

Academic Self-Efficacy and Academic Achievement: How Do They Relate Throughout Portuguese Secondary School?

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Abstract. The Reciprocal Effects Model was developed by Marsh, Byrne, and Yeung (1999), and asserts the existence of reciprocal relationships between self-concept and academic performance. In this study we resumed this model and applied it to another motivational construct - academic self-efficacy (ASE). ASE is defined as one's expectations regarding school achievement and includes three dimensions: Portuguese self-efficacy, Mathematics self-efficacy and general school self-efficacy.

In this context, we sought to examine the relationship between ASE dimensions and academic achievement throughout Portuguese secondary school, through a three-wave longitudinal design (10th, 11th and 12th grades). Two specific goals oriented this research: (a) analyze the impact of ASE dimensions on Portuguese and Mathematics achievement throughout high school years; and (b) analyze the impact of previous achievement on the ASE dimensions of the following academic year. In each year we administered the Academic Self-Efficacy Scale to 433 students from different socio-economic levels and academic courses. Within this sample 52.8% were females and, in the first wave, were aged between 14 and 18 years ($M=15.3$; $SD=.63$).

Through path analysis modeling (AMOS software), there were analyzed two models, one for each achievement domain: Portuguese and Mathematics. Overall, the results evidenced positive reciprocal relationships: ASE dimensions influenced achievement (β between 0.17 and 0.35) and the achievement in one year influenced ASE dimensions in the following year (β between 0.12 and 0.31). Generally, the closer was the variables' (ASE and achievement) academic domain (i.e. Mathematics self-efficacy and Mathematics achievement) the higher were the β magnitudes.