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RELATIONSHIP OF CORE SELF-EVALUATION TRAITS: SELF-EFFICACY, LOCUS OF CONTROL AND SELF-ESTEEM - WITH ACADEMIC ACHIEVEMENT

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Abstract

This article presents results of the relationship of self-efficacy, locus of control and self-esteem, with academic achievement. The aim of this research was to demonstrate that the three traits are predictors of academic achievement. Participants were 100 students (mean age: 28.7 years) of Psychology and Education Sciences at the University of Hyperion, Bucharest. It was used a non-experimental predictive correlational design. Variables were measured by means of items from SES - Self-Efficacy Scale, LOC - Rotter's Questionnaire and RSES - Rosenberg Self-Esteem Scale. Academic achievement was expressed through learning outcomes, the overall averages of the previous year of study. With respect to academic achievement, Pearson correlations were .02 for self-efficacy and .04 for locus of control. The results have shown a positive relationship for self-efficacy and a negative relationship for locus of control. For self-esteem the correlation was not statistically significant. Previous findings from several studies are used for discussing similarities between the three traits and their relationship to academic achievement.

Keywords: *self-efficacy, locus of control, self-esteem, academic achievement.*

1. INTRODUCTION

Children are evaluated since kindergarten and from the first year of school they get grades according to knowledge and learning. We can say that formal education implies social assessment, thus having a fundamental role in the development of future adults. Both teachers and parents have always placed a special emphasis on school results which they classify as success or failure. A study with students sample has demonstrated that beliefs about their abilities are essential elements in their school success or failure. In literature, a central place is

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the importance of self-efficacy on school motivation (Pajares, 2003).

Self-efficacy represents the belief of a person about how well can perform the necessary behaviors to deal with prospective situations (Bandura, 1982) and is considered to be a positive predictor of cognitive engagement, an essential factor in self-regulation, but also a mediating factor of the relationship between past performance and further performance (Diseth, 2011). Performance is defined as the fulfillment of goals at a higher level (Sonnentag & Frese, 2002).

It is particularly important to distinguish between self-efficay and self-esteem. Self-efficacy refers to the perception we have about our own abilities through which we achieve a certain performance, while self-esteem pertains to global perception of our own value. Thus, if a person who obtains poor results in a specific situation has a low level of self-efficacy for that area that involves certain skills, the perception of his own value will not be affected unless his self-esteem is closely related to the performance he achieves in the activity of that field (Schwarzer, 2014).

Self-esteem is defined as the positive or negative self-evaluation of one's own self, expressed by degrees of approval or disapproval, indicating the extent to which the person is perceived as capable, valuable or important (Rosenberg, 1965). Self-esteem is considered to be the result of the influences of different situations, such as personal success (Rosenberg, Schooler, & Schoenbach, 1989). Research on students sample has shown that people who rely on self-esteem have achieved results that correlate negatively with academic performance, but positively with academic difficulties (Lawrence & Crocker, 2009).

Both self-efficacy and locus of control refers to beliefs about their own capabilities. In the case of self-efficacy, the problem is whether the person thinks he is capable of carrying out the necessary actions to succeed, while, in the case of locus of control, the question is whether the person believes or not that he is capable of influencing the results (Judge, Erez & Bono, 2002).

The concept of locus of control refers to individuals beliefs about the causes of events in their lives (Judge, Erez & Bono, 2002; Rizeanu, 2016). Rotter describes expectation as representing the possibility that a behavior can lead to a particular result. A behavior will be determined by the individual's expectation that he will achieve the goal to which he was directed (Rotter, 1945). Rotter believes that people with internal locus of control have a greater chance to retrieve information from their own experience and thus improve their future behavior in similar situations. They also seem to have more initiative to change or improve their own living conditions, are more resilient to external manipulation, they value more their own skills and capabilities and are more oriented towards achieving goals. Rotter concludes that people with internal locus of control are better adapted and more effective in their life (Rotter, 1966).

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

The main objective of this research is to analyse the relationship of three traits: self-efficacy, locus of control and self-esteem with academic achievement, in order to demonstrate that these traits are predictors of academic achievement.

2.2. HYPOTHESES

H_1: Self-efficacy is positively related to academic achievement.

H_2: Locus of control is negatively related to academic achievement.

H_3: Self-esteem is positively related to job academic achievement.

3. METHOD

3.1. PARTICIPANTS

The investigated group included 100 participants aged between 19 and 59 years old (mean age: 28.7 years), students of Psychology and Education Sciences at the University of Hyperion, Bucharest.

3.2. INSTRUMENTS

In order to evaluate self-efficacy it was used the Self-Efficacy Scale (SES) developed by Ralf Schwarzer and Matthias Jerusalem (1995).

To evauate locus of control it was used Rotter's Questionnaire (LOC) developed by Julian Rotter (1966).

To measure self-esteem it was used Rosenberg's Self-Esteem Scale (RSES) developed by Morris Rosenberg (1965).

Academic achievement is expressed through learning outcomes. University's notice boards facilitated collection of the grades obtained by the students participants.

3.3. PROCEDURE

The research took place at Hyperion University, Bucharest. Participants were tested with the same investigative tools and they recieved the same instructions.

All the collected data was analysed in SPSS using dispersion diagrams, linear regression analysis and Pearson correlation analysis.

3.4. EXPERIMENTAL DESIGN

The research method was non-experimental with predictive correlative design with a criterion variable - academic achievement and three predictive variables, where „O" represents the training phase, „O_1" represents self-efficacy assessment, „O_2" locus of control assessment and „O_3" self-esteem assessment.

N O O_1, O_2, O_3

2. RESULTS

Dispersion diagrams, linear regression analysis and Pearson correlations have shown as expected, a positive relationship for self-efficacy and self-esteem with academic achievement and a negative relationship for locus of control with academic achievement. For self-esteem the correlation was not statistically significant.

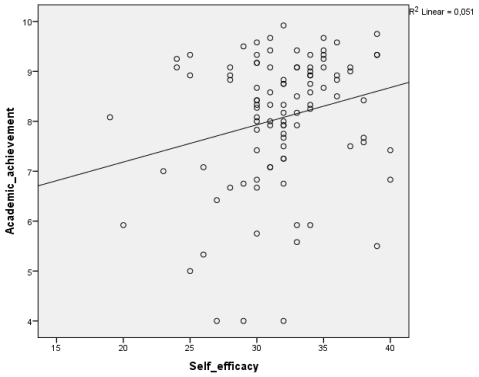

Figure 1. Dispersion diagram of the relationship between academic achievement and self-efficacy

The scatterplot presents regression line sloping from the bottom left to the upper right which indicates a positive relationship between academic achievement and self-efficacy. $r^{2} = .05$ – this means that .25% of self efficacy variance is given by the variance of academic achievement.

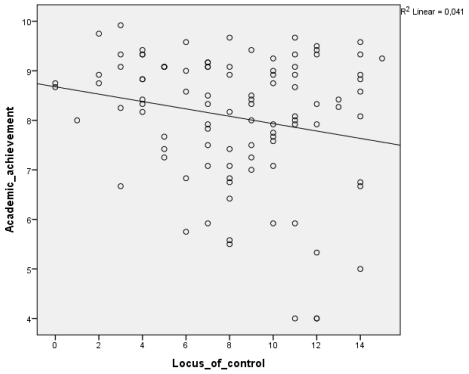

Figure 2. Dispersion diagram of the relationship between academic achievement and locus of control

The scatterplot presents regression line sloping from the top left to the bottom right which indicates a negative relationship between academic achievement and locus of control. $r^2 = .04$ – this means that .16% of locus of control variance is given by the variance of academic achievement.

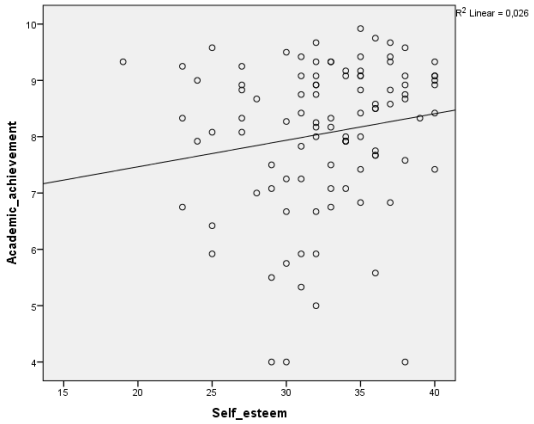

Figure 3. Dispersion diagram of the relationship between academic achievement and self-esteem

The scatterplot presents regression line sloping from the bottom left to the upper right which indicates a positive relationship between academic achievement and self-esteem $r^2 = .02$ – this means that .04% of self-esteem variance is given by the variance of academic achievement.

Table 1. Linear regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.476	1.484		4.364	.000	3.530	9.421
	Self-efficacy	.054	.039	.162	1.389	.168	-.023	.130
	Locus of control	-.047	.041	-.127	-1.145	.255	-.128	.034
	Self-esteem	.008	.034	.028	.242	.810	-.060	.077

a. Dependent Variable: Academic achievement

For self-efficacy the point where the regression line intersects the vertical axis is 5.69. The non-standardized regression coefficient is .07 - this means that for each increase by 1 of self-efficacy scores, the academic achievement scores increases by .07. The standardized regression coefficient is .22 - this is equal to the Pearson correlation coefficient between variables. The 95% confidence interval for the slope of the regression line takes values from .01 to .13 - the non- standardized coefficient has the value of the population between these values. For locus of control the point where the regression line intersects the vertical axis is 8.67. The

non-standardized regression coefficient is -.07 - this means that for each increase by 1 of locus of control scores, the academic achievement scores decreases by .07. The standardized regression coefficient is -.20. The 95% confidence interval for the slope of the regression line takes values from -.14 to -.002. For self-esteem the point where the regression line intersects the vertical axis is 6.52. The non-standardized regression coefficient is .04 - this means that for each increase by of self-esteem scores, the academic achievement scores increase by .04. The standardized regression coefficient is .16. The 95% confidence interval for the slope of the regression line takes values from -.01 to 0.10.

Table 2. Pearson correlation analysis

Variable		Academic achievement
Self-efficacy	Pearson Correlation	.226*
	Sig. (2-tailed)	.024
	N	100
Locus of control	Pearson Correlation	-.202*
	Sig. (2-tailed)	.043
	N	100
Self-esteem	Pearson Correlation	.161
	Sig. (2-tailed)	.109
	N	100

*. Correlation is significant at the 0.05 level (2-tailed).

With respect to academic achievement, Pearson correlation analysis shows for self-efficacy a weak positive relationship, statistically significant for p = .02, and for locus of control a weak negative relationship, statistically significant for p = .04. For self-esteem the correlation was not statistically significant (p = .10). These results support H_1 - there is a positive relationship between self-efficacy and academic achievement and H_2 – there is a negative relationship between locus of control and academic achievement.

3. CONCLUSIONS

The purpose of this research was to demonstrate that self-efficacy, locus of control and self-esteem are predictors of academic achievement. The results have shown that students who have high self-efficacy and internal locus of control are predisposed to achieving high performance. Although in the case of self-esteem the results were not significant, the relationship was positive. Research on students sample has shown that people who rely on self-esteem have achieved results that

correlate negatively with academic performance, but positively with academic difficulties (Lawrence & Crocker, 2009).

A study that have examin the meta-analytical results of self-esteem, self-efficacy, locus of control and emotional stability showed that these traits are among best predictors for job satisfaction and job performance (Judge & Bono, 2001). The results of the study highlighted that locus of control is less self-oriented than other features, although many elements from Rotter's theory and other studies reflect self-orientation. Moreover, locus of control has characteristics common to other features, especially with self-efficacy. It is very possible that people with low self-efficacy level to believe that they are not in control of their lives (external locus of control) (Judge, Erez, & Bono, 2002).

The results illustrate the importance of developing and implementing programs designed to increase school motivation, differentiated and individualized school curricula that ensure school success, as well as programs of self-motivation and personal development. Self-efficacy is closely related to the resources we allocate to solving a task.

Bandura (1977) considers increasing the level of self-efficacy is important because it will cause a significant increase in performance (Stajkovic & Luthans, 1998). An important study has revealed that people with a high level of self-efficacy who are experiencing difficult situations, use their resources optimally and they don't give up easily (Wolters, Shirley, & Pintrich, 1996).

The traits analyzed in the context of this article benefit from the attention of health psychology. In order to ensure the continuity of the highlighted ideas, another topic that would require scientific research should determine the implications of all psychological factors considered to be responsible for maintaining health. Thus, in addition to self-efficacy, locus of control and self-esteem, should be included in the study optimism, feeling of consistency and robustness (Bubulac, Gatej, Rizeanu, 2018). Researchers of a cross-cultural study pursued psychological adaptation to receiving a cancer diagnosis of a population whose culture was based on superstition. The results were at least interesting, given the participants background. Thus, internal locus of control correlated positively and external locus of control correlated negatively with adaptation to disease (Sun & Stewart, 2000). People with a high level of self-efficacy use their resources optimally and successfully unlike people who have a low level of self-efficacy, who tend to give up when they have difficulties (Stajkovic & Luthans, 1998). Self-efficacy has an impact on the way people think, the choices they make, the goals they propose, the effort they make, the way they anticipate the results, the level of resistance in stressful or problematic situations and on the quality of emotional life, level of stress and depression (Pajares & Urdan, 2006; Rizeanu, Bubulac, Popa-Velea, 2018).

The present study has some limitations as respects the sample made up of only 100 participants, thus it requires prudence in generalizing the results. It is also important that has not been taken into account the extreme level of variables. The level of intelligence is an important factor to be considered in a future research. It should be proven that intelligence is not the only one that has established performance.

In summary, results of the present study indicate that self-efficacy and locus of control are significant predictors of academic achievement. However, there is much to be known about the exact nature of the traits and the processes by which they affect these outcomes, therefore, more research is needed to examine the common effects of the traits, as predictors of academic achievement (Constantin, Rizeanu, 2018).

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