

# Relationships between Autonomy Support, Autonomy, and Deep Learning

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**1. Introduction** – The self-determination theory (SDT) is a macro-theory of human motivation that establishes that the social factors such as the autonomy support satisfies the basic psychological need of autonomy. This, in turn, leads to an increase in individuals' intrinsic motivation and psychological well-being. In classrooms where the teacher supports students' autonomy, there have been reports of improved academic performance [1], and increased school engagement [2]. Furthermore, the use of deep learning strategies fosters stronger memory of the subject matter and better academic grades. The aim of this study was to test a theoretical model that would explain deep learning within academic setting. The model hypothesized the influence of the autonomy support climate on the basic psychological need of autonomy, and, in consequence, on deep learning. Participants were 276 undergraduate students of the University de Las Palmas de Gran Canaria, 241 female and 29 male (6 missing values), with an average age of 21.80 years ( $SD = 2.93$ ).

**2. Results and Discussion** - Structural equation modelling showed that autonomy support climate positively predicted the students' autonomy, and, this in turn, positively predicted the students' deep learning. The model showed adequate fit indexes: CFI = .91; IFI = .91, and SRMR = .06. All parameters were significant ( $p < .01$ ). In addition, the model explained 51 % of the variance of the dependent variable (i.e. deep learning). Results confirmed the tenets of SDT, because autonomy support is a determinant of autonomy. Furthermore, both the autonomy support and the basic psychological need for autonomy determine the deep learning of the students.

**3. Conclusions** – Results of this research emphasize the importance of the environmental factors. In this sense, the teacher should promote a climate of autonomy support based on providing meaningful rationales, acknowledge negative feelings, using non-controlling language, offering choices, and nurturing inner motivational resources. Moreover, teachers should not use overly extrinsic incentives and pressuring language in order to satisfy the basic psychological needs of student.

## 4. References

[1] C. Flink, A. K. Boggiano, & M. Barrett, *Journal of Personality and Social Psychology*, **26**, (1990) p. 5.

[2] A. Assor, H. Kaplan, & G. Roth, *British Journal of Educational Psychology*, **72**, (2002) p. 261.