

Can Exams Be Shortened? Using a New Empirical Approach to Test in Finance Courses

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Abstract : Marking exams is universally detested by lecturers. Final exams in many higher education courses often last 3.0 hrs. Do exams really need to be so long? Can we justifiably reduce the number of questions on them? Surprisingly few have researched these questions, arguably because of the complexity and difficulty of using traditional methods. To answer these questions empirically, we used a new approach based on three key elements: Use of an unusual variation of a true experimental design, equivalence hypothesis testing, and an expanded set of six psychometric criteria to be met by any shortened exam if it is to replace a current 3.0-hr exam (reliability, validity, justifiability, number of exam questions, correspondence, and equivalence). We compared student performance on each official 3.0-hr exam with that on five shortened exams having proportionately fewer questions (2.5, 2.0, 1.5, 1.0, and 0.5 hours) in a series of four experiments conducted in two classes in each of two finance courses (224 students in total). We found strong evidence that, in these courses, shortening of final exams to 2.0 hrs was warranted on all six psychometric criteria. Shortening these exams by one hour should result in a substantial one-third reduction in lecturer time and effort spent marking, lower student stress, and more time for students to prepare for other exams. Our approach provides a relatively simple, easy-to-use methodology that lecturers can use to examine the effect of shortening their own exams.

Keywords : exam length, psychometric criteria, synthetic experimental designs, test length

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