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SELF-REGULATION IN LEARNING: APPLICATIONS IN THE ACADEMIC ENVIRONMENT

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ABSTRACT

The present study aims to verify the existence of correlations between autonomic regulation and controlled regulation, autonomous regulation and postintentional regulation, but also between controlled regulation and postintentional self-regulation. To achieve the aim of the present study, two questionnaires were used. 144 academic subjects (students) aged 20 and 21 participated in the study. The results of the study demonstrate that there are significant direct linear relationships between the three aspects.

KEYWORDS: learning, learning autonomy, emotional self-regulation, motivation, students

1. Introduction

Self-regulated learning is a key concept in educational psychology due to the influence it has on learning performance and adaptation to school requirements.

According to what Negovan (2010) said, Bandura (1997) argued that self-regulation not only ensures success in formal training, but also promotes lifelong learning, learning in which he mobilizes his personal resources to acquire new knowledge, to cultivate all his skills, in the view of self-respect or to live better.

Self-regulated learning refers to one's ability to under- stand and control one's learning environment. Self- regulation abilities include goal setting, self-monitoring, self-instruction, and self-reinforcement (Harris & Graham, 1999).

Autonomy is a concept that many researchers have studied and tried to define. Thus, Benson (2007) states that autonomy is the capacity for detachment from the environment, critical reflection, decision-making and independent action. It also assumes that the student will develop a certain kind of psychological relationship to the learning process and content. The ability to be autonomously displayed, both in the way the student learns and in the way he or she transfers what has been learned to wider contexts.

Researchers, however, broadly agree that autonomy involves skills and capabilities, which are both overt behavioral and psychological traits. One of the problems in defining autonomy, concisely, is represented by the large number of skills and capacities that it encompasses.

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Self-regulatory, autonomous learning as a concept stems from motivational theories of learning (Skinner and Belmont, 1993). Learning styles, metacognition and theories relating to the self are also influential in autonomous learning. Azevedo (2009) argues that learning utilizes numerous self-regulatory processes. He talks of planning knowledge activation, metacognitive monitoring, regulation and reflection. Schunk and Zimmerman (1997) directly linked motivation to the concept of self-regulation. Self-regulated learners are intrinsically motivated and autonomous individuals who are proactive in pursuing their own goals for their learning and who take control of the process of their learning.

On the other hand, post-intentional self-regulation appears when individuals are in front of the set goal and face difficulties in maintaining their action. In such a situation, it is necessary to focus on the task and maintain a favorable emotional balance. Thus, attention regulation and emotion regulation are reflected in the items of this scale. In affective self-regulation, as Bandura (1997) discovered, according to Negovan (2010), an important role is played by self-efficacy. The author distinguishes three ways through which trust (efficacy beliefs) affects the nature and intensity of emotional experience by controlling thinking, action and affectivity. This questionnaire includes ten items.

2. Methodology of Research

2.1. Material and Methods

Two questionnaires were used for this study. The SRQ-L questionnaire (Brown, Miller, & Lawendowski, 1999) was used to measure controlled regulation and autonomous regulation. This questionnaire refers to the reasons why people learn. It consisted of two scales: Controlled Regulation and Autonomous Regulation. Thus, the responses that are provided are either controlled (eg, external control or introjection) or autonomous (autonomous regulation or intrinsic motivation). The SRQ-L comprises ten items. The response to the items is predetermined, being expressed on a Likert scale from 1 = never to 5 = often. The questionnaire was applied, in the present research, to a group of 144 girls aged 20 and 21. After calculating internal consistency, a Cronbach alpha coefficient of 0.70 was obtained for the autonomous regulation scale and 0.73 for the controlled regulation scale. To measure post-intentional self-regulation, the questionnaire of Ralf Schmitz uet al. from 1999 was used. The answer to the items is predetermined, being expressed on a Likert scale from 1= never to 5 = often. The questionnaire was applied, in the present research, to a group of 144 girls aged 20 and 21. After calculating the internal consistency, a Cronbach alpha coefficient equal to 0.77 was obtained.

2.2. Objectives

O1. Exploring the relationship between autonomous regulation and postintentional self-regulation in learning.

O2. Exploring the relationship between autonomous regulation and controlled regulation in learning.

O3. Exploring the relationship between postintentional self-regulation and controlled regulation in learning.

2.3. Hypothesis

I1. There is a positive linear relationship between postintentional self-regulation and controlled regulation in learning.

I2. There is a positive linear relationship between autonomous regulation and postintentional self-regulation in learning.

I3. There is a positive linear relationship between autonomous regulation and controlled regulation in learning.

2.4. Sample

144 second-year female students took part in the study, in the field of Educational Sciences. Of these participants, 76 are 20 years old and 78 of the participants are 21 years old. The mean of the ages is M= 20.26 and the standard deviation SD=2.51.

3. Results

Analyzing the correlations established between the different aspects of external regulation and self-regulation in learning in female students, significant direct linear relationships were discovered (Table no.1).

Table no.1

Correlation matrix

	1	2	3
1. Self-regulation	-		
2. Controlled regulation	0.597(*)	-	
3. Autonomous regulation	0.482(**)	0.666(**)	-

* p= 0.05

** p= 0.01

Thus, it is observed that there is a significant positive linear relationship between autonomous regulation and postintentional self-regulation in learning (r =0.48, p=0.0001, p <0.01). The effect size is large r2= 0.2. So, the better the person regulates his emotions and attention to learning tasks, the more he will make progress in acquiring as much information as possible, but also in using it in contexts different from the contexts in which they were learned (skills which correspond to autonomous regulation in learning).

Autonomous regulation and controlled regulation are components of self-regulation in learning. In this case, the linear relationship is statistically significant between the two variables (r =0.66, p=0.0001, p <0.01). The only difference between these variables is the outside pressure. Thus, the stronger a person will feel the pressure from the outside, the more he will be involved in the process of assimilating information. At the same time, the more praise he gets from the teacher, the more the person will focus all his resources towards achieving the goals. It is possible for a pupil/student to study for a competition because he likes the subject, but also because he is offered a prize. So we can talk about both intrinsic and extrinsic motivation of the pupil/student in the same learning context.

Controlled regulation, according to the results in the table mentioned above, correlates significantly positively with postintentional self-regulation (r =0.59, p=0.020, p <0.05). Individuals who are intrinsically motivated to take action to achieve academic goals can sometimes be swayed by immediate rewards. All these conclusions regarding the confirmation of the research hypotheses are also supported by the Graphs below in which the orientation of the points from the lower left to the upper right can be observed, which highlights the existence of positive associations between the research variables.

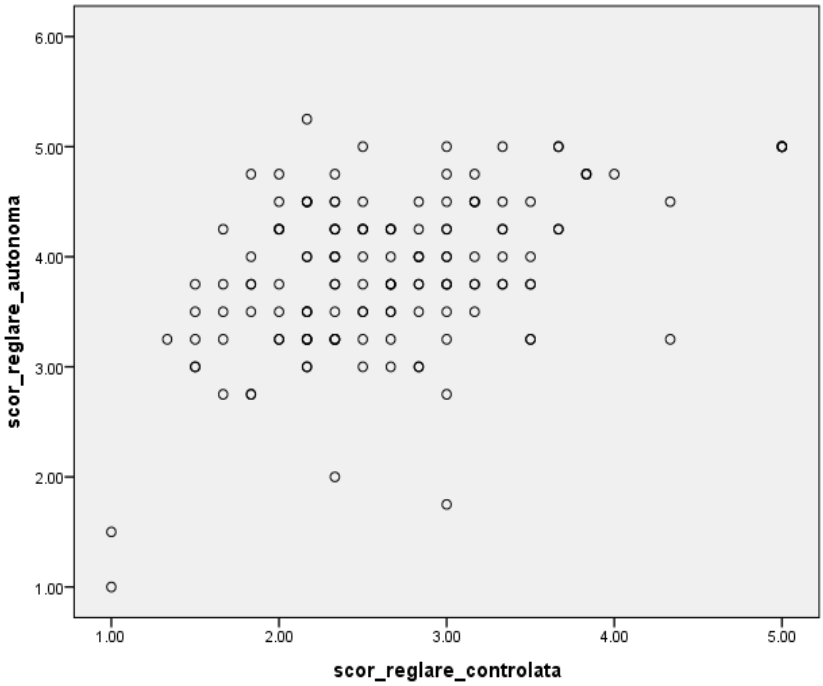


Figure no. 1: *Correlation between controlled regulation and autonomous regulation*

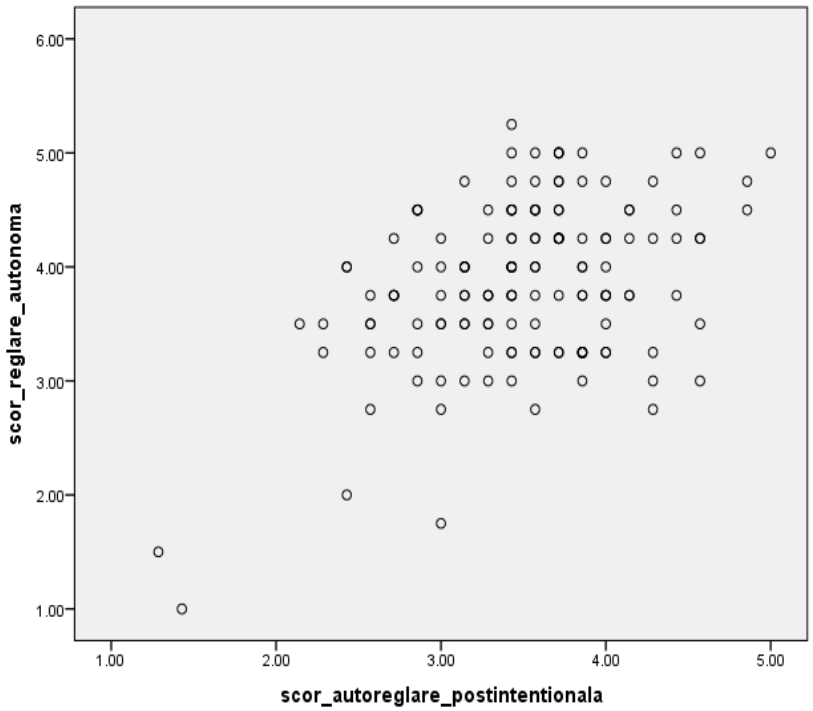


Figure no. 2: *Correlation between autonomic regulation and postintentional self-regulation*

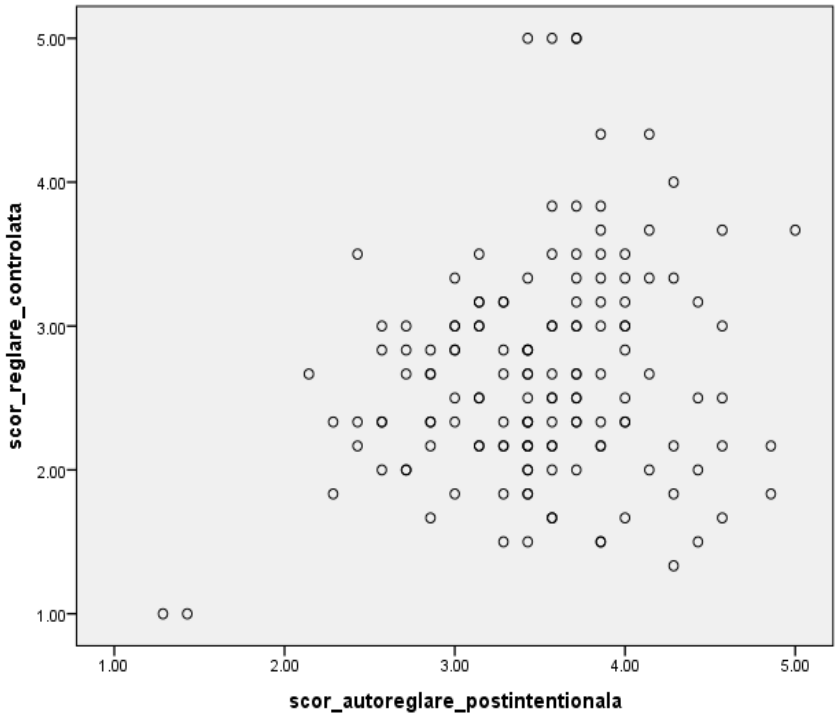


Figure no. 3: *Correlation between controlled regulation and postintentional self-regulation*

4. Conclusions

By analyzing the correlations, the following can be concluded: there are statistically significant positive linear relationships between the different aspects of external regulation and self-regulation in learning. Thus, it can be stated that there is a significant positive association between autonomous regulation and postintentional self-regulation in learning. So, the better the person regulates his emotions and attention to learning tasks, the more he will make progress in acquiring as much information as possible, but also in using it in contexts different from the contexts in which they were learned (skills which correspond to autonomous regulation in learning) (Kvetenska & Myska, 2017; Lincă et al., 2022).

On the other hand, there is a statistically significant positive relationship between autonomous regulation and proactive attitude in learning. So, it can be said that girls who know their resources can find solutions to various problems related to the learning process. The more autonomous a person is, the more he can develop a proactive attitude in the learning process. Autonomous regulation and controlled regulation are components of self-regulation in learning. In this case, the correlation is statistically significant between the two variables. The only difference between these variables is the outside pressure. Thus, the stronger a person will feel the pressure from the outside, the more he will be involved in the process of assimilating information. At the same time, the more praise he gets from the teacher, the more the person will focus all his resources towards achieving the objectives (Lincă, 2016; Lincă, 2018; Lincă, 2019a; Lincă, 2019b).

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