To what extent can "gender" impact school performance along with different factors?

Introduction

Attainment 8 has become the measure of a school's performance as it's based on a pupil's performance in the best eight subjects and it can give insight on a pupil's learning progress. According to Cambridge the Assessment, Students in single-sex boy's schools made significantly more progress than those in mixed schools. However, whilst the descriptive analysis showed that students in girl's schools made the most progress on average, there was no significant difference between girl's school students and mixed school students in the statistical model¹. As Figure 1 shows, the average attainment 8 score by gender, girl's schools scored better as compared to boy's schools and mixed schools.

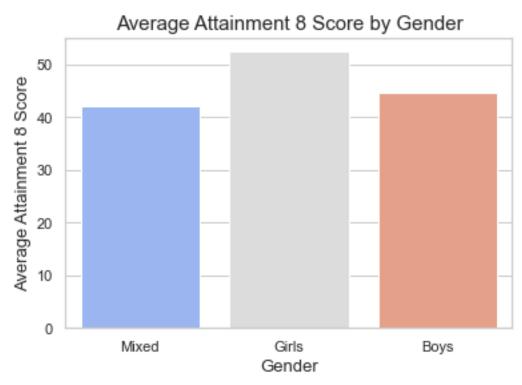


Figure 1 The average attainment 8 score by Gender

Aim

The aim of this report is to find out to what extent gender can impact school performance along with different factors.

This is an important question for several stakeholder groups such as local authorities to monitor the performance of the schools under their control, to plan for improvement and to allocate resources. The Department of Education (DfE) should be interested in keeping track of the performance of mixed and single-sex schools. The faculty of education in the university of Cambridge to improve the educational policy

¹ https://www.cambridgeassessment.org.uk/Images/514988-how-have-students-and-schools-performed-on-the-progress-8-performance-measure-.pdf

and practice in partnership in Schools. In fact, this can also be helpful for parents to make important decision for their children.

Required Data

This question can be answered using data on school ratings from the UK Government website². Data from this wide variety are gathered and used to produce an agreed national set of indicators of performance. This set of indicators has evolved over time, reflecting national priorities of the moment³. The data is to measure pupils' performance in terms of their attainment and progress in their school career.

The data is likely to be reliable for the most part and must surely be accurate enough to answer the proposed question as it is on UK Government website.

Data Analysis

Figure 2 illustrates the schools where in pupils (by gender) are eligible for free school meals (FSM) along with an illustration of the attainment 8 score. The average attainment 8 score and percentage of pupils eligible for FSM in mixed schools is 42 and 20.2% respectively. However, there's a difference in single-sex schools of boys and girls. In girl's schools, the attainment 8 score is higher, but the percentage of FSM is lower that is 52 and 15.1% respectively. While, in boy's schools, there's a positive relation in the attainment 8 score and FSM percentage that is 44 and 19.9% respectively.

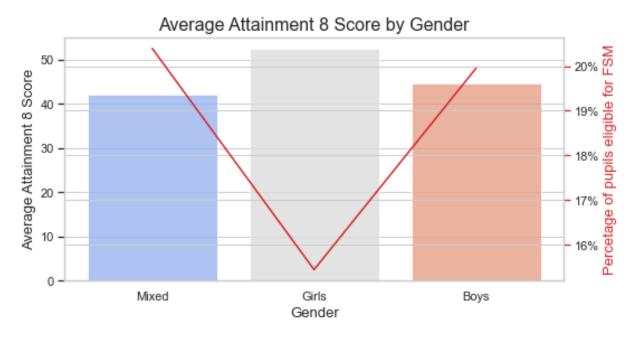


Figure 2 The Average attainment 8 score by gender and pupils eligible for free school meals in schools

Figure 3 shows the attainment 8 score by gender with the percentages of boys and girls in schools. In mixed schools, the average attainment 8 score is 42 with the percentages of boys and girls being 57.54% and 42.46% respectively. In girl's schools, the attainment 8 score is the highest that is 52 with 92.95% of girls while, in boy's schools, the attainment 8 score is 44 with 91.56% of boys.

 $^{{}^2\,\}underline{\text{https://www.compare-school-performance.service.gov.uk/schools-by-type?step=default\&table=schools\®ion=all-england\&for=secondary}$

³ https://www.cornwall.gov.uk/media/3626500/OFSTEDusingdata improvingschools.pdf

In addition, 7.05% of boys are in girl's schools, while, 8.44% girls are in boy's schools this is because there are exceptions under the Equality Act which allow single-sex schools to operate. The term "single-sex" includes schools which exceptionally admit pupils of the other sex or which admit a comparatively small number of pupils of the other sex and confine those pupils to classes or courses. For example, a girl's school will not lose its single-sex status by admitting a pupil who was born male but identifies as a girl⁴.

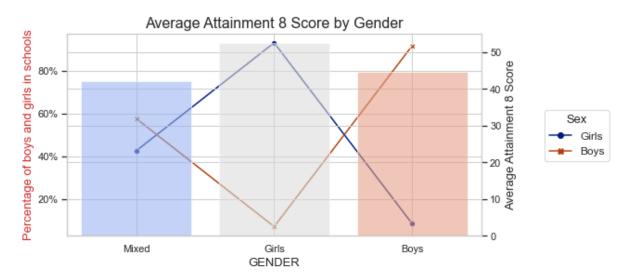


Figure 3 The Average attainment 8 score by gender and percentage of boys and girls in schools

Figure 4 shows the attainment 8 score by gender with percentages of the pupil's first language in school. There's a significant difference between pupil's whose first language is English, and whose first language is not English. In mixed schools, the percentage of pupil whose first language is English, not English and English is unclassified is 84.47%, 15.14% and 0.39% respectively with the attainment 8 score of 42.

Similarly, in single-sex schools there's also a significant difference. In girl's schools, the percentage of whose first language is English, not English and English is unclassified is 75.58%, 23.98% and 0.44% respectively with the attainment 8 score of 52. Whilst, in boy's schools, the percentage of pupil's whose first language is English, not English and English is unclassified is 82.44%, 17.06% and 0.5% respectively with the attainment 8 score of 44.

⁴ https://www.wrigleys.co.uk/news/education/single-sex-schools-boarding-and-transgender-pupils/



Figure 4 The Average attainment 8 score by gender and percentage of pupil's first language in schools

Children with special education needs (SEN) are of two types. The First, SEN Support: focusing on a cycle which requires the school to assess, plan, do and review, to ensure they understand the child's needs and the support needed to help them make good progress. Second, SEN ECHP: is a higher level of support than SEN Support for children with special educational needs, and not all children will be entitled to one⁵.

Figure 5 shows the average attainment 8 score by gender and the percentage of pupil's SEN status in schools. In mixed schools, the percentage of the pupils SEN EHCP and SEN support are 26.24% and 10.39% respectively where the attainment 8 score is 42.

However, in single-sex schools there's a significant difference in the girl's school, where the percentage of pupils SEN EHCP is 5.69% which is very low when compared to boy's schools where the percentage of pupils SEN EHCP is 25.39% which is similar to that of mixed schools. Although, in single-sex schools, the percentage of pupils SEN support is almost equal which is 8.19% and 8.62% respectively in girl's and boy's schools with an attainment 8 score of 52 and 44 respectively.

-

 $^{^{\}bf 5} \ \underline{\text{https://www.goodschoolsguide.co.uk/special-educational-needs/legal/sen-but-no-ehcp}\\$

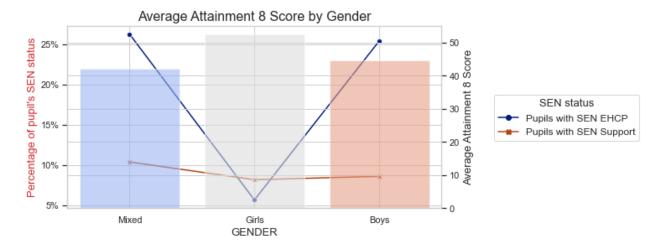


Figure 5 The Average attainment 8 score by gender and percentage of pupil's SEN status in schools

Conclusion

In this report, we have used the data of average attainment score to answer an important question regarding school performance based on multiple factors in relation to gender. In terms of gender and average attainment 8 scores, single-sex school scored higher as compared to mixed schools while, girls' schools made the most progress on average.

In terms of free school meals with the attainment 8 score in gender, more pupils were eligible for FSM in mixed schools as compared to single-sex schools. However, single-sex girl's schools scored better in the attainment 8 score although, pupil's eligible for FSM were low. Therefore, it's hard to say that attainment 8 score will be raised through free school meals.

In terms of percentage of boys and girls with attainment 8 score in gender, in girl's schools the attainment 8 score was higher so we can say that, as per the analysis, girls outperform boys in attainment 8 score. Based on this statement, we can say that mixed school's attainment 8 score would increase if the percentage of girls would be more than boys.

In terms of pupil's first language with attainment 8 score in gender, there's a positive relationship between the percentage of pupil's whose first language is not English with the attainment 8 score as we noticed in girl's schools. In girl's schools, attainment 8 score was higher because the percentage of pupil's whose first language is not English were more. We can consider that the pupil's whose first language is not English made more progress on average than pupil's whose first language is English.

In terms of the percentage of pupil's SEN status with attainment 8 in gender, there's a negative relation in single-sex, girl's schools where the attainment 8 score was high but, the percentage of pupil's with SEN EHCP were low. It means that girls with no SEN status had scored better in attainment 8. However, in boy's schools, percentage of pupil's with SEN EHCP were high like that of mixed schools and the percentage of boy's were also high in mixed schools. In other words, boy's with higher percentages of SEN status tend to have lower attainment 8 scores.

Further analysis and research can be required to find out what other factors impact school performance in relation to gender.