The balance between cognitive and non-cognitive aspects of students' well-being: a quantitative analysis

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The objective of this work is to determine which students' characteristics (of the 8th grade Spanish students) allow them finding a balance among different dimensions of well-being. Firstly, in order to measure the students' well-being, we built four synthetic indexes related to anxiety, motivation, belonging to the educational centre and bullying. Then, different models are estimated using as explained variables those indexes and condition on students' sociodemographic characteristics, use of ICTs, hours of study and a proxy for maturity. Based upon the estimated parameters a multiobjective problem is defined; the problem is solved with multiobjective programing using an achievement scalarazing function. The results allow to characterize the profile of those students who achieve an optimal balance among the different aspects of well-being evaluated, which may be used to design educational policies aimed at improving simultaneously cognitive and non-cognitive measures of students performance.