

Paper Presentation
Assessment methods

PSYCHOMETRIC APPROACHES

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Development of edumetrical indices for the analysis of the spectral quality of higher education standardized tests

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The confidence degrees technique associated to the MCQ makes it possible to bypass the binary character of students assessment performance (the selected proposal is either correct, or incorrect) provided that a series of methodological rules are followed called admissible probability measurement procedures by Shufford & al. (1966). Usually, the confidence percentages which accompany the MCQ answers are used to deliver more subtler feedback on each student's spectral performances. The innovative aspect of our approach lies in the fact that we have exploited the confidence percentages provided by the students to provide spectral information on the quality of the questions (as opposed to information on the quality of students performances). Our research thus led to the development of a series of original indices for the analysis of assessments' spectral quality. These spectral indices are intended to be used when the assessor must highlight problematic MCQ and, within those, the proposals which contain anomalies.