of themselves as feminists seek equality in all desirable outcomes (e.g. equal pay at work) and view all examples of unequal desirable outcomes as proof of unfair discrimination. Inequality in undesirable outcomes, such as deaths at work, is not important. They view all men as sexists because they are part of a system – the patriarchy – that is a huge conspiracy to oppress women. Conversely, it is logically impossible for a woman to be sexist because women are oppressed and anything they do against men is just fighting back and getting some reparations.

This type of 'radical' feminist has many detractors, including others who see

themselves as feminists. To criticise 'feminists' without further qualification is over-homogenizing characteristics.

Under the same video another comment, probably from a man, was 'Men worker harder, with longer hours, in more stressful and dangerous jobs for more years and yet the main retail consumers are women. Somehow feminists have managed to construct a narrative that the "wage gap" represents the oppression of women when it actually proves the enslavement of men.' In this example there is an Implicit All for men, women, and feminists.

Movie genre preferences

A PsyPost article about male/female movie genre preferences (Dolan 2017) has this headline: 'Study: Gender stereotypes about movie preferences are mostly accurate'.

After setting up the topic with a question, the article continues: 'According to research recently published in *Frontiers in Psychology*, people's gender stereotypes about movies generally match the actual preferences of men and women. But there is a catch — people also tend to exaggerate just how different men and women's preferences are.'

(So which is it? Do the stereotypes match reality or are they an exaggeration?)

Within these sentences is an element of over-homogenization. The text is talking about the preferences of men and women matching stereotypes, which would only make sense if every man had the same preferences as every other man, and the same for women. That way, simple comparisons can be made.

The article continues along these lines, failing to refer to the distribution of preferences or otherwise mention individual differences within each sex.

This was true for the journalist's words and also when the researcher was quoted. Here is a quote from the researcher to illustrate: 'We found that men remembered more details from action movies than women, and women remembered more details from romantic movies than men.' In reality, average recall across all men was higher for action movies and average recall across all women was higher for romantic movies. Some men will have recalled more details from romantic movies than some women. Similarly, some women will have recalled more details from action movies than some men.

Male and female university places

A Guardian newspaper article (Guardian 2017) about the difference in numbers of male and female students with places on university degrees started with the headline: 'University gender gap at record high as 30,000 more women accepted'

This headline is not neutral and, as a result, it is less than perfect. It uses the Divisive Word 'gap' and does not specify which 'gender gap' is meant. The word 'accepted' is used misleadingly since the reality is that it is usually students who accept offers by universities, not the other way around.

The sub-headline says 'UCAS says young women a third more likely to go to university than men, and overall admissions are down on last year.' This uses Universal Probability; the wording 'more likely to go' indicates a probability for a future event that applies to each man and another for each woman. This is over-homogenization of a characteristic. The reality is that about a third more women had places than men and this was not the result of a lottery.

A good sentence from within the article was 'As of Friday morning, 133,280

British women aged 18 had secured a university place, compared with 103,800 British men of this age.'

However, this was soon followed by the crucial lapse into probabilities about future events. 'That means 18-year-old women are 36% more likely to start degree courses this autumn than their male peers.'

Another good section reads: 'UCAS suggests one factor contributing to the gender difference is a 9% increase in the number of 18-year-olds placed on nursing courses this year. Women significantly outnumber men for these degrees, with around 28 women recruited for every man.'

The wording 'significantly outnumber' is an understatement, but is better than, for example, 'dominate'.

A BBC online article (Coughlan 2016) about the same issue written a year later has the headline: 'Why do women get more university places?'

Again, trying to do too much in a headline leads to problems. First, there is the bizarre suggestion that women get more university places. In reality, each woman gets just one place, which will be the same as the number that each man gets. More importantly, this headline hints that women get more than men, rather than that more women try to get a place than men. It's a subtle point, but still a neutral headline would have been more appropriate.

The first line of body copy reads 'This isn't just a slight difference. Women in the UK are now 35% more likely than men to go to university and the gap is widening every year.' As with the Guardian, they have chosen to talk in terms of future likelihoods (Universal Probability), which is a subtle form of over-homogenization. The reference to

the 'gap' is using an Emotive, Divisive Word. The claim that is widening 'every year' is vague since we are not told over what period of time this is true.

Emotive Divisive Words appear elsewhere in the article, as in this quote: 'this increasingly polarised gender divide'. This suggests a division between genders – some kind of emotional or practical gulf or barrier perhaps – and suggests that there is polarization i.e. people shifting towards poles rather than there being common ground, probably on attitudes. In reality there are just more women than men going to university.

Jury trials and race

'Are juries fair?' (Thomas 2010) is a paper published by the UK's Ministry of Justice and written by an academic. It includes several studies of primary and secondary data and effects of race are one issue examined in detail.

In addition to looking at conviction rates of defendants of different races in real trials the paper reports the results of simulated trials. These were done with video evidence taken from a real trial for actual bodily harm, cleverly edited so that the race of the defendant and alleged victim could be varied independently without changing the evidence in any other way.

The case itself had resulted in a hung jury when tried so this was expected to be a case that would lead to many hung juries in the simulated trials and also be a sensitive guide to bias, if it existed.

In addition to recording the jury verdicts, the verdicts of each individual juror were recorded before and after jury deliberations, along with their race and other demographic variables.

Jury members were people who had been called up for real life jury service at three

locations in the UK with different racial mixes locally.

As simulated trial studies go this was a very realistic and large scale one with about 20 trials conducted at each location.

Taken over the three locations the rate of conviction was low overall (as expected) but higher for white defendants than for black or Asian defendants. When the individual verdicts of white jurors were studied this strongly confirmed the bias, with almost twice as many white jurors convicting white defendants as black at all three locations. Conviction rates for Asian defendants were in the middle.

The situation eliciting the highest conviction rates from individual white jurors was where a white defendant was alleged to have attacked a black victim, and this situation may have been the main reason for the differences overall.

The purpose of including this information here is to illustrate flawed writing about group differences, so how did the researchers summarise their findings?

Here are three summary bullet points in the paper with analysis:

- 'The verdicts of all-White juries did not discriminate against BME defendants. But some differences in jury decision-making emerged. Winchester juries had almost identical verdicts for White and BME defendants, but Nottingham juries had difficulty reaching a verdict involving a BME defendant or BME victim.'

While technically true this is Misleading by Omission. There was no discrimination *against* BME (black and minority ethnic) defendants, but there was discrimination *in favour of* BME defendants. Failing to mention this leaves the impression that there was no discrimination at all.

- 'BME defendants are not more likely than White defendants to be found guilty by juries at courts where there is a large proportion of BME defendants and a very low level of ethnic diversity in the local population.'

The 'more likely' wording is reasonable in this case because the results of the simulated trials were something of a lottery. The same evidence was presented each time but verdicts differed.

Again, failing to mention the bias that was found is Misleading the reader by Omission.

- 'White defendants accused of racially motivated crimes are not more likely to be acquitted by all-White juries than racially mixed juries.'

And there's the same issue again, misleading the reader into thinking there was no evidence of bias.

The paper goes on to discuss the results of real trials and some more familiar writing flaws appear.

'There is currently good evidence that members of BME groups are **over-represented** at virtually every stage of the criminal justice process relative to their representation in the general population (Jones & Singer, 2008).'

This use of 'over-represented' is more of a reference to statistically representative samples than to democratic representation. The suggestion is that the police and Crown Prosecution Service are sampling the general population and selecting a sample of people for prosecution that is not representative of the whole population. There may be some element of randomness, but what is really happening is not a random selection but a selection driven by the process of trying to catch criminals.

'This is referred to as "**disproportionality**" in the criminal justice system.'

This is an Emotive Word of the Divisive type.

'Statistics show that members of a BME group are **more likely to be** stopped, searched, arrested, charged and in prison than their White counterparts. What has not been known is whether BME defendants are **disproportionately** convicted by juries.'

Here again we have Universal Probability, with the suggestion that being arrested is a probability that is the same for everyone in each racial group. There is also the repetition of the Emotive Word, 'disproportionality'.

The Misleading Omission seems to have been effective in misleading at least some journalists.

A short article on this research in Wired (Wired 2010) had the headline 'Ground-breaking research finds juries are fair and effective' and maintained the same position throughout. It quoted the author of the study saying that the juries are 'fair, effective and efficient.' The Misleading Omission seems to have been completely effective in misleading Wired.

A piece in the Guardian (Travis 2010) mostly accepted the Misleading Omission, but further down in the article it said this: 'But it did find that all-white juries in Nottingham, a racially diverse area, appeared to be more sensitive in cases involving racial conflict and were more likely to convict a white defendant accused of assaulting a black victim.' This fails to spell out that by 'more likely' they mean more likely to convict a white person than a black person, not just that the race of the alleged victim had an effect. Also, the same was true in the other two locations and the extent of the

bias was large, but at least this journalist was not completely misled.

Explaining the Brexit referendum result

In 2016, after many years of waiting, British citizens were given the chance to vote on whether they wanted to be in the European Union, with its aim of ever-growing political union. A small but sufficient majority voted to leave, despite a vigorous campaign to stay by the three longest established and largest political parties and most of the television and radio news media.

People voted to leave even though the government at that time had no plans for how to leave or what they would do differently outside the European Union. They never expected the vote to go the way it did.

Almost before the poll had closed there were people claiming that their region of the country, or age group, or ethnic group, had not voted to leave. Within this there were many examples of talking as if everyone in particular demographic groups had voted the same way.

For example, some time after the referendum, an article in Buzzfeed (Ball 2016) started with this headline: 'Here's Who Voted For Brexit – And Who Didn't'

It got straight down to business in its sub-heading, saying 'Leave voters were older, poorer, less educated, and far more likely to think the country was getting worse than Remain voters, new research shows.'

This is a classic example of an Implicit All and says that Leave voters were older, poorer, less educated, and less happy with the changes in the country. In short, if you voted Leave then you are old, stupid, and grumpy. This is annoying for

well-educated, younger people who voted to leave.

The article is heavy with data from a detailed study by researchers at NatCen, with many good paragraphs.

However, some of the sub-headings have flaws, usually of the Implicit All type. For example:

'People with little education voted to leave.'

It is true that 78% of referendum voters with no formal qualifications voted to leave, but that still leaves 22% who voted to remain. Also, while 74% of voters with degree level qualifications voted to remain, that still leaves 26% of them voting to leave.

'Only the highest-income group of voters backed Remain.'

Again, this is an example of an Implicit All. In reality only a majority of these high-income referendum voters wanted to remain and many of them wanted to leave.

'White British people were the only ethnic group to back Brexit.'

Yet again this is an Implicit All example. Many non-white people also voted to leave – just not the majority.

'Black voters were least likely to vote for Brexit'

This sub-heading changed things to a Universal Probability, suggesting that somehow all of them were the same but then decided their vote randomly.

'People "just about managing" – or doing worse – voted to leave.'

This takes us back to Implicit Alls, even though some poor people voted to remain.

Similarly, a BBC article (BBC 2016) is riddled with annoying flaws. The heading was:

'EU referendum: England leads UK to exit'

This begins the Implicit Alls, suggesting that the English all voted to leave, when of course it was just a majority of English referendum voters.

The paragraph that follows is worded.

'Voters in England have led the UK's way out of the European Union with nine areas seeing more than 70% opting to leave.'

However, the article soon returns to Implicit Alls with this:

'While Scotland and Northern Ireland backed staying, every English region except London voted to leave.'

This is annoying for Scots, Northern Irish, and Londoners who voted to leave and for people in other English regions who voted to remain. It is also annoying for the Welsh, who don't even get mentioned even though a majority voted to leave. A better statement of reality, for England at least, came later in the article:

'The England vote was 53.4% for Leave and 46.6% for Remain.'

Conclusion

Writing about the characteristics of demographic groups or differences between demographic groups can be difficult. It's easy to rub readers up the wrong way accidentally with seemingly subtle ambiguities and implications.

With sensitive subjects this can lead to emotional reactions and damaging arguments that achieve nothing useful.

However, with a better understanding of the specific patterns that cause problems

and a toolkit of better wordings it is possible to do much, much better.

References

American Enterprise Institute (2014). *The gender wage gap uses bogus statistics*. Available on YouTube at: www.youtube.com/watch?v=58arQIr882w

Ball, J. (2016). *Here's Who Voted For Brexit – And Who Didn't*. Available on BuzzFeed at: www.buzzfeed.com/jamesball/heres-who-voted-for-brexit-and-who-didnt?utm_term=.qp3PYXLvp#.mykpX8EIK

BBC (2016). *EU referendum: England leads UK to exit*. Available at: www.bbc.co.uk/news/uk-politics-eu-referendum-36606245

Coughlan, S. (2016). *Why do women get more university places?* Available on the BBC at: www.bbc.co.uk/news/education-36266753

Dolan, E.W. (2017). *Study: Gender stereotypes about movie preferences are mostly accurate*. Available on PsyPost at: www.psypost.org/2017/05/study-gender-stereotypes-movie-preferences-mostly-accurate-49019

Fisher, P. (2018). *First gender pay reporting figures embarrass top six*. AccountingWEB Available at: www.accountingweb.co.uk/practice/general-practice/first-gender-pay-reporting-figures-embarrass-top-six

Guardian (2017). *University gender gap at record high as 30,000 more women accepted*. Available online at: www.theguardian.com/education/2017/aug/28/university-gender-gap-at-record-high-as-30000-more-women-accepted

ITV News (2018). *How can the UK fix its gender pay gap?* Available on YouTube

at: www.youtube.com/watch?v=-6MCffOrAcs&t=3s

Leitch, M. (2017). *Encouraging people who are CRED (capable, rational, ethical, diligent)*. Available at: www.workinginuncertainty.co.uk/encouraging.pdf

Sky News (2018). *Watch: Pay equality debate gets heated*. Available on YouTube at: www.youtube.com/watch?v=srt3AQyrs_E&t=269s

Thomas, C. (2010) *Are juries fair?* Ministry of Justice. Available online at: www.justice.gov.uk/downloads/publications/research-and-analysis/moj-research/are-juries-fair-research.pdf

With a technical annex at: www.whatdotheyknow.com/request/29367/response/72874/attach/3/Are%20juries%20fair%20TECHNICAL%20ANNEX.pdf

Travis, A. (2010). *The verdict on juries: fair, effective and efficient*. Available at: www.theguardian.com/uk/2010/feb/17/juries-fairness-research

Wired (2010) *Ground-breaking research finds juries are fair and effective*. Available at: www.wired-gov.net/wg/wg-news-1.nsf/0/2A3501D1B57572F8802576CD005E0682?OpenDocument