

A Short Project Presentation Including Research Ethics Dilemma

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Universities in Norway use applicants' grade point averages (GPA) as the sole admission criterion. The fairness of the GPA system, however, has been repeatedly called into question by studies overseas (He et al., 2018; Korobko et al., 2008). Since not all grades mean the same thing (Caulkins et al., 1996), subjects differ in their difficulties and lower GPAs could reflect *either* lower competency *or* candidates' decisions of taking subjects with more stringent grading standards. This study directly tests the inter-subject difficulties using Norway's GPA archival record in order to verify the existence of significant misalignment in difficulty parameters and proposes a statistical procedure for restoring cross-subject comparability.

For this study, students' GPA records will be extracted from the Norwegian registry covering the period between 2009 (the year "clean data" became available after the 2006 reform) and 2019 (the last "normal year" before COVID). GDPR registration is lodged through the NSD Portal and the UiO ethics approval is also obtained. All data import, storage, and analyses are to be conducted within the secured infrastructure TSD provided by the UiO Central IT Division. TSD logs all activities and no data or results can be copied out of the restricted system without prior approval from project leaders.

This project experiences the ethic dilemma concerning the re-identifiability of test subjects. Although immediate identifiers such as names, dates of birth and addresses have been recoded by the data provider *Statistisk sentralbyrå*, it is entirely feasible for researchers to narrow the database down to a manageable number of entries by applying filters such as "females, from private schools, have taken both physics and advanced mathematics for GPA, in the year 2019". Privacy and trust to public institutions may be undermined should researchers release analysis results to the public domain without further de-identification.

References

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