

## **Development and validation of a questionnaire on perception of portfolio by undergraduatemedical students**

Riquelme, Arnoldo; Méndez, Benjamín; de la Fuente, Paloma; Padilla, Oslando; Benaglio, Carla; Sirhan, Marisol; Labarca, Jaime

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### **Resumen**

Background: Portfolio is an innovative instrument that promotes reflection, creativity and professionalism among students. Aim: To describe the development and validation process of a questionnaire to evaluate the use of portfolio in undergraduate medical students. Material and Methods: Focus groups with students and teachers were employed to identify aspects related with portfolio in undergraduate teaching. The Delphi technique was used to prioritize relevant aspects and construct the questionnaire. The validated questionnaire, consisting in 43 items and 6 factors, was applied to 97 students (response rate of 99.9%) in 2007 and 100 students (99.2%) in 2008. Each question had to be answered using a Likert scale, from 0 (completely disagree) to 4 (completely agree) The validity and reliability of the questionnaire was evaluated. Results: The questionnaire showed a high reliability (Cronbach alpha = 0.9). The mean total scores obtained in 2007 and 2008 were 106.2 +/- 21.2 (61.7% of the maximal obtainable score) and 104.6 +/- 34.0 (60.8% of the maximal obtainable score), respectively. No significant differences were seen in the analysis by factors. Changes in portfolio during 2008 showed differences in items related with organization, evaluation and regulation. Conclusions: The questionnaire is a valid and highly reliable instrument, measuring perceptions about the portfolio by undergraduate medical students. The students perceived an improvement in their creativity and professionalism as one of the strengths of portfolio. The weaknesses identified during the implementation process helped us to focus changes in organization and evaluation to improve the portfolio as a dynamic process. (Rev Med Chile 2011; 139: 45-53).

### **Palabras clave**

**Palabras clave de autor:** Portfolios; Psychometrics; Students; Medical; Teaching

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