Approaches to Learning of European University Students. A Psychometric Study of the Revised Two Factors Study Process Questionnaire (R-SPQ-2F)

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Contribution

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For the last two decades research in the field of university students’ approaches to learning has repeatedly used the Study Process Questionnaire- SPQ (Biggs, 1987) in a wide range of educational settings. As a result deep and surface approaches to learning emerged and remain as conceptual and empirically consolidated constructs in educational research. Richardson (2004) points out that scores on SPQ have showed reasonable stability over time, moderate convergent validity with other questionnaires, and reasonable levels of both discriminating power and criterion-related validity. Nevertheless, both the evidence on the internal consistency of its scales and the factorial validity have been variable.

After more than twenty years using the Study Process Questionnaire (SPQ) it seems necessary to update and improve the survey structure; that is why a reduced version of the SPQ (R-SPQ-2F) has been proposed (Biggs, Kember and Leung, 2001). Nowadays the R-SPQ-2F is widely used in many different countries (e.g. Baeten, Dochy and Struyven, 2008; Gijbels, de Watering, Dochy and den Bossche, 2005; Gijbels and Dochy, 2006; Justicia, Pichardo, Berbén and De la Fuente, 2008; Leung, Ginnns and Kember, 2008; Skogsberg and Clump, 2003).

However, the results obtained using the R-SPQ-2F does not merge well with those obtained using the SPQ, and so at the
present there is still limited evidence about the psychometric properties of the new instrument. Consequently additional evidence on the internal structure of the questionnaire is needed especially through survey applications to students following different academic disciplines and also developing a cross-cultural research so as to generalize the factorial validity of this new instrument.

In this context, this research aims to:

1. Adapt the R-SPQ-2F to the German, Spanish, French, Italian and Portuguese languages using a back-translation method under the supervision of John Biggs, the original author of the instrument.

2. Examine the internal structure of the R-SPQ-2F in different cultural and academic contexts and in samples of German, Spanish, French, English, Italian and Portuguese university students following different degrees.

The research plan is divided into two parts. The first one has already been completed producing different language versions of the R-SPQ-2F and examining its psychometric properties in a large and diverse Spanish sample. The second part is currently being developed to extend the empirical results of Spanish university students’ approaches to learning to a wider, international population (German, French, English, Italian and Portuguese students). The Association of Catholic Institutes of Education (ACISE), the sectorial group of education of the International Federation of Catholic Universities (IFCU), will support the empirical development of the project so that preliminary results of the second phase are expected shortly.

**Method**

Standardized cross-cultural research techniques were used to develop French, German, Italian, Portuguese and Spanish versions of the R-SPQ-2F. A well-established method to achieve this goal was used: forward-translations and back-translations (Hambleton, Merenda and Spielberger, 2005).

The Spanish sample was composed of 1749 undergraduate students enrolled in one private and two public universities. The sample included from first to fifth year students in the following degrees: Economics, Education, Law, Psychology and Nursing. All participants completed the Spanish version of the R-SPQ-2F. Participants also filled out some additional instruments and provided demographic data. Psychometric properties of the R-SPQ-2F were examined using confirmatory factor analysis and other correlation techniques. When conducting multi-lingual/multi-cultural research validity needs to be addressed and demonstrated instead of taking it for granted. In the second phase, the cross-cultural generalizability of the R-SPQ-2F will be tested using multiple group confirmatory factor analysis in five European nations (Stein, Lee and Jones, 2006).

**Expected Outcomes**

Research results include:

- The adaptation of the R-SPQ-2F to German, Spanish, French, Italian and Portuguese language versions following a rigorous methodological approach and under the supervision of its original author John Biggs.

- Increased evidence regarding the psychometric properties of the R-SPQ-2F in a large Spanish sample. As previous research has almost entirely focused on approaches to learning of students following Education and Psychology degrees, this study includes a wider sample of contexts and academic degrees and a transversal analysis on the evolution of approaches to learning through the career process (from first to fifth year). Both aspects are really important so as to generalize both the hypothetical internal structure of the scale and its validity and comparability for different study groups.

Expected research results for the second phase will be really important to future work relating to the learning and teaching process in the European university context. From a methodological perspective testing factorial invariance will be essential to compare these results on approaches to learning in university students from different countries.

**References**


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