

Data Vis Assignment SG

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Critiquing and Creating Data Visualisations

DATA ANALYSIS AND VISUALISATION

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1. “Physical activity for adults UK”

The infographic shown below aims to inform people about the benefits and ways for people to be more active. In the infographic, it says it is aimed at adults and older adults. In the infographic, the top section states some health benefits of being active, these being mental health improvements and reducing the chance of some illnesses. In the latter section of the infographic, it provides the user with ways to be more active with little to no tools or equipment required. In this report, I will be critiquing the infographic.



Colour

The use of colour in visual forms of data is important because it can help make certain information stand out over others and help differentiate between parts of the infographic.

Choosing the right colours is important because the colours need to be able to be differentiated between for users with impaired vision. Using a colour-blind checker [1] to simulate what the infographic would look like to various types of colour-blindness. Below are two of the simulated

Simulated



Simulated



results from the colour-blind checker. After reviewing all the simulated results, we can conclude

that the colours used in the infographic do not majorly hinder a colour-blind user from accessing the information. In addition to this, according to [2], good colour choice “Finds colors that provide maximum contrast... ³ so that text and non-decorative images are legible for anyone with low vision or color deficiencies”. Although this source is about web accessibility, the quote still applies in this scenario and this infographic follows this well.

Text

Using the criteria in [3] to critique the text we can conclude that the text and language used in the infographic is easy-to-read and informative. Throughout the infographic, there are no uncommon terms or words used that are not explained or defined which prevents the user from getting confused when reading. Furthermore, the infographic focuses on presenting the information in small sections aiding the user’s experience when reading the small and precise bites of information. The final criteria outlined in [3], says the text should “clearly explain what is going on”, the infographic does explain everything and provides relevant context to any images throughout used in the infographic.

Graphs

In the infographic, there is one bar graph. It shows the percentage reduction that being healthy benefits people against several illnesses. At first glance, it was hard to identify it as a graph as the bars are very similar in size, however once recognising it as a graph, we can say that it provides relevant and useful information to the topic in a form that is easy for the average user

to understand. In addition to this, it follows the same colour scheme as the section of the infographic it is in. It does not stop any other information from seen and does not make the overall infographic look cluttered.

Graphics

The infographic uses multiple graphics throughout to aid the user's experience of the infographic, all the all images are clearly labelled and relevant to the topic of the infographic, they also do not block any other information. They are easy to see, as they are all in white which contrasts against the other more vibrant colours well, making it easy to see for people with sight issues. However, the number of graphs could be cluttering the infographic

5 Cognition

Cognition is “the mental action or process of acquiring knowledge and understanding” – Oxford Languages. The infographic engages a number of cognitive skills outlined in [4]. One of them being the user's ⁸ working memory or short-term memory. Short term memory (STM) is only capable of storing seven pieces of information at a time [5]. This is important because the infographic contains a lot of information. In addition to this, the STM ⁶ “is very fragile and can be lost with distraction or passage of time”. This is also important because if someone is not fully focused on the infographic, then they will lose out on information which means they will only remember certain parts of the infographic. The infographic also promotes some mental modelling, with the graphics of the people doing the exercises, it encourages the user to imagine

themselves doing the exercises outlined in the infographic which in turn increases their attention to the content of the infographic

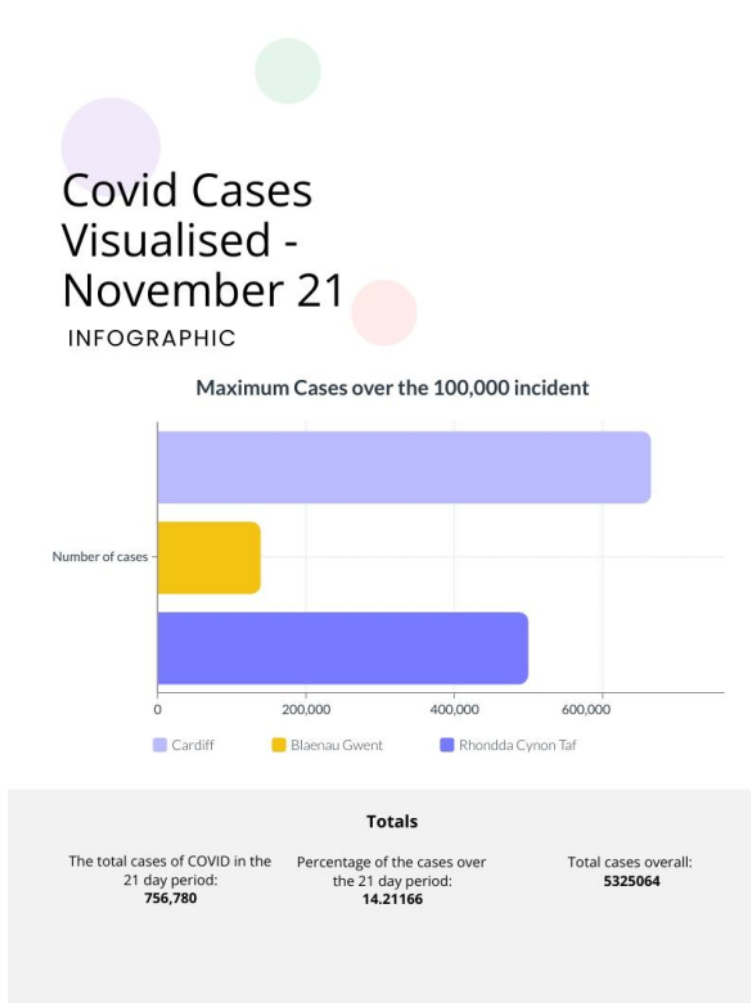
Improvements

An improvement that we could make to the infographic is by removing a few of the graphics to try and make the infographic look less cluttered to improve the readability. Another improvement that could be made is the bar graph could be made more recognisable as a graph. One way this could be done would be to change the colour of the graph or alternatively to make the size difference of the bars more noticeable. This could be a positive change as it would make the information vary more and therefore improve the cognition by giving the brain something different to look at and remember.

2. Covid Cases Data October 2021

The infographic

Using a shortened version of the data given in the spreadsheet, I have created an



infographic using an online creator.

Sean Garrington

Improvements

The infographic is very simple and does not provide a lot of information and can be improved upon to be more informative and useful for its purpose.

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