There are differences of performance during in-person regular testing between students with and without disabilities

Title: Assessing whether regular in-person testing is inclusive for students with disabilities

Background:

- There are many benefits of regular testing (e.g., improved recall, increased performance and confidence)[1,2]
- However, how inclusive these tests are remains unanswered
- Playfoot et al., (2022) found no difference in online quiz performance between students with, and without additional learning needs[3]

Methods

Stage 1 (*N* = 435)
Analyse secondary data from teaching and disability records for Year 1, Year 2 and Year 3 students from academic year 2022/23

Exclusion Criteria:
- Anyone with alternative exam arrangements
- Withdrawn students
- Students repeating the year
- Students without a minimum of 2 MCQs

N= 417
Year 1-3 Research Methods students

Variables

Disability Status
As classified by the University Disability Services using the study support plans (SSPs).

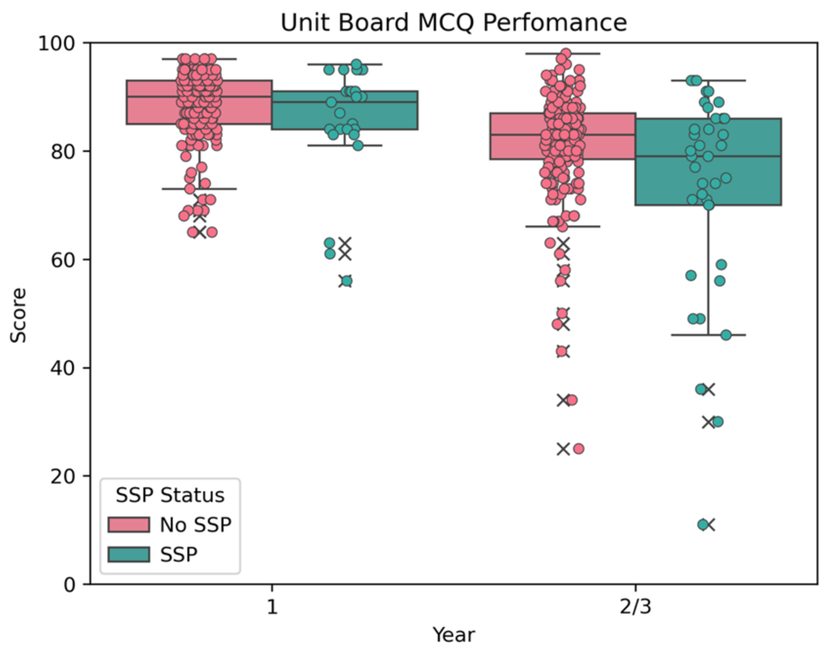
Unit Board Average
Average calculated using a proportion of the best scores, where 3 of the lowest MCQ scores were removed to account for absences or poor performance.

Weighted Average
Average calculated using students' available scores, extracting scores from the MCQs the students were able to attend.

Stage 1 Analysis
T-tests calculating differences in performance (using Unit Board Average & Weighted average) between students with and without a disclosed disability.

Stage 2
Embed historical data going back to 2018/19

Results

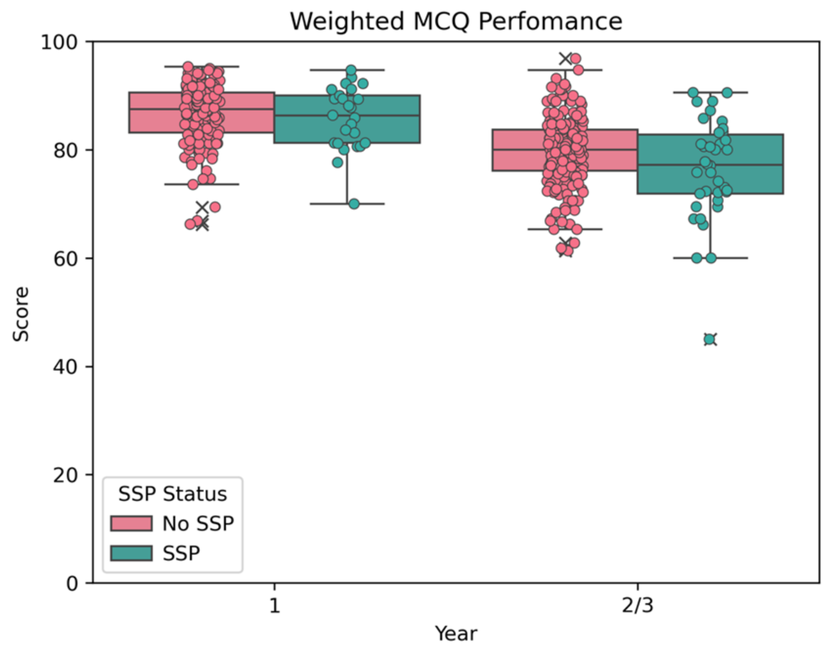


Unit Board Average

- Significantly lower for students with a disclosed disability (M= 77.86, SD = 17.4) compared to those without (M = 84.42, SD = 9.33); ***t*(415) = -4.398, *p* ≤.001, *d* = 0.47.**
  - Year 1 students: no statistically significant differences between students with a disclosed disability (M = 85.56, SD = 10.72) and those without (M = 88.30, SD = 6.95); *t*(178).= -1.682, *p* = .094, *d* = 0.3.
  - Year 2 &3 students: statistically significant differences between students with a disclosed disability (M = 72.78, SD = 19.11) and those without (M = 81.39, SD = 9.83); ***t*(235)= -4.126, *p* < .001, *d* = 0.57.**

Weighted Average

- Significantly lower for students with a disclosed disability (M= 80.07, SD = 9.42) compared to those without (M = 82.72, SD = 6.81); ***t*(415) = -2.661, *p* = .008, *d* = 0.24.**
  - Year 1 students: no statistically significant differences between students with a disclosed disability (M = 85.80, SD = 5.85) and those without (M = 86.53, SD = 5.44); ***t*(178).= -0.615, *p* = .528, *d* = 0.13.**
  - Year 2 & 3 students: statistically significant differences between students with a disclosed disability (M = 76.31, SD = 9.47) and those without (M = 79.75, SD = 6.28); ***t*(235)= -2.822, *p* =.005, *d* = 0.43 .**



References

1. Sotola, L. K., & Crede, M. (2021). Regarding Class Quizzes: A Meta-analytic Synthesis of Studies on the Relationship Between Frequent Low-Stakes Testing and Class Performance. *Educational Psychology Review*, *33*(2), 407–426. https://doi.org/10.1007/s10648-020-09563-9. **2.** Yang, C., Luo, L., Vadillo, M., Yu, R., & Shanks, D. (2021). Testing (quizzing) boosts classroom learning: A systematic and meta-analytic review. *Psychological Bulletin*, *147*. https://doi.org/10.1037/bul0000309. **3**. Playfoot, D., Wilkinson, L. L., & Mead, J. (2022). Is continuous assessment inclusive? An analysis of factors influencing student grades. *Assessment & Evaluation in Higher Education*, *0*(0), 1–13. https://doi.org/10.1080/02602938.2022.2150834

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