Deep learning and subject vitality: Predictions from the Self Determination Theory

Juan L. Núñez; Jaime León; Celia Fernández y Fernando Grijalvo

University of Las Palmas de Gran Canaria

## Abstract

Does intrinsic motivation predicts deep learning and subject vitality in University students? Self-determination macro-theory has been established as a theoretical framework to explain optimal functioning. Within this theory it has been posit that socials factors influence by nurturing versus thwarting people's autonomy. In the educational context, a critical social factor is the teacher's or lecturer's autonomy support, which influences the students' autonomy, and this, in turn, has an effect on the students' intrinsic motivation. As well, more intrinsic motivated students have positive emotional, cognitive and behavioral consequences.

Students use different strategies for learning new content, sometimes more superficial methods, such as repeating the material over and over again, while at other times they try to understand the material, making a deeper learning. These learning strategies depend on several social factors, including the classroom context.

The aim of this study was to test a structural equation model in which the lecturer's autonomy support predicts student's autonomy, this has an effect on intrinsic motivation, which predicts students' deep learning and subject vitality. A total of 276 students (29 men, 241 women and six unknown) took part in this study. The fit indices were adequate, and supported the relationships proposed in the model. The proportion of variance explained of deep learning and subject vitality was 22% and 17%, respectively.

In conclusion, if a teacher support students' autonomy, that is, accepts their students' decisions and negative feelings as well as offers choices, will nurture students' autonomy, which in turn, would make them study by more intrinsic motives. In addition, if students are intrinsic motivated, will try to learn by processing and understanding information instead of just memorizing it, and will feel more energetic and vital.

*Keywords*: Autonomy support; Deep learning; Intrinsic motivation; Self-determination; Structural equation modeling; Vitality.