

# Locus of control in the function of improving work with students – Pilot research

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**Abstract** – This paper represents the results of a research focused on analyzing locus of control in function of improvement working with students. The subject of research is defining presence of a particular type locus of control at students. The subject of research is also statistical relationship of locus of control and satisfaction with teaching staff, grades/success, provided knowledge and relations with colleagues. Research has been conducted during November of 2019. and sample had N=60 examinees. Methods used in data processing were variance analysis and regression analysis. In the research was also used locus of control scale (Julian Rotter) which was defined as independent variable. As dependent variable was defined dimension which represents student satisfaction, which contains four item (satisfaction with teaching staff, grades/success, provided knowledge and relation with colleagues). This is a pilot research, which could expand depending on a new items of dimension chosen as a dependent variable. Research result showed that locus of control has a strong negative statistically impact on the satisfaction with professors and assistants in teaching and grades/success, and that it has a positive impact on relations with colleagues, while it has no impact on the satisfaction with obtained knowledge.

## I. INTRODUCTION

Students positive reactions on changes in education, learning process and extra effort, depends a lot on teaching staff (professors and teaching assistant) and their will to motivate students. Key mission of professors/teaching assistants is not only to teach particular science field, but also to motivate students to use their maximum potential, so they can accomplish vision and mission of their careers. Good professor/teaching assistant has to be a good pedagogue. It's very important for them to know how to approach to their students. Observing their personality helps in this. It is necessary to realise what kind of personality do they have, and to know all about influences of different motivators on different types of personalities. Psycho-moral and socio-demographic characteristics of working staff affects on their behavior towards particular job and other people. Observing psychological side of people can help in prediction of their behavior. Motivating students relative to their

locus of control represents motivation on psychological aspect. Analyzing the students' locus of control represents their psychological analysis. It was taken as a starting point for personality analysis, and for improvement of their results and better socialization.

The position of control is psychology term that refers to a person's opinion about the causes of accomplished results in life. The concept of locus of control in psychology was introduced in 1966. This concept derivatives from a theory of learning introduced by Julian Rotter in the mid-twentieth century. Also, this concept was originally developed within the theoretical framework of Julian Rotter's theory of social learning. Rotter describes locus of control as a hypothetical construct that refers to the level in which individual believes that the appearance of reinforcement is contingently related to his own behavior [1]. Expectancy factors are called external and internal control. Internal locus of control refers to the perception in which positive or negative events are consequence of their own acts and they are under the personal control. External locus of control refers to the perception in which positive or negative events are not connected with own behavior in specific situations, so then they are out of personal influence. Generally speaking, the locus of control can be seen as a behavior in function of expectations and substantiation in a specific situation. While studying individuals in therapy, Rotter observed that:[1]

1. Different people in the same learning conditions, learn different things;
2. Some people respond quite predictably, others less, while some unpredictably;
3. Some people have strong and direct connection between their behaviors and the rewards they receive.

In his research, Rotter notes that rewarding or punishing a particular individual behavior strengthens the expectation that the same behavior will trigger similar reactions (positive or negative) in the future. The level of expectations about the repetition of similar consequences was higher in persons who believed that they were dependent on their own behavior and actions, or on themselves. Rotter also thinks that the beliefs are events that have happened as a result of internal or external actions, that were made by one of the characteristics of personality. Several studies show that the locus of control, defined as individuals' tendency to believe that they may or may not control their environment and the course of events, plays a role in the way that individuals perceive their environment [1].

This research shows that it is very important for professors/teaching assistants to take the role of leaders who will help their students to act in accordance with their personality and sense of belonging.

## II. THEORETICAL FRAMEWORK

The results of the research, which relate to the internal-external locus of control (behaviors that are characteristic of internal personality types), showed that top managers and leaders would be persons of internal locus of control, which means that students of management should have this characteristic [2].

The research that was supposed to show the impact of gender, locus of control, love of money and economic status on students ethical perceptions gave the following results: gender and internal locus of control positively affects on students' ethical perceptions, and love of money has a negative impact on ethical student's perception, while economic status has no effect on ethical student's perception [3]. According to research results, in most cases students hate failure, most believe that there is no perfect solution in real life, and when they are insecure and need to make an important decision, they usually consult with someone more experienced in that field [4].

The basis of the research conducted by Sari and Fakhruddiana was to determine the relationship between the internal locus of control and social support, with the delay of thesis preparation by students [5]. The regression analysis showed a very significant relation between the internal locus of control and social

support with the delay in completing the thesis, as well as a negative relation between the internal locus of control and the delay of completing the thesis. This means that the lower internal locus of control is, there is a higher level of delay in preparing a thesis for students. The same results happened with the relation between social support and the delay in submission of the thesis, the lower level of social support results with the higher delay in completing the thesis by students. The research it was conducted to determine the influence of locus of control on the relationship between social exclusion and characteristic choices (unique choices). The results of this study show that participants who believed that the environment controls their fate (external locus of control) preferred more unique choices in the context of social exclusion than inclusion, while participants who believed that they could control the environment (internal locus of control) preferred less characteristic choices and less social exclusion [6].

The research conducted at the University of Botswana was intended to show an association between the external locus of control and depression among postgraduate students, as well as the influence of age and gender on this relation. The results showed that of the 272 students, 47.3% had low level of depression, 23.4% had mild level of depression, 18% had moderate level, while 11.3% had high level depression. Both internal and external locus of control, along with age, showed a 31% difference in depression scores, while gender did not affect significantly to depression levels. Results direct attention to locus of control as one of the cognitive variables associated with depression [7]. The research obtained result revealed that there was no significant gender and age difference found in the big five and locus of control. Further, there is no significant relation between locus of control in the big five personality characteristics [8]. The academic locus of control plays an important role in explaining student behavior in education. According to research, the mean level of locus of control was determined at students of pedagogical formation. Also, it was concluded that the internal and external locus of control did not vary depending to gender and year of study, but did vary depending on the age of the subjects. It was found that the level of student satisfaction in the pedagogical formation is significantly related to the external locus of control, while is not to the internal and academic locus of control [9].

The research conducted in Pakistan among graduates showed that men have an internal locus of control, while women are highly oriented towards an external locus of control [10]. The research conducted by Gifford, Mianzo, and Briceno-Perriott on a sample of 3000 first-year students, found that students who enrolled in faculty with lower scores according to the internal locus of control, scored significantly higher grades than those who had more external on the same scale [11]. French also examined the locus of control from the aspects of personality variables of the work locus of control (WLOC) for examinees. Work Locus of Control (WLOC) is the level in which individuals feel that they have an impact on work-related rewards or penalties. Those with an internal locus think that they have control, while those with an external locus believe that rewards are more governed by external factors such as the happiness or actions of others. The results compared the perception of stress and the prevalence of job unions for those with an external locus, compared with those with more internal WLOC. Those with an external locus were found to be more likely to experience both, interpersonal conflict at work and organizational constraints. They showed lower affective prosperity, also experienced lower feelings of satisfaction, and had lower physical prosperity. Respondents with an external locus scored lower in terms of job satisfaction. The results support the existing literature and identify that perceptions of job stress and job tasks are in a function of personality and environment [12].

### III. METHODOLOGICAL PART

#### A. Subject and problem of reasearch

The subject of the research is directed towards observing students' satisfaction with the teaching staff, grades/success, the knowledge provided and the relationship with their colleagues. The focus was on observing motivators that influence student behavior from the aspect of locus of control. The subject of the research is based on determining the psychological aspect in approach to students. The subject of the research is based on determining the psychological aspect in approach to students. Based on personality type - the type of locus of control that is taken as a benchmark in this research that influences students' further view and behavior toward studying and which builds their stance on particular segments of studing. The research

problem deals with the formation of an optimal approach to students in relation to their locus of control. We were guided by the fact that, if we estimate what affects on students in terms of creating their relationship to education, it can be easier to manage and improve their work and productivity level.

#### B. Reasearsh question

The research subject can be presented through the following research questions (Figure 1):

IP1: Is there a statistical relation between locus of control and satisfaction in relationship with teaching staff?

IP2: Is there a statistical relation between locus of control and satisfaction with grades / success?

IP3: Is there a statistical relation between locus of control and satisfaction with the provided knowledge?

IP4: Is there a statistical relation between locus of control and satisfaction with relationships with colleagues?

IP5: Is there a statistical relation between the locus of control and the student satisfaction dimension?

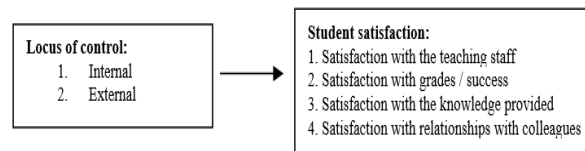


Figure 1. Presentation of research question of influence of locus of control on student satisfaction

#### C. Research tasks and goals

Examinees' characteristics are unavoidable factor that shapes and influences on their attitude towards study. When we consider characteristics of the subjects, the goal is to examine do their psychological characteristics influence on satisfaction of certain segments during the study. We assume that the characteristics mentioned above, form and shape the views of the examinees. We observe attitude through thinking, emotions and actions that a person has toward a particular phenomenon (things, people, situation). The research goal was to determine what has influence on development of students' satisfaction from the locus of control aspect.

### IV. RESEARCH

**Sample** - The sample of examinees includes students of undergraduate and graduate studies N = 60, who studied Locus of Control within the courses of Organizational Behavior and Human Resources Management.

#### A. Operationalization of variables in research

**Dependent variable** - we observe student satisfaction dimension, as a dependent variable, which includes four items: satisfaction with the

teaching staff (professors/teaching assistants), grades/success, knowledge provided and relationships with colleagues.

**Independent Variable** - we observe the locus of control of the examinees as an independent variable. The locus of control is operationally defined by applying the measuring scale of the Rotter's Locus of Control through 29 items. The factors of the locus of control are: 1. Internal locus of control: Individuals with a large internal locus of control believe that events are primarily caused by their own behaviors and actions and 2. External locus of control: individuals with big external locus of control believe that fate or chances primarily determines events [13].

#### *B. Measuring instruments*

The student satisfaction scale contains only four items: satisfaction with the teaching staff, grades/success, provided knowledge and relationships with colleagues. Satisfaction is measured by a Likert scale from 1 to 10, where 1 represents total dissatisfaction, and 10 represents complete satisfaction.

The locus of the control scale is measured by the Rotter scale of the Locus of Control. The Rotter's Locus of Control scale of internal versus external locus of control, consists of 29 items, with a choice of alternatives a and b. Items scores are binary variables - 0 and 1, and the total score is expressed as the sum of points on 23 statements (6 items are not scored; they only serve to disguise the purpose of the test). A higher number of points indicates a higher level of externality, and the range of results is 0-23 [14]; [15]. Where high score = external locus of control, and low score = internal locus of control. We estimate that internal consistency is between 0.65 and 0.79. The test-retest reliability rating of Rotter's Locus of Control Scale is between 0.49 and 0.83. Correlation from the Marlowe-Crowne aspect of social desirability is between -0.41 and -0.12.

#### *C. Methods and organiyyation of data processing*

In the empirical part of the paper, the survey method will be used. The research was conducted during November 2019, and data was processed in IBM SPSS Statistics Version 21. After inserting results into database, data were analyzed using standard statistical descriptive methods and inference statistics procedures. Regression analysis was used as a statistical data processing method. Qualitative, descriptive and analytical methods were applied in the research. The

research methodology during that period also included theoretical analysis related to the following areas: psychological factors, locus of control, relationship with students.

### V. RESULTS AND DISCUSSION

The research was directed to determ the correlation between the locus of control of the respondents with their satisfaction with the teaching staff, grades / success, knowledge provided and relations with colleagues. Subject of the research was presented through 5 research questions, which will be answered below.

During the data processing, descriptive statistics dimensions of the student satisfaction were first produced and presented (Table 1). This table contains every specific item and dimension. Based on the results, the mean value of the speech is 25.58. Answers were scored with a Likert scale of 1-10, but for the purposes of the study, we use the score of items dimension. Maximum score is 40 and it represents complete satisfaction of the mentioned segments. It can be concluded that students are slightly more than average satisfied with the segments of study. First item representing students' satisfaction with the teaching staff is their attitude towards students, and it was rated 7.20. Grades were ranged from 1 to 10, so it can be concluded that students are satisfied with the professors' attitude towards them. This item has the highest satisfaction rating compared to the other three items. When we observe second dimension item that represents relationship satisfaction with colleagues, we get average score of 6.75, which is above average satisfaction. The third item that represents satisfaction with the grade success is 6.52, which is also above average satisfaction. Satisfaction with the provided knowledge was given an average score of 5.12. According to statistics, conclusion is that the students are satisfied with the study segments. According to the students, each segment should be improved, especially course materials and the methods of teaching. Materials which contain current business trends, should have the influence on the curriculum. They should not be outdated. It is also very important for knowledge to be practical and applicable in practice.

*Table 1.* Showing the descriptive statistics of the student satisfaction dimension

Descriptive Statistics

	N	Mean	Std. Deviation
Dimension of study satisfaction	60	25,58	3,259
I am satisfied with the professor's attitude towards the students	60	7,20	1,725
I am satisfied with the relationship with my colleagues	60	6,75	2,222
I am satisfied with the grades i get	60	6,52	2,013
I am satisfied with the knowledge provided	60	5,12	1,776
Valid N (listwise)	60		

The first research question in the paper was "Is there a statistical relation between locus of control and satisfaction with the teaching staff?". In the table number 2 we can see the influence of the locus of control on the satisfaction of the teaching staff through regression analysis. Based on the results, we can conclude that the locus of control has a direct and very significant statistical influence on the satisfaction of the professor / teaching assistant relationship with the students.

Table 2. Showing the influence of locus of control on teacher satisfaction with staff through regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	12,585	,505		24,924	,000
1 The score of locus of control	-,476	,043	-,823	-11,023	,000

a. Dependent Variable: I am satisfied with the professor's attitude towards the students

The second research question that was asked in the paper was "Is there a statistical relationship between control locus and satisfaction with grades / success?" In the Table 3 (Table 3) we can see the influence of control locus on satisfaction with grades / success through regression analysis. Based on the results, we can conclude that the locus of control has a direct, statistically significant and very strong influence. When looking at the direction, it can be seen that people with an internal locus of control are more satisfied, as in the case of the past question.

Table 3. Showing the influence of locus of control on satisfaction with grades / success through regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	12,678	,612		20,713	,000
1 The score of locus of control	-,544	,052	-,807	-10,404	,000

a. Dependent Variable: I am satisfied with the grades i get

The third research question that was posed in the paper was "Is there a statistical relationship between the locus of control and the satisfaction with the provided knowledge?" In the following text, Table 4. (Table 4.) shows the influence of the locus of control on the satisfaction with the provided knowledge through regression analysis. We can conclude that the locus of control has no

direct influence and is not statistically significant. From this we can also conclude that the type of locus does not affect in the students opinion that the knowledge provided to them is adequate.

Table 4 Showing the influence of locus of control on knowledge satisfaction provided through regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5,833	,909		6,413	,000
1 The score of locus of control	-,063	,078	-,106	-,814	,419

a. Dependent Variable: I am satisfied with the knowledge provided

The fourth research question in this paper was "Is there a statistical relation between locus of control and satisfaction with colleague relationships?" In the further test, Table 5. (Table 5.) shows the influence of locus of control on satisfaction with colleagues through regression analysis. Based on the results, it can be concluded that the locus of control has a statistically direct, significant and very strong influence. When we observe direction, we can see that people with an internal locus of control are less satisfied with their relationship with colleagues, and that students with an external locus of control are more satisfied. It is known that people with an internal locus of control are more self-oriented, while those with an external locus are more oriented to others. This result was expected.

Table 5 Showing the influence of locus of control on satisfaction with colleagues through regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,138	,709		,194	,847
1 The score of locus of control	-,584	,061	-,784	9,634	,000

a. Dependent Variable: I am satisfied with the relationship with my colleagues

The fifth research question in this paper was "Is there a statistical relationship between the locus of control and the dimension of student satisfaction?". In the following text, Table 6. (Table 6.) shows the influence of the locus of control on the dimension of student satisfaction through regression analysis. Based on the results, we can conclude that the locus of control has a statistically significant direct influence. When looking at the direction, it can be seen that people with an internal locus of control are more satisfied, and students with an external locus of control are less satisfied. As people with an internal locus of control feel that everything depends on them, the resulted sense of satisfaction was also expected as something for what they are responsible. Consequently, it is in the nature of

man to feel pleasure, and therefore he also tries to feel it and to experience things satisfactorily. In contrast, people with an external locus of control feel that they cannot influence on the things around them so much, including their satisfaction, as confirmed by these results.

Table 6 Showing the influence of locus of control on satisfaction with the student satisfaction dimension through regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	31,233	1,492		20,927	,000
1 The score of locus of control	-,499	,128	-,457	-3,912	,000

a. Dependent Variable: dimension of study satisfaction

## VI. CONCLUSION

This paper presents a pilot research focused at the analysis of locus of control in the function of improving work with students. Factors that influence on students' attitudes toward study were examined. The locus of control was taken as a factor which influences on students' attitudes towards segments of study, and also he creates them. The most important result is the influence of the locus of control on the student satisfaction dimension. Based on the results, it can be concluded that the locus of control has a direct influence and is highly statistically significant. Looking at the direction, it can be seen that people with an internal locus of control are more satisfied, and students with an external locus of control are less satisfied.

When observing the relations of the locus of control separately, with the items, different statistical results are obtained. The first result, showed that the locus of control has a direct and very significant negative statistical effect on the satisfaction of the professor / teaching assistant relationship with students. The lower locus of control causes greater satisfaction. Also we can conclude from the second result-item that the locus of control has a direct and statistically significant very strong influence, and that the direction is also negative, as in the case of the past result. The third result-item which observes the influence of the locus of control on knowledge satisfaction, gives a different result, where there is no statistically significant effect. The fourth result-item shows that the locus of control has a very strong statistical effect on the satisfaction with colleague relationship, which is different from the other two results. It means that people with an internal locus of control are less satisfied with their relationship with colleagues, and that students with an external locus of control are more

satisfied. This research is a pilot study, which later could be expanded. Firstly, with comparison to the extension of a dimension as a dependent variable, it would add elements such as: tuition fees, courses, technical conditions, practices/projects, etc. Also in the next research some other independent variables will be added, to measure what else does affect to the attitude of the students. It is recommended to expand the sample size, so the results can be more relevant.

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