Grade 7 Promotion Gateway exercise Equalities Analysis

Final Outcome

1. Background

For DH, analysis was carried out to determine if an individual’s final outcome for the Grade 7 Promotion Gateway exercise is dependent on an individual’s characteristics. The rationale for the analysis is based on the premise that the outcome for individuals should not depend on/be influenced by one or more of the characteristics (be it a favourable or unfavourable outcome).

2. Methodology

Of the 58 individual’s that had passed the written test and reached the final stage, 1 withdrew, 37 received tickets and 20 were unsuccessful.

For those characteristics where analysis could be carried out, tests of association were employed, namely Chi Square contingency testing\(^1\) and Fisher’s Exact test\(^2\), due to the outcome variable and characteristic variables being categorical with relatively small sample sizes. Analysis focused on those receiving tickets or those who were unsuccessful, yet excluded the candidate who withdrew.

The following characteristics could not be analysed due to low sample sizes in the comparative groups:

- Ethnicity (54 white staff vs. 1 BME, 2 unknown)
- Disability (52 not disabled vs. 3 disabled, 2 unknown)
- Work Pattern (54 Full time vs. 2 Part time, 1 unknown)

3. Findings

A summary of the Chi Square analysis/Fisher's Exact test is shown below (for those characteristics that could be analysed):

<table>
<thead>
<tr>
<th>Equality Characteristics</th>
<th>Conclusion at 5% significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Final outcome is independent of sex</td>
</tr>
<tr>
<td>Age group</td>
<td>Final outcome is independent of age group</td>
</tr>
<tr>
<td>Location</td>
<td>Final outcome is independent of location</td>
</tr>
<tr>
<td>Caring Responsibility</td>
<td>Final outcome is independent of caring responsibility</td>
</tr>
<tr>
<td>Religion</td>
<td>Final outcome is independent of religion</td>
</tr>
</tbody>
</table>

\(^1\) Contingency testing is based on the difference between what we observe and what we expect. If what we observe is ‘too different’ then it is possible that a particular characteristic does influence the likelihood of being successful or not at a particular stage. 

\(^2\) Fisher’s Exact test is used for 2x2 tables when samples are low and when Chi Square testing may not be robust.
There were no statistically significant findings for those characteristics analysed.

4. Conclusion and caveats

- For those characteristics that could be analysed, there were no significant findings found, suggesting no adverse impact was present amongst these.
- Grade is no longer significant as it was at the Written test stage.
- With any statistical analysis, an increase in sample size would give greater robust results. In recruitment exercises such as this however, the sample size tends to decrease throughout the stages, particularly in the minority groups, rendering analysis of the results impossible (i.e. for the case of ethnicity, disability and work pattern).