## #1. Lead author: Chrisanna Kate Cornish, Calling BS on "Target Boycott Crosses 1 Million Signers, Stock Sinks by \$1.5 Billion", Breitbart, 28 April 2016.

This article[1] makes a number of claims, two of which will be discussed herein. **1.** That more than 1 million people have signed the boycott, and this is a significant number of customers. **2.** Target has suffered from stock market losses because of this. We can consider these claims individually:

- 1. The first part may well be true, the petition is no longer available so this cannot be verified. However, we can perform a *Fermi estimation* as to the number of unique customers Target has and see if 1 million is significant. *i*. US population  $\approx 300,000,000[2]$ , *ii*. 80% US shoppers shop at Target [3], *iii*. Assume 80% of the US population is a shopper ( $\approx 10\%$  under 18[2], and assume another 10% never shop), *iv*. calculate 0.8\*0.8\*300,000,000=192,000,000 customers. This suggests that Target would lose  $\approx 0.5\%$  of its customer base if the 1 million signees never shopped there again, which is not significant.
- 2. To investigate the second claim, stock data from 2014-2018 was downloaded[4] and analysed. Figure 1 shows the plot of the daily closing stock figures for each of the five years. We can see the stock price does fall sharply following the announcement on 20th April. However this follows a period of relatively high prices, and a (smaller) drop around this time can also be seen in the two preceding years. The level quickly returns to how it had been at the start of the year, and it doesn't appear as if these ups and downs are particularly large or unusual over the five years charted. We can consider this a case of *multiple hypotheses*: there is no confirmed causality between Target's announcement and the drop in share prices (*correlation is not causation*), and other things (for example, normal variation) could also explain the drop. The boycott doesn't seem to have created long-term harm to Target's stock levels, even if they did so in the short term, as the stock prices remain roughly at the same general level for the five years.

A possible consequence of this misleading information is to hurt the Target brand, and to create an environment that is unwelcoming, if not outright dangerous to transgender individuals. It creates and maintains divisions between people, preventing education and meaningful discussions by encouraging polarisation. This is likely to cause society to become a less safe place for people who are already vulnerable. It also increases the risk to all people who don't present in a traditional manner, whether due to medical issues or choice.

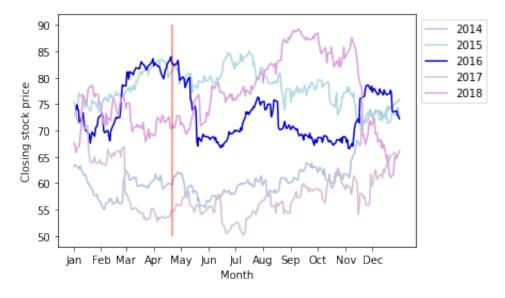


Figure 1: 2014-2018 daily closing stock figures for Target. The 20th April is highlighted in red.

## #2. Lead author: Chrisanna Kate Cornish, Calling BS on "Outcomes for UK-based applicants for nursing courses", Migration Watch UK, 4 March 2021.

This briefing paper[5] makes a number of claims, however this journal will focus on one: The majority of UK nursing student applicants are rejected.

The authors consider a period of ten years to prove their point that more UK nursing student applicants get rejected than accepted. Figure 2 shows their visualisation of this. From 2017 onwards more applicants were accepted than not. They have chosen a 10 year time span because it implies the number of acceptances have been constant for a long time - a form of *extrapolation bias* although this term would usually be used for the assumption that a trend will continue into the future, rather than what has already occurred. Data from 2007 to 2020[6] is shown in Figure 3. Different time-spans are used elsewhere in the paper, either earlier, or from 2016 onwards, it's not clear if this is the only data that was available, or a case of *confirmation bias*. The number of accepted students show a gentle rise over the ten years, with more student nurses shown to begin training as time goes on, whilst the number of rejected applicants falls from 2017, along with the number of applicants in general<sup>1</sup>.

They offer no explanation as to why nursing applicants are unsuccessful, for example, there is no breakdown of how many of the applicants failed to achieve the entry requirements, or chose to follow a different education/career path. In the UK, you can apply for up to five university places[7], but can only accept one. It is not clear if the statement takes this into account, as the dataset provides only values for applications and accepted, so there is no distinction between being rejected and the applicant not accepting a place. A part of their claim isn't false: there are less accepted applicants than not-accepted ones, however they cannot back up their claim that these not-accepted applicants were rejected. They have also chosen to present the data in a misleading way a form of *lying through visualisation*, and have also ignored the recent trend for more applicants to be accepted than not.

Some potential consequences might be to increase the level of discrimination that nurses from overseas receive whilst working in UK hospitals, decreasing their quality of life, and causing more nurses to leave the profession. Another might be that both foreign and UK potential applicants may be discouraged from applying, the former because they feel unwanted, and the latter because they feel other applicants will be preferred. One possible positive consequence might be to put pressure on the government and universities to open (and maybe fund) more course places for student nurses. However, we can estimate around a third<sup>2</sup> of nursing students do not end up registering as nurses, so a focus on retaining student nurses, rather than merely recruiting may also be a good idea, and a more cost-effective solution in the long run.

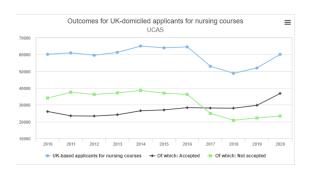


Figure 2: Outcomes - Migrant Watch UK

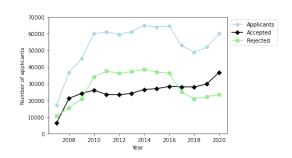


Figure 3: Outcomes - Outcomes - All years

which is suggested to be due to the removal of the student nurse bursary, which paid for the education prior to 2017

<sup>&</sup>lt;sup>2</sup>In 2022, 43, 417 nurses joined the NMC[8] for the first time, with approximately half coming from overseas, so we estimate around 21, 500 nurses from the UK were trained. It's a three year course, so the 30,000 September 2019 starters graduated in June 2022, suggesting approximately 27% dropped out.

## References

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