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PREDICTORS OF STUDENTS' ACADEMIC SUCCESS

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Abstract

If one regards school learning as a dynamic, continually evolving process, one should further understand that the success of this process is not exclusively conditioned by cognitive and motivational factors. Certain socio-cultural variables, the quality of the educational environment and that of the informational resources, the learning type or emotional intelligence also have significant influence. Moreover, the research conducted in this field underline the explicit connection between academic performance and the external factors of learning. The literature, our own investigations, and also practical experience make up a reference point in emphasising the correlation between academic performance and non-cognitive, external factors. Taking this correlation as a starting point, the aim of this paper is that of underlining the factors that may determine academic performance and the students' cognitive resources. It is important that teachers and decision-makers become aware of the importance of these factors, as it further requires a coherent and objective analysis of the educational politics and practices, emphasis being laid on the quality of the learning experiences provided. The external determiners of learning indicate the fact that the learning process is influenced by variables which we sometimes tend to disregard. As a matter of fact, not only do these factors manifest contextually, but they also affect the students' outcomes.

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Keywords: Academic success; performance; learning; non-cognitive factors; cognitive factors.

1. Introduction

An objective analysis of the Romanian education underlines the many efforts of increasing its quality at all levels, from preschool to university. The decision-makers are preoccupied with reformulating the educational policies and also with establishing a number of criteria in what



accomplishing a certain quality level of education is concerned. The theorists of the educational field are set on identifying and promoting a learning paradigm that would realistically satisfy the student's need of knowledge and that would capitalize on his/her intellectual potential. Psychologists are interested in understanding the mechanisms which influence the learning process and which justify the success or failure of the said process. The teachers revise their teaching strategies and project learning experiences which actively involve the student in the learning process. Regardless of the perspective of the analysis of the educational process, a tendency of redefining the quality of instruction is noticeable.

Under normal circumstances, a qualitative educational process should produce qualitative graduates with competences in various fields. As it is a complex process, in many cases, outputs are determined by the quality of the inputs, as well as by that of the process per se. In Romania, the concerns with turning the educational process more effective are nothing new. The decision-makers have constantly attempted at identifying some criteria meant to determine the increase in the quality of the teaching act and school performance, which are also supposed to constitute an objective measurement tool for performance, for teachers and students alike. This aspect entails the identification of the type of skills and competences specific to each academic field, being strongly influenced by the evolution of the educational politics at a given moment. Taking this aspects as starting point, our paper aims at explaining the relation between academic success and the internal and contextual factors which determine it.

2. An Attempt at Explaining Academic Success

Regarded globally, academic success seems to be a concept which encapsulates all the facets and means of explaining success. Nevertheless, this concept is rather insufficiently defined and difficult of objectivise. We have become accustomed to associate success with performance, with the competence validated by external evaluators. At the educational level, academic success concerns both students and professors. The assessment of academic success or failing depends on the assessor, on his or her grid of analysis and interpretation. For example, for teachers, successful students are those who constantly involve in teaching activities and who get good grades and merit scholarships, as an acknowledgement of their effort. In their opinion, a successful teacher is one that is exigent. For students, the successful teacher is that who combines exigency with patience, great expectations with his/her explaining efforts and identification of diverse knowledge experiences. Also, during their academic studies, students tend to evaluate their own academic success based exclusively on their grades.

Experience shows that this is a relative, oftentimes unrealistic approach. Analysing a student's success judging only by his/her ability of adequately responding to academic requirements is a reductive approach. In truth, academic success must be validated by success at the social level. In many cases, successful students are unable to prove their competences on a social plane. In our opinion, academic success is by no means a sure predictor of social success. School and Society operates with different grids of understanding success. It is inferred, then, that one person's intellect and aptitudes are insufficient for determining the social success. There are different requirements, which deems obvious the fact that the individual is required different skills and attitudes. In our opinion, academic success is a theoretical construct which aims the relationship between expectations and needs of student development and validation provided by the school, the school satisfaction felt at the level of personality.

York et al. (2015) consider that academic success is ambiguously defined and targets different constituents. What can be a success indicator for some, it may well represent not so much for others. York attempts to define academic success and operationalize it at the educational level. Thus, he proposes a conceptual model of academic success which incorporates: academic outcomes, satisfaction, acquisition of skills and competences, consequence, accomplishing learning objectives, career success/ performance.

Creţu C. (1997, p. 54) analyses the issue of success from a holistic perspective, advancing the 'global success' concept. In her opinion, global success means 'a reflection of personal accomplishment, of the ontological heights at the individual/ human scale, of what the individual as hyper-complex and unique entity has most valuable at a given time on his ontogenetic path'. The author considers that global success is:

- multiply determined (by hereditary, socio-cultural, educational, axiological variables);
- multidimensional;
- multilevel;
- individualized (what gives uniqueness to one person);
- multifunctional (both globally and sequentially).

In her analysis of global success, C. Crețu considers a requisite to correlate the cognitive performance, the specific skills and the attitudinal dominant.

The objective analysis of academic success may be reflected in projecting an instructive, individualised and customised undertaking, in agreement with the student's aspiration, potential and needs for development. Academic success is not a given and cannot be taught either. It is built according to a number of social and individual variables, and the assessment of this success must be acquired by employing complex grids which incorporate all the success-determining factors.

3. Some Factors Which Explain Academic Success

It may be a difficult task to establish the exact determiners of academic success, as the latter is, according to most researchers, an ambiguously defined concept. However, if one accepts the idea of analysing academic success based on performance, one can identify a number of factors which either internally or externally condition its accomplishment. For example, Russell (2016) underlines the fact that academic success is distinctly defined by students and parents, teachers and school administrators. Studies are important, but some factors add to them as possible predictors of success: creativity, character, individuality, (self)-esteem, interrelation. In a study which aims at determining to what extent do cognitive skills and non-cognitive aptitudes predict the students' success, Russell draws the conclusion that both cognitive and non-cognitive factors may be success predictors. Conscientiousness and emotional intelligence are the most relevant success predictors of all the non-cognitive factors.

In what the emotional intelligence is concerned, the research undergone by Rode et al. (as cited in Roy et al., 2013) underlines two reason why emotional intelligence affects academic performance: the ambiguity of the 'academic performance' concept and the self-driven character of academic activity. This latter reason is why people with a higher level of academic intelligence have better performance. Also, Roy et al. (2013) claim that a high level of emotional intelligence helps in maintaining harmony, as the person is more confident in approaching life and learning challenges encountered in the education

institutions. Despite their high IQ, many students do not raise up to their innate potential. Conversely, mediocre students – according to their grades – manage to complete their academic studies. The level of emotional intelligence practically influences the motivation level.

Academic success can only be analysed in direct relation to the learning process. In our opinion, learning should not be construed as a process of memorizing sterile information in view of faithfully reproducing it during exams. As Danili and Reid (2006) rightfully note, students can be successful in evaluations without necessarily understanding what they learnt. Therefore, the authors claim, the evaluation must focus on aspects which involve thinking and problem-solving abilities. In a study conducted on a sample of 16 students over 18 years old, Finkelstein and Thom (2014) tried to point out the extent to which the non-cognitive factors influence academic performance. The two researchers included the following in the non-cognitive factors category: personal factors (the relationship with the parents, parental literacy), affective factors (attitude towards learning, willingness to put in extra efforts, willingness to seek help), qualification-related factors (creativity, practical skills) and the previous educational experience. The results of the research establish four categories of students: cognitively and non-cognitively prepared; cognitively prepared, but non-cognitively unprepared; cognitively unprepared – non-cognitively prepared; and cognitively and non-cognitively unprepared. As a rule, from the personal factors perspective, the students appraise the teachers' involvement in obtaining success and complain about the low personal or parental involvement due to family issues. At the affective level, self-esteem, perseverance and the self-control ability influence academic performance. Also, the activities which arouse curiosity and require creativity on the part of the students may facilitate academic performance, especially in the case of students lowly prepared from a cognitive point of view. In what the previous academic experience is concerned, should it be positive, then it may be a predictor of the subsequent academic performance.

Analysing the cognitive-non-cognitive relation, Brunello and Schlotter (2011) define the noncognitive abilities as personality factors weakly correlated with the indicators of academic intelligence (IQ). The authors emphasise the fact that motivation and conscientiousness influence the results of the IQ tests. They claim that perseverant, disciplined and motivated individuals tend to score higher in what concerns the academic results. Professors also play an important role, but their influence depends on their qualification level.

An interesting approach can be found in the research undertaken by Van den Bossche et al. (2006) regarding team-learning and its effects on performance. In this case, reference is made to the sociocognitive aspects of learning. The results underlined the fact that collaborative learning generates shared knowledge and, inherently, performance. The cohesion, engagement in an activity and psychological safety influence the efficiency of learning and, at the same time, the level of performance.

According to Voight et al. (2013, p. 9) a possible predictor of academic success is the school environment itself. In this respect, Voight believes that a positive school climate is beneficial for all students, especially for those who fight socio-economic burdens which can encumber success. In this case, the research confirms the assertions made by Cutinho (2007) who claims that students who are in a learning environment have certain proposed objectives. The results of the research indicate that the students whose objective is to acquire performance generally obtain it. They may have superior metacognitive skills, which may lead to academic success.

Academic success may also be analysed from the gender stereotyping perspective. Although most studies do not reveal significant differences between men and women in what success is concerned, this topic keeps proving interesting to researchers. For example, in a study on the success of women, Westrin et al. (2012) employ the phrase 'culture conducive to women's academic success' in reference to the shared beliefs and expectations which contribute in women's empowerment for acquiring success in their careers. The research conducted at the University of Pennsylvania reveals four distinct aspects of the culture conducive of women's accomplishment in their career: equal access to opportunities and resources, encouragement of the work-private life balance, eradication of gender bias and support from the leader.

Also, our research shows that academic performance - as a manifestation of success - is strongly influenced by the mentality towards study. The results show that students performing are opposed the superficiality in achieving the academic requirements; they submit consistent efforts in learning, accept additional tasks and maintain the same level of intellectual effort even when they record a failure (Anghelache, 2012).

The predictability of the academic success may be correlated to a large number of cognitive or personality factors. Most studies note the necessity of explaining the performance-generating mechanisms and of fully understanding the real significance of what we are used to term academic success.

4. Conclusions

Beyond the relativeness of the definitions of academic success, it is important to become aware of the complexity of this problem, as it is interesting for decision-makers, teachers and students alike. It is compulsory that we pay more attention to the manner of understanding and constructing the learning situations. Equally important are the rigorous management of the performance-generating factors and the change at the level of the evaluative practices. Academic performance cannot be separated from the personal, cognitive and socio-affective factors which influence it. To exclusively evaluate knowledge or skills provided by the curriculum without taking into consideration the data collected from the systematic observation of the learning behaviour, from the learning experiences which require involvement, creativity, boldness or self-control means to generate erroneous conclusions regarding the student's real performance. The in-depth understanding of this matter may result in real implications at the level of the actual teaching practices. It is necessary that we change the school learning patterns, the grids of assessing performance, and also that we revise whatever social success may signify at a given time.

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