

levels of self-confidence. Using Eccles et al.'s model as a framework, this paper will investigate the predictive effects of gender and value, as measured via the Students' Positive Affect and Students' Valuing scales, on Australian Year 8 students' mathematics and science achievement in the 2007 Trends in International Mathematics and Science Study (TIMSS). In particular, the simultaneous contributions of gender and value will be examined. This paper will employ multiple regression analysis to investigate whether the pattern of relationships between self-confidence and gender and mathematics and science achievement, found by Thomson et al. (2008), are also maintained for the Students' Positive Affect and Students' Valuing scales. It is hoped a better understanding of the interplay between gender, motivation and achievement will inform the design of interventions to engage students' and facilitate better learning outcomes.

Keywords: values, gender differences, academic self-confidence, student achievement

The trajectories of intrinsic and extrinsic motivation along primary school: Differences depending on academic achievement

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Motivation is a determinant factor of academic achievement. However, it is known that motivation decreases along schooling. The study presented in this poster is a longitudinal study with four moments of data collection. Participants were 217 students from elementary school (3rd grade at Time1). The main goal was to understand the relations between academic achievement and motivation along two school years. The authors were particularly interested in tracing the intrinsic and extrinsic motivation trajectories depending on previous academic achievement: *low achievers*, *average achievers*, and *high achievers*. Data were analyzed using HLM6. The study revealed a significant and progressive decrease of both intrinsic motivation (IM) and extrinsic motivation (EM) along 3rd and 4th grades. Moreover, students with different levels of academic achievement showed different trajectories of motivation: *whereas low achievers, average achievers, and high achievers* did not differentiate in the baseline on EM, *low achievers* and *high achievers* showed significantly different EM trajectories. Concerning IM, *low achievers* and *high achievers* differentiated at the baseline, but showed similar IM evolution. The study suggested that changes at this school grades concern mainly in the EM decreasing.

Keywords: trajectories, academic competence, intrinsic motivation, extrinsic motivation

The Evolution and Role of School Engagement along Basic School

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Within educational contexts motivation acquires a great importance and significance through its powerful influence in the learning process and children's development, affecting specially their engagement or disaffection on the teaching/learning process. Therefore an actual motivational outcome is the engagement or lack of interest in learning activities of children in the classroom. Engagement versus disaffection is defined in this study as the intensity and quality of children's involvement in initiating and carrying out learning activities.

Engagement also emerges as an important predictor of academic achievement and as a behavioral indicator of motivation. However, research has shown that students' intrinsic motivation and engagement decreases along schooling and that they progressively alienate themselves from learning (e.g., Harter, 1981; Skinner & Belmont, 1993).

This study is integrated in a broader longitudinal research project, and its main goal is to chart the development of students' behavioral and emotional engagement over basic education. It also seeks to examine the relations between engagement and school achievement, and the evolution of these relations. The sample was formed by 245 students, followed from the 4th to 9th grade, along four repeated observations of the same subjects: in the 4th grade (1st cycle), in the 5th/6th grade (2nd cycle), in the 7th grade, and in the 9th grade (3rd cycle), in two schools of the north of Portugal. The results indicated a progressive decrease of engagement over basic education, revealing significant differences between the first, and third and fourth observation moments. Moreover, results confirmed significant relations between academic achievement and engagement at all grade levels, but especially stronger at the 3rd cycle. These findings have important educational implications by suggesting that, whereas engagement decreases along basic school years, its association with academic achievement gets stronger.

Keywords: students' engagement, longitudinal study, academic achievement