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Equity or unfair advantage? Impact of access arrangements on students' performance

Conference Abstract

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Abstract

In many countries, the results of national assessments determine students' prospects (*e.g.,* school placement, access to higher education, employment). Performance on these assessments is, therefore, of vital importance for students, parents and educational institutions. However, some students face difficulties in demonstrating their knowledge/skills due, for example, to the assessment format or to administration procedures. To compensate for the difficulties that some students may experience, access arrangements can be introduced (JCQ, 2018).

Access arrangements are reasonable adjustments to allow students with specific needs (*e.g.*, special education needs, disabilities, temporary injuries) to access the assessment and remove unnecessary barriers without changing the demands of the assessment. The main aim of an access arrangement is, therefore, to meet the particular needs of an individual student without affecting the validity of the assessment. However, there has been some controversy around the practice of providing access arrangements, with some critics suggesting that they may provide an unfair advantage, rather than simply levelling the playing field (*e.g.*, Elliot & Marquart, 2004). If that were the case, the assessment results of the students with arrangements could be inflated, which would also have a detrimental effect on the validity of the assessment.

The majority of the available research on the impact of different types of access arrangements on students' performance comes from experimental designs and was conducted predominantly in the United States (*e.g.*, Gregg & Nelson, 2012; Morphy & Graham, 2012; Li, 2014; Perelmutter, McGregor & Gordon, 2017; Liu *et al.*, 2019). While these studies provide some evidence on whether or not access arrangements provide the intended assistance to students with disabilities or learning difficulties, it is difficult to extrapolate their results to high-stakes assessments, especially outside the United States.

The aim of this research was, therefore, to investigate whether granting access arrangements to students creates equity or confers an advantage using authentic assessment data. Using such data ensures that the students with access arrangements were actually in need of such arrangements and that the arrangements reflected their normal way of working. The data was provided by one international awarding body in the United Kingdom and included students at the end of secondary education who requested access arrangements in a high-stakes examination in the academic year 2016/17.

The focus of the research was on the most frequently used access arrangements. According to research published by Ofqual (2019), the most common access arrangements in the United Kingdom in the 2017/18 academic year were to allow candidates 25% extra time, a word processor (with spell check disabled), supervised rest breaks, reading assistance, and writing assistance.

In a first step, descriptive statistics were used to investigate the background characteristics of the students with and without access arrangements and the impact of each of the arrangements on performance. Subsequently, propensity score matching was carried out to examine the impact of the arrangements on performance taking into account the background of the students. To account for group differences that have the potential to affect students' performance, students with and without arrangements were matched on a number of characteristics such as gender, concurrent attainment, type of school attended and income-related deprivation. This strategy provides a general framework to identify causal effects rather than simple measures of association. Once matched, the performance of students with and without access arrangements was compared.

The results revealed that students with access arrangements performed similarly to students without arrangements. In particular, students received comparable grades regardless of whether or not they had any of the arrangements in place, suggesting that the arrangements supported the students in demonstrating their knowledge/skills and created equity between the groups. The grades obtained by students using word processors or writing assistance were, on average, almost equivalent to those of matched students; the grades of students with extra time and supervised rest breaks differed by a third of a grade; and the grades of students with reading assistance differed by less than two-thirds of a grade. None of these differences was statistically significant.

In conclusion, this research found no evidence that the access arrangements confer an unfair advantage to students with disabilities and learning difficulties. On the contrary, the results suggested that the arrangements fulfil their role in creating a level playing field for disadvantaged candidates.

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