

**Phones in flight mode...**

**Browser tabs closed or minimised**  
(multitasking negatively impacts learning  
and increases anxiety)

# Directed study review

- What was **useful** in the Burgess **reading**?
- What **questions** did you have?
- What might you **use** from reverse engineering the stories?

## **Reverse engineering Upmarket tennis and golf clubs among recipients of major sports grants**

FOI has been used in this story to find out how much money certain sports clubs have been awarded by the sports grants scheme in Australia. FOI has also been used to find out how the money has been spent and what on, and how the clubs have benefited from the grants. **Some data has been found from the accounts of these sports clubs which may be available anyway.**

They may have asked the government in Australia, controls of state, and sporting bodies for this information.

They will have asked **how much money from the sports grant scheme has been awarded to [name] club, what the money was granted towards/for, how it has been spent, and what on.**

I can utilise these skills in **by finding out just where one grant has been awarded**, it leads to finding out what this has been used for, sourcing quotes from someone directly involved with the organisation and to finding out where other grants have been awarded. Going forward into the assignment, I have learned the importance of comparison in articles.

## Police record rise in religious hate crimes after Israel-Gaza war

FOI was used to show the number of both antisemitic and Islamophobic offences in each area compared to 2022, as well as which areas had the **biggest rise** in religious hate crimes following 'Israel-Gaza war.'

Public bodies contacted were: emergency services i.e. **police** (Greater Manchester, West Yorkshire, WM, Merseyside, Hertfordshire & Thames Valley, British Transport police)

Questions asked may have been: has there been a rise in / what is the state of religious hate crimes in the month following Oct 7th? *[as that's a yes/no question it's more likely they asked for numbers]*

What could have been better: the focus is mainly on antisemitism at the start, suggesting a bias.

Overall I can use this knowledge to obtain quotes/comments from spokespeople and those directly involved within organisations, charities etc. to add more depth to my story than just numbers alone. I can also implement the practice of **comparing data and sourcing a wide variety of information** that is of importance and public interest through FOI requests. From reading this article I learnt that **full data may not always be supplied due to delays by public bodies**.

## UK universities fine students £170,000 for Covid rule breaches

FOI sent – They would have contacted **each university** asking **how many students had fines, the cost of that fine and the reason for the fine.**

For comment they asked: students as well as **some of the universities** they spoke to **Universities UK** and the **National Union of Students.**

What could be better? - For Aberdeen University, a second **follow-up FOI could have been used** to ask for the number of students that were fined. If they did not provide the number of students within this one, then that could be another story. Alongside this, **it would be good to hear the reason as to why they decided not to disclose the number of students.** Furthermore, if the data was provided in a spreadsheet, it would be good for the reader to be able to see this, so they are able to see the information/response themselves.

How can I use this? - For my FOI stories, it has shown me the importance to make sure that I **chase answers and ensure that where I can, I get all the information I ask for.** This will ensure that I have all the information to ensure that the data is accurate and gives a fair representation of the institutions I have included within the stories. Furthermore, it has shown me that **just having the data alone is not enough for the story.**

# Using in an evaluation (don't quote facts!):

*Burgess (2015) suggests ideas for FOI requests can be inspired by others that have already been made. So I searched for FOI requests in [my field] to get ideas (see Appendix C)*

# Using in an evaluation:

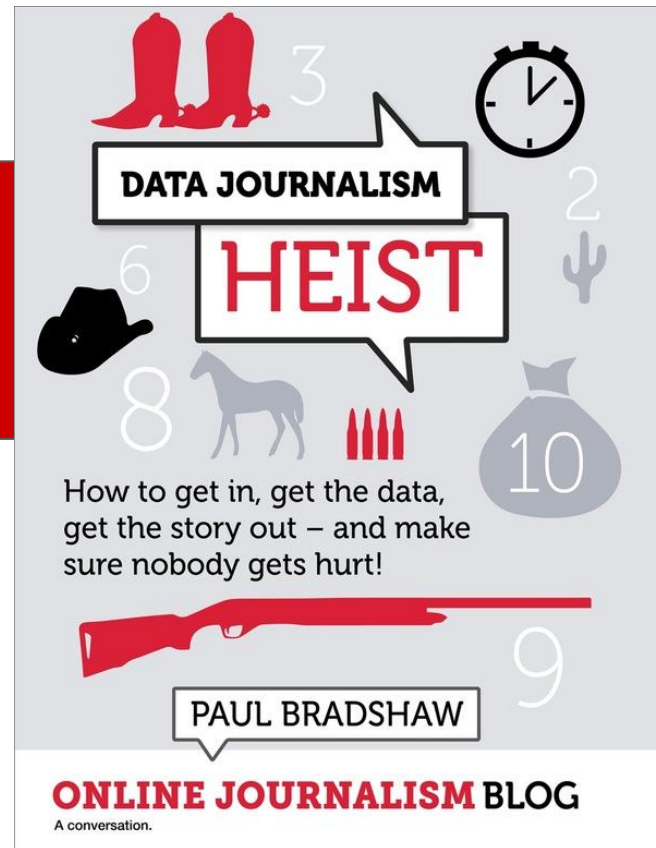
*I decided to send an FOI asking for the data behind a press release (Appendix D), an idea inspired by Burgess (2015)*

# Using in an evaluation:

*I sent a “round robin” FOI (Burgess 2015) to all the police forces in the UK (Appendix E). This can be time consuming (Burgess 2015) so I planned ahead to allow enough time for compiling the responses.*



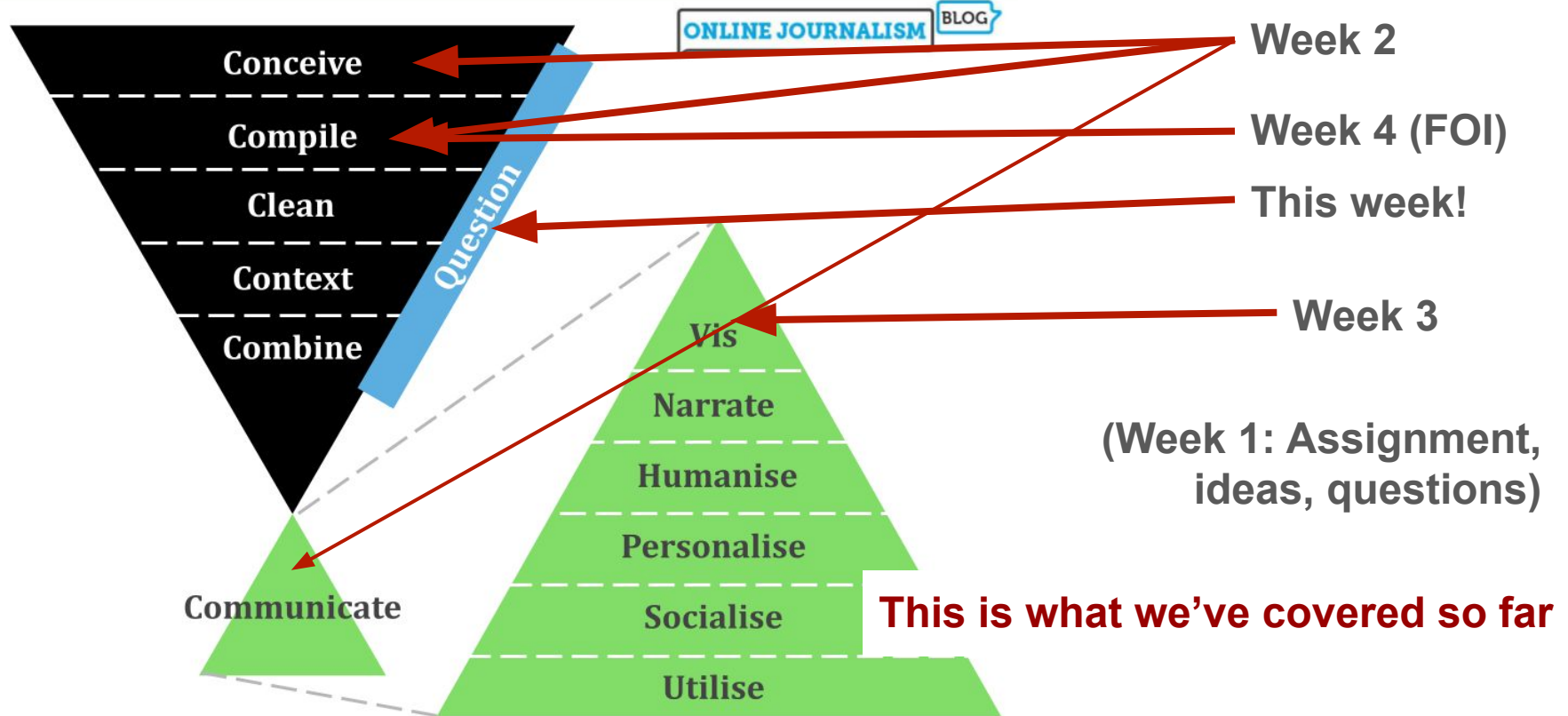
# Did you read it?

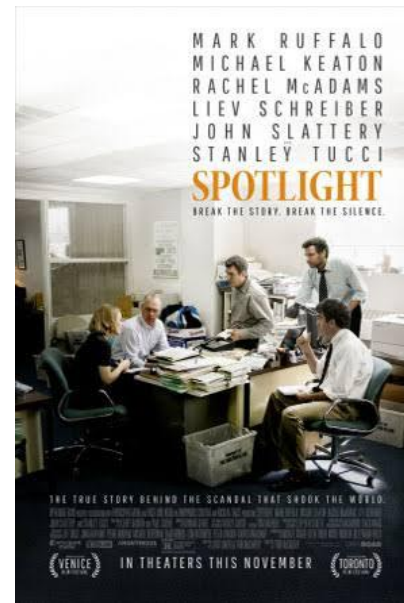


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[leanpub.com/DataJournalismHeist/c/bcustudents](https://leanpub.com/DataJournalismHeist/c/bcustudents)

# The Inverted Pyramid of Data Journalism





**data journalism's 3 chords**

# **This section will cover:**

- Common techniques for finding stories in data
- What types of stories each technique can help you find



“Data journalists are the new punks”

# Data journalism's 3 basic chords...

- Sorting (who's worst/best?)
- Filtering (what's relevant to my audience?)
- Calculations (what's meaningful? Totals, proportions, percentage change, etc)



# For example: gender pay gap data

	A	B	C	D	E	F
1	EmployerName	Address	CompanyNumber	SicCodes	DiffMeanHourlyPercent	DiffMedianHourlyPercent
2	23.5 DEGREES LI	Unit 3	8014079	56103	10	0
3	ABACUS HOTELS	White Lion	3101431	55100	37.8	3.5
4	Abbeyfield Wale	Pagefield		87100,	21.9	7.6
5	ABERDEEN JOUR	Lang	SC015256	18110,	15.7	13.3
6	ACEGOLD LIMITE	Norcliffe	3484784	86900	-5.1	2
7	ADAPT BUSINESS	Canolfan	6805468	81229	3.3	0
8	ADDITIONS (U.K.	Coach	1945425	78200	0	0
9	ADECCO UK LIMI	Millennium	593232	78200	-7.8	-3.2
10	ALLIANCE CARE (	Norcliffe	3691542	86900	-0.8	0.3
11	ALLIANCE CLEAN	Unit 5,	3596969	81299	2	0
12	ALLIANCE MEDIC	Iceni	2128897	86101,	21	23
13	AMVALE MEDIC	Unit 1, C/D	4502825	82990	7	0
14	APETITO LIMITE	Canal Road,	233851	10850	18	13.2

# Sorting and filtering to find stories

- Sort it to bring outliers to the top
- Filter it to identify organisations in a particular area or industry (further manual filtering may be required)
- Filter — and then sort!



# Sorted Z-A by mean pay gap

	A	B	C	D	E	F	G
1	EmployerName	Employee	Address	PostCode	Company	SicCodes	DiffMeanHourlyPercent
2	HPI UK HOLDING LTD.	63557	Albema	W1S 4HQ	5598207	55100	100
3	M. ANDERSON CONSTRUCTION LIMITED	20315	Springfiel	CM2 5PW	2207082	41100	100
4	PSJ FABRICATIONS LTD	19413	Boothm P	WA16 8QZ	1205595	25110	100
5	BIRMINGHAM CITY FOOTBALL CLUB PLC	15371	St Andrew	9 4NH	27318	93120	99
6	ACUSHNET EUROPE LTD	883	Caxton R	PE27 3LU	1198336	32300	96.8
7	HOOK 2 SISTERS LIMITED	6290	Cote, Bar	OX18 2LG	5969169	1470	92
8	CHELSEA FOOTBALL CLUB LIMITED	3148	Stamford	SW6 1HS	1965149	93120	91.6
9	BRAND ENERGY & INFRASTRUCTURE						
10	MANCHESTER CITY FOOTBALL CLUB						
11	NEWCASTLE UNITED FOOTBALL COM						
12	LEEDS UNITED FOOTBALL CLUB LIM						

HomeInsertDrawPage LayoutFormulasData

Get External Data

Refresh All

Queries & Connections

Properties

Edit Links

A Z ↓

**Z A ↓**

A Z


Sort


Filter


# Sorted A-Z by mean pay gap


	A	B	C	D	E	F	G
1	EmployerName	Employee	Address	PostCode	CompanyM	SicCodes	DiffMeanHourlyPercent
2	ANKH CONCEPTS HOSPITALITY MANAGEM	485	30 Argyll	W1F 7EB	6603179	78300	-379.6
3	FORTEL SERVICES LIMITED	5150	1 Diversit	WS2 8DS	3559714	42990	-184.2
4	REVOLUCION DE CUBA LIMITED	10439	11 Old St	OL6 6LA	8838595	47250	-182
5	CONCEPT RECRUITMENT GROUP LIMITED	3501	Haselden	WF1 3LQ	5888879	78200	-177.7
6	TOTAL RECRUIT LTD	20186	Whitecro	S29 6PB	1.2E+07	78200	-143
7	STAPLES (VEGETABLES) LIMITED	11662	Station F	PE22 0SF	504587	10390, 49410	-133.7
8	FIRSTPOINT HOMECARE LIMITED	15593	Kingston	M20 2LD	5719916	87300	-123.6
9	R E PERSONNEL LIMITED	10207	Manor Pa	GL51 9TU	4301078	78109	-109
10	C.J.L. CONSTRUCTION LIMITED	2649	Woodlan	BS25 5DP	177666	42990	-103.3
11	QUEST PAY SOLUTIONS NE LIMITED						
12	ELEMIS LIMITED						
13	PICTUREHOUSE CINEMAS LIMITED						
14	MARS FOOD UK LIMITED						


HomeInsertDrawPage LayoutFormulasData


Get External Data


Refresh All

Queries & Connections

Properties

Edit Links

Sort

Filter

**Equal pay**

🕒 This article is more than 1 year old

# The UK companies reporting the biggest gender pay gaps

**Lingerie group Bux Avenue, Apple, Ryanair and investment firm Macquarie Group top list**



**Sorting 'reveals' the worst/best companies**

▲ UK companies with more than 250 employees had to report details of gender pay gaps by midnight on Wednesday. Composite: Frank Hulley-Jones

<https://www.cosmopolitan.com/uk/reports/a27042068/gender-pay-gap-2019-best-worst-companies/>

<https://www.theguardian.com/society/2018/apr/05/the-uk-companies-reporting-the-biggest-gender-pay-gaps>

# Sorted Z-A — and filtered

The screenshot shows a Microsoft Excel spreadsheet with a table of football clubs. The table is sorted Z-A and filtered for 'football'. The ribbon is set to 'Data', and the 'Filter' button is highlighted with a red box. A red arrow points from the title 'Sorted Z-A — and filtered' to the 'Filter' button. Another red arrow points from the 'Filter' button to the 'Filter' task pane on the right. The 'Filter' task pane shows the search term 'football' and a list of search results, all of which are checked. The 'Auto Apply' checkbox is also checked. The 'Apply Filter' button is visible at the bottom of the task pane.

	A	B	C	D	E
1	EmployerName	Empl	Address	PostCod	Compar
5	BIRMINGHAM CITY FOOTBALL CLUB PLC				
18	LEICESTER CITY FOOTBALL CLUB LIMITED				
19	WATFORD ASSOCIATION FOOTBALL CLUB				
20	FULHAM FOOTBALL CLUB LIMITED				
22	MANCHESTER UNITED FOOTBALL CLUB LI				
24	THE LIVERPOOL FOOTBALL CLUB AND ATH				
25	BRIGHTON AND HOVE ALBION FOOTBALL				
26	EVERTON FOOTBALL CLUB COMPANY, LIM				
27	WOLVERHAMPTON WANDERERS FOOTBA				
30	TOTTENHAM HOTSPUR FOOTBALL & ATHL				
31	THE ARSENAL FOOTBALL CLUB PUBLIC LI	12191	Highbury	N5 1RU	10924

**Filter**

Sort

A ↓ Ascending Z ↓ Descending

By colour: None

Filter

By colour: None

Choose On

Q football

- (Select All Search Results)
- ABERDEEN FOOTBALL CI
- ALBION FOOTBALL CLUB
- BIRMINGHAM CITY FOOT
- BRIGHTON AND HOVE AL
- BURNLEY FOOTBALL & A
- CARDIFF CITY FOOTBALL

Auto Apply

Apply Filter Clear Filter

# Sorted Z-A — and filtered

	A	B	C	D	E	F	G
1	EmployerName	Employer	Address	PostCode	Compar	SicCode	DiffMeanHourlyPerce
5	BIRMINGHAM CITY FOOTBALL CLUB PLC					18 93120	99
8	CHELSEA FOOTBALL CLUB LIMITED					49 93120	91.6
10	MANCHESTER CITY FOOTBALL CLUB LIMITED					46 93120	91
11	NEWCASTLE UNITED FOOTBALL COMPANY					14 93110	90.4
12	LEEDS UNITED FOOTBALL CLUB LIMITED					75 93110	90
15	BURNLEY FOOTBALL & ATHLETIC COMPANY					22 93110	88.8
16	WEST BROMWICH ALBION FOOTBALL CLUB					63 93120	88.6
17	THE SHEFFIELD UNITED FOOTBALL CLUB LIMITED					64 93120	87.9
18	LEICESTER CITY FOOTBALL CLUB LIMITED					77 93199	87.8
19	WATFORD ASSOCIATION FOOTBALL CLUB					94 93199	87.8
20	FULHAM FOOTBALL CLUB LIMITED					86 93120	87
22	MANCHESTER UNITED FOOTBALL CLUB LIMITED					89 93120	86.1
24	THE LIVERPOOL FOOTBALL CLUB AND ATHLETIC					68 93110	85.7
25	BRIGHTON AND HOVE ALBION FOOTBALL CLUB					77 93120	85.6
26	EVERTON FOOTBALL CLUB COMPANY, LIMITED					24 93110	85.2
27	WOLVERHAMPTON WANDERERS FOOTBALL CLUB					23 93120	84.5
30	TOTTENHAM HOTSPUR FOOTBALL & ATHLETIC					86 93110	84
	THE ABERDEEN FOOTBALL CLUB PUBLIC LIMITED	12101	Highbury	N5 1RU	100211	93120	82.1

EmployerName

Sort

A ↓ Ascending

Z ↓ Descending

By colour: None

Filter

By colour: None

Choose One

☒ (Select All Search Results)
 ☒ ABERDEEN FOOTBALL CLUB
 ☒ ALBION FOOTBALL CLUB
 ☒ BIRMINGHAM CITY FOOTBALL CLUB
 ☒ BRIGHTON AND HOVE ALBION FOOTBALL CLUB
 ☒ BURNLEY FOOTBALL & ATHLETIC COMPANY
 ☒ CARDIFF CITY FOOTBALL CLUB

☒ Auto Apply

Apply Filter

Clear Filter



# Sorted Z-A — and filtered

	A	B	C	D	E	F	G
1	EmployerName	Empl	Address	PostCod	Compar	SicCod	DiffMeanHourlyPerce
5	BIRMINGHAM CITY FOOTBALL CLUB PLC	15371	St Andrews Stadium, Small Heath, Birmingham, B5				99
29	NSWE SPORTS LIMITED	10364	Villa Park, Birmingham, West Midlands, B6 6HE				84.3
67	HEADLAM GROUP PLC	6037	PO BOX 1 Gorsey Lane, Coleshill, Birmingham, We				61.2
75	DENTAL PARTNERS TRADING LIMITED	20622	Dental Partners Support Centre 476-478 Bristol R				59
77	RUSH HAIR LIMITED	10709	C/O Opus Restructuring Llp Cornwall Buildings, 45				58.5
128	GATELEY PLC	5397	One Eleven, Edmund Street, Birmingham, B3 2HJ				49.7
162	GENTING CASINOS UK LIMITED	5455	Genting Club Star City, Watson Road, Birmingham				47
204	Our Health Partnership	16205	First Floor, 1856 Pershore Road, Cotteridge, Birmi				45
324	MISSGUIDED LIMITED	8514	C/O Teneo Financial Advisory Limited 156 Great C				40.6
436	NATIONAL EXHIBITION CENTRE LIMITED (	300	National Exhibition Centre, Birmingham West Mid				38
450	Modality Partnership	15242	Orsborn House, 55 Terrace Road, Birmingham, B1				37.7
500	SALTS HEALTHCARE LIMITED	10840	Richard Street, Aston, Birmingham, West Midalnd	B7 4AA	74096	32990	36.7
525	ROYAL ORTHOPAEDIC HOSPITAL	10667	Bristol Road South, Northfield, Birmingham, West	B31 2AP	RC000510		36.3

Address

Sort

A ↓ Ascending

Z ↓ Descending

By colour: None

Filter

By colour: None

Choose One

Q birmingham

(Select All Search Results)

1 Centenary Square, Birm

1 Chamberlain Square Cs,

1 Victoria Square, Birm

1 Wharf Road, Tyseley, Bii

1 Wythall Green Way, Wyt

1, Trinity Park, Bickenhill L

☒ Auto Apply
 

Apply Filter

Clear Filter

# Gender pay gaps in academy school chains among the worst in UK

Guardian analysis reveals several trusts where women face hourly pay deficit of more than 50%



Filtering to reveal the scale/ranking in one category

## This is the gender income gap in Birmingham - and it's bigger than you think

It shows female taxpayers in the West Midlands have an average pre-tax income of £24,679 - compared to £33,067 for men

SHARE



By David Ottewell & James Rodger Head Of Trends

05:30, 10 MAR 2019

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WHAT IS  
THE  
GENDER  
PAY  
GAP?

<https://www.theguardian.com/politics/2017/aug/10/gender-pay-gap-widening-at-one-in-four-government-bodies-figures-show>

<https://www.theguardian.com/news/2018/mar/25/gender-pay-gaps-in-academy-school-chains-among-the-worst-in-uk>

# Calculating to find stories

- Divide change by the starting figure to get a percentage change
- Divide the part by the whole to get a proportion (% of whole)



# Calculating a proportion

- 73 companies out of 100 pay men more than women.
- Divide the part by the whole:  $= 73 / 100$
- $= 0.73$  (This means 73%)
- Change formatting to show that as 73%

# North East gender pay gap gets worse as 55% of firms see divide widen

Second round of gender pay figures show that women are now paid 11.3% less than men in the North East

SHARE



By [Jonathon Manning](#)

16:22, 5 APR 2019

UPDATED 11:23, 9 A

## Gender pay gap widening at one in four government bodies, figures show

Gap across civil service has shrunk by two points since 2010, suggesting equality will take another 37 years



**Calculating to reveal the scale  
(+ filtering = one category)**

<https://www.birminghammail.co.uk/news/midlands-news/gender-income-gap-birmingham-its-15940113>

<https://www.chroniclive.co.uk/business/business-news/north-east-gender-pay-gap-16085565>

# Exploratory feature: ranking across different measures

## The gender pay gap: How do Premier League clubs compare?

Jacob Whitehead Mar 8, 2023

248

March 8 marks International Women's Day, an opportunity to celebrate the progress made towards gender equality but also to highlight the work still to do.

Football is no different. A legacy of England's Women's European Championship win is the UK government's [pledge to give girls equal access to sport in schools](#) but *The Athletic* [has also reported on the harassment regularly faced by female football fans](#).

Though the mean pay gap is often quoted, very high or low pay can distort the results — the median is considered to show the more 'typical' situation. In the Premier League, where the first-team men's squad is exceptionally well-paid, the median is a more appropriate measure.

*The Athletic* also contacted each Premier League club with a negative pay gap to ask if they wished to comment on the findings.

As pointed out by several smaller clubs, teams that employ fewer members of staff are at a slight disadvantage, with the first-team playing squad more likely to skew the median, which should be considered.



- Chapter 1: Ranking mean pay gap Z-A (*Nottingham Forest have the largest gender pay gap*)
- Ch2: Ranking A-Z (*West Ham's gender pay gap shows a large advantage for female staff*)
- Ch3: Ranking on another column A-Z (*Who employs the fewest women in the upper pay quartile?*)
- Ch4: Calculation then ranking (*Which clubs have improved the most?*)

**Tip: March 8 is International Women's Day**

**Editorial planning:**

Use as a **topical hook** for an exploration of data on gender pay gap in your field

# Calculating a change

- The number of companies paying men more than women rose from 53 to 73
- Calculate the change:  $73 - 53 = 20$
- Divide the change by the older figure:  $20/53$
- $= 0.38$  (“increased 38%”)

# Calculating a change (one org)

- Pay gap at one club dropped from 75 to 25
- Calculate the change:  $75 - 25 = 50$
- Divide the change by the older figure:  $50/75$
- $= 0.66$  (“dropped 66%” or “by two thirds”)

# Finding stories with pivot tables

- Create the empty pivot table
- Put your focus column in **Rows**
- Put what you want to count, or sum, in **Values**
- Put any periods in **Columns**
- Create your own calculations of change etc.



# Example: what is the scale of stop and search in your area?

Met officers investigated after black boy, 16, stopped six times in five months

Police watchdog investigating eight officers after complaints of racial profiling over stops in Tottenham and Stratford



Take one 'event' in the news and look for data that tells a story about the bigger picture

# Example:

## Who is stopped and searched?

3	Row Labels	Count of Self-defined ethnicity
4	White - English/Welsh/Scottish/Northern Irish/British	764
5	Asian/Asian British - Pakistani	499
6	Black/African/Caribbean/Black British - Caribbean	248
7	Other ethnic group - Not stated	222
8	Black/African/Caribbean/Black British - African	153
9	White - Any other White background	146
10	Asian/Asian British - Indian	144
11	Mixed/Multiple ethnic groups - White and Black Caribbean	110
12	Black/African/Caribbean/Black British - Any other Black/Af	84
13	Mixed/Multiple ethnic groups - Any other Mixed/Multiple	69
14	Asian/Asian British - Bangladeshi	44
15	Mixed/Multiple ethnic groups - White and Asian	21
16	White - Irish	20
17	White - Gypsy or Irish Traveller	4
18	Asian/Asian British - Any other Asian background	2
19	Asian/Asian British - Chinese	1
20	(blank)	
21	Grand Total	2531

PivotTable Fields

FIELD NAME

Search fields

☐ Gender

☐ Age range

☒ Self-defined ethnicity

☐ Officer-defined ethnicity

Filters

Columns

Rows

Values

Self-defined eth...

Count of Self-d...

Drag fields between areas

Tip: News story about Met officers being investigated

Use as a **topical\*** hook for an exploration of data on stop and search in your area

*\*Topical means it has to have happened in the last week or so*

**Tip: if it's not *topical*, lead on a reaction\* to your analysis**

**(This should *not* be Joe Public:  
interview someone whose **authority**  
or **expertise** makes it **newsworthy**)**

*Examples would include campaign groups and groups that represent victims, politicians, police, academics etc.*



**“If we cannot explain why it is disproportionate then we are in a very bad place” - Assistant Commissioner of the Metropolitan Police on stop and search powers**

Figures show Asian minorities are disproportionately stopped and searched by police forces.

*Posted on January 21, 2021*



# Example: What is getting how much?

Row Labels		Sum of 2023-26 Annual Funding (Offered 4 Nov 2022)
Theatre	£	111,574,250
Combined arts	£	81,943,672
Music	£	65,129,380
Visual arts	£	47,372,659
Dance	£	46,907,702
Museums	£	36,647,341
Not discipline specific	£	34,805,780
Literature	£	16,027,669
Libraries	£	4,162,720
Grand Total	£	444,571,173

PivotTable Fields

FIELD NAME

- ☐ 2019-22 Average Annual Funding (Figure)
- ☐ 2022/23 Annual Funding (Extension year)
- ☒ 2023-26 Annual Funding (Offered 4 Nov)
- ☒ Main Discipline
- ☐ ACE Area

Filters Columns

Rows Values

- Main Discipline
- Sum of 2023-26...



# Example: Where is getting how much?

Row Labels		Sum of 2023-26 Annual Funding (Offered 4 Nov 2022)
Lambeth	£	41,227,421
Westminster	£	30,112,508
Leeds	£	28,948,850
Birmingham	£	26,534,514
Manchester	£	24,618,070
Stratford-on-Avon	£	15,860,562
Tower Hamlets	£	13,990,814
Southwark	£	12,297,157
Camden	£	10,439,801
Islington	£	10,026,436
Liverpool	£	9,932,966
Bristol, City of	£	9,215,443
Newcastle upon Tyne	£	8,929,115

**PivotTable Fields**

FIELD NAME

- ☒ 2023-26 Annual Funding (Offered 4 Nov 2022)
- ☐ Main Discipline
- ☐ ACE Area
- ☐ ONS region
- ☐ Constituency
- ☒ Local authority

**Filters**

**Columns**

**Rows** : Local authority ⓘ

**Values** : Sum of 2023-2... ⓘ



# Example: Who is getting how much?

3	Row Labels	Sum of Actual Value
4	LIVERPOOL STREETSCENE SERVICES LIM	4819553.95
5	MERSEY CARE NHS FOUNDATION TRUST	2757281.84
6	MERSEYSIDE WASTE DISPOSAL AUTHORITY	2728510.2
7	VINCI CONSTRUCTION UK LIMITED	2060707
8	****REDACTED PERSONAL INFO****	1578289.19
9	WIRRAL BOROUGH COUNCIL	1366879.44
10	LIVERPOOL SCHOOLS SERVICES LTD VARI	1339194.93
11	HUYTON ASPHALT LTD	1324203.27
12	MORGAN SINDALL PLC	1181664.74
13	LIVERPOOL YMCA (SP)	997867.4
14	RIVERSIDE	994528.97
15	COMMUNITY INTEGRATED CARE	724746.79
16	LIVERPOOL CHARITY & VOLUNTARY SERVI	625000

PivotTable Fields

FIELD NAME

Q Search fields

☐ SAP Document Number
 ☐ Posting date
 ☒ Vendor
 ☒ Actual Value

Filters

Columns

Rows

Values

: Vendor

: Sum of Actual V...

Drag fields between areas

# Key points to remember

- A quick sort can show you **outliers** to investigate further
- A quick filter allows you to **focus** on an area or field
- A quick % calculation can tell you how much something has **changed**, or the **proportion** something accounts for
- A quick pivot table can allow you **compare** areas, categories and/or time periods and which merits further investigation...
- ...and after 5 minutes of the above you **pick up the phone...**

“The most important piece of technology on my desk is my landline **telephone**. I think some people have the idea that “data journalism” means staring at spreadsheets until a story magically appears, but in the real world that almost never happens. The best stories almost always emerge from talking to **people**, whether they are experts or just ordinary people affected by the issues we write about. **They’re the ones who pose the questions** that data can help answer, **or who help explain** the trends that the data reveals, or **who can provide the wrinkles and nuances** that the data glosses over.”

[Ben Casselman, New York Times](#)

# Questions?

- How could you use sorting and filtering to give you a story?
- Will you need to calculate a change, percentage, or total?
- Could you use a pivot table to give you totals per category/area?

# Mid module survey