THE RELATIONSHIP BETWEEN MOTIVATION AND HUMAN CAPITAL THEORY 2

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ABSTRACT

Human Capital is the most valuable resource of a company. In nowadays there are no exact ways about how can we measure it. Recognizing or measuring knowledge and skills of employees also has strategic importance. Lepak – Snell (1999) Becker (1962) and Schulcz et. al. (2013) speak in their paper about the level of motivation. A perfectly motivated employee is more valuable. But how can we measure the value of motivation? What psychologists think about perfect motivation? Based on Deci and Ryan's (2000) self-determination theory we could assume that speak about perfect motivation is equal to intrinsic motivation. We have measured the levels of motivation (intrinsically and extrinsically) on a sample (N=471).

In the paper, we search the answer for the question: is the intrinsically motivated person is more valuable for a university or for a firm, or an extrinsically motivated person can also add the amount of value.

1. Introduction

The research of this article was based on Self-determination theory (SDT). In the following we briefly introduce human capital as a concept. Ajzen started to deal with human behavior in the 1980s. He analyzed human capital based on its intentions. The Planned Behavior theory of Ajzen was the expansion of TRA which is the Theory of Reasoned Action. In the Theory of Planned behavior, the behavior is not under complete control like in case of TRA. The analysis of this stability of intentions was the basis for Deci and Ryan, as well, to develop their self-determination theory. (Chatzisarantis and Biddle, 1998). Until a point in time, these theories were focused on the psychological aspects of human behavior, but after a while they realized the importance of these to working human capital. Deci and Vansteenkiste (2004) started to discuss SDT in a new way. They state that the social environment supports optimal functioning which is significant in the life of humans because of the fact that people are social beings. Beside these, self-determination theory examines human beings' life aspirations, showing different relations of extrinsic versus intrinsic life goals to psychological health and performance. (Deci and Ryan, 2008) These are heavily important aspects of human capital because of their effects on working relationships, work performance, worker's satisfaction and the overall well-being of the organizations. The goal of this paper is to show the main reasons why university students applied to their school and based on that create different groups of people: intrinsically motivated, extrinsically motivated and amotivated. In the previous article, the writers used IBM SPSS Statistics 20 Software in order to group people. The groupings were based on extreme data. In this paper the reader will be able to see what the reason behind those groupings was.

2. Empirical Research

2.1. Sample and methodology

The empirical research was carried out at a Central European University in a transition country in 2014. We used the Vallerand et al (1992-1993) motivationsurvey the "Academic Motivation Scale AMSC-28". The size of the sample was: 471 (N=471) participants (49,9 % female, 50,1% male), there were no significant differences between genders. Their average age was 22,34 with a range of 18 to 35 years. The questionnaire consisted 39 questions in which 12-12 were focusing on intrinsic and extrinsic motivation. The valuation was based on a 1-7 scale which helped to differentiate the student groups. The essence of the research was to find out why the students apply to universities.²

We are focused for different students groups, they were:

- 38 students were members in the special elite study group entirely run by students
- 40 participants were foreign students, who had relationships with the university where the research was carried out, and who studied on any foreign language;
- 31 students were Erasmus-students, who studied at least one semester long at the university where the research was carried out;
- 193 participants studied at the university's business school in Hungarian at master level;
- 96 participants studied at the university in Hungarian bachelor level;
- 73 students studied in the English language business program of the university – level was mixed both bachelor and master, because the research looked at motivation in correlation with language

In this paper our hypothesis was that those students get the best results who are intrinsically motivated. In order to justify this, we analyzed the above explained questionnaire and created groups of people based on their answers.

SDT is a research based theory of human development, wellness and motivation. The theory has a broad perspective and focuses on the different types of motivation.

² The research idea came from a research group in at the University of Pécs. The leaders of this research group were Associate Professor Zsuzsanna Kispál-Vitai and Professor Gábor Rappai. The statistical analyst was Gábor Haraszty (MA student), and the contributor was Mariann Benke (teaching assistant).

The authors pay more attention to amotivation, autonomous motivation and controlled motivation because these can be predictors of well being, performance and relational outcomes. In this paper the research focuses on the main types of motivation: intrinsic (autonomous), extrinsic (controlled) motivation. (Deci and Ryan, 2008) In our empirical research we examined those students who have the best level of grade point average in the last two semesters (more than 4.02), and we examined also these students based on their answers for the extrinsic or intrinsic motivational questions.

2.2. Results

From 471 students we found 113 students who had, in the last two semesters, better grade point average than 4,02. In the following we examined only this 113 students based on their answers to the questionnaire. There were 39 questions on the list and from these questions 12 were about intrinsic motivation and 12 questions were about extrinsic motivation.

All of the questions were about motivation: why these students decided to apply to the university. In the first table we show some answers from these questions. In order to understand the results you need to know the reason behind this grouping. In table 1, the reader can find those answers which are in connection with intrinsic motivation. That is why the analysis focused on those students who gave extreme answers for these. In the second column you can see the number of students who gave 1-4 points to the different statements. The last column shows only the number of those students who thought these answers are relatively significant for them. It can be see that most of the students who have better grade point average than 4.02, gave high points (6 or 7) to those answers which are in connection with intrinsic motivation. 85% of the students applied to university because of pleasure and satisfaction. 87% of the students thought that discovering new things is really important in their university years. More than 89% of the participants gave also high points to the answer: for the pleasure that I experience in broadening my knowledge about subjects which appeal to me.

Answers	5> (range from 1 until 7)	>5 (range from 1 until 7)
Because I experience pleasure and satisfaction. while learning new things.	15% (18 Students)	85% (95 Students)
For the pleasure I experience when I discover new things never seen before.	13% (15 Students)	87% (98 Students)
For the pleasure that I experience in broadening my knowledge about sub- jects which appeal to me.	10,6% (12 Students)	89,4% (101 Students)

1. table: Intrinsic motivation (percentage of students)

(Research Groups University of Pécs 2014)

Based on these results we can state that students with high grade point average also have high level of intrinsic motivation.

In the second table, the practice is the same. We tested here those questions that examine extrinsic motivation and we present some answers from our examination. The focus of the analysis was again the extreme ends because these are those answers which show the group of people who are extrinsically motivated.

Answers	5> (range from 1 until 7)	>5 (range from 1 until 7)
In order to obtain a more prestigious job later on.	3,5% (4 Students)	96,5% (109 Students)
Because I want to have "the good life" later on.	7% (8 Students)	93% (106 Students)
In order to have a better salary later on.	10,6% (12 Students)	89,4% (101 Students)

2. table: Extrinsic motivation (percentage of students)

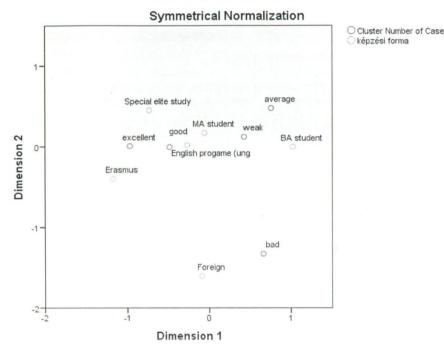
(Research Groups University of Pécs 2014)

As it can be seen in the second column, only a few students gave low points to those answers which show extrinsic motivation. Only 4 students gave less than 5 points for the reason to obtain a more prestigious job later. 93% of the students with high grade point average thought it is important to have "the good life" later on which shows the signs of high level extrinsic motivation. To have a better salary is significant for more than 89% of the students. Based on that, we can state that students who have high grade point average also have high level of extrinsic motivation, as well.

In the research, the writers wanted to differentiate the two main groups but based on the students' answers it is not so easy. The results of the first table showed that students with a high level of grade point average (more than 4.02) have high level of intrinsic motivation and the second table shows exactly the same for extrinsic motivation. Because of that further investigation is required.

The following part consists of a diagram about the grade point averages of the different student groups: Erasmus students, Students from the English program, BA students, MA students, Special elite study group and foreign students. Here we summarize our results. The grade point averages of the students were between 1.7 and 5.1. The mean of the grade point average was 3.679 and the standard deviation is 0.801. Our second hypothesis was: Students with extra research and university activity have better grade point averages because they are willing to do more which comes from their high level of intrinsic motivation. We analyzed the different groups based on their averages so the SPSS software created different clusters (bad, weak, average, good and excellent).

1. diagram: Grade Points Average of the Student Groups (2014)



Row and Column Points

(Research Groups University of Pécs 2014)

- 1). Cluster (bad students): the grade point average is less than 2.5. 33 students were in this cluster.
- Cluster (weak students): the grade point average is more than 2.5 but less than 3.25. 104 students were in this cluster.
- 3). Cluster (average students): the grade point average is more than 3.3 but less than 3.8. 66 students were in this cluster.
- 4). Cluster (good students): the grade point average is more than 3.9 but less than 4.5. 107 students were in this cluster.
- 5). Cluster (excellent students): the grade point average is more than 4.5. 66 students were in this cluster.

We made a correspondence analysis between the grade point averages and the student groups. We reduced the dimensions to a 2 dimensions table. The dimensions show simple normal distribution. The diagram shows the closeness of the different groups to the previously explained clusters. Those students have the best grade point averages who are Erasmus students or part of the special elite study group. Their averages were more than 4.5 in the last two semesters. These students

made plus university or research activity beside the basic requirements. Based on these results we can suggest: these students have higher level of intrinsic motivation, than the others. Erasmus students take part of university courses only for 1 or 2 semesters in foreign countries but students from the special elite study group are studying at the university during their whole studies which means, 3-5 years and because of that these students are more valuable to the university. Students from the English language program of the university (BA, and MA) had good grade point averages in the last two semesters. Those students who study on the Hungarian Master level had weak those who study on the Hungarian Bachelor level had average grade point averages in the last two semesters. Those regular foreign students who study on the English program had the worst grade point averages. This part of the research was the most interesting one, because previously the researchers thought that students on the English program would be the most motivated ones, because on successful completion of the program they will get two certificates at the end of their studies. But as it can be seen intrinsic motivation is not about the results but about the process.

3. Conclusion

As a conclusion we can state that a person with intrinsic motivation has better results, but people with extrinsic motivation can have high performance and exceptional results as well. The writers used Deci and Ryan's Self-determination theory as a basis for this research. In SDT we can distinguish a-motivation, extrinsic motivation and intrinsic motivation but these separate phases of motivation are connecting with each other. A person can go through a process which starts with a-motivation and end in the phase where the person is intrinsically motivated. As the readers were able to see in the article there are only small differences between those persons who have extrinsic motivation and who have intrinsic motivation.

If we analyze only the results of the SPSS analysis we will not be able to see the reasons behind this. This question leads us to Becker's human capital theory. Human capital theory is about the person within the organization and outside the organization. Based on Becker's idea a value of a person can increase with training and education. If we analyze the motivational factors of the students in universities we will be able to analyze their value within the organization. A person with intrinsic motivation, who is willing to participate in different competitions and conferences in order to increase his or her knowledge and develop new skills, probably will be a much more valuable person within the organization. The reason behind this is that person is more willing to participate in job-specific trainings and more motivated to have higher performance and to develop new skills which are essential for a given job.

REFERENCES

- Becker, G. S. (1962): Investment in Human Capital: A Theoretical Analysis, In: The Journal of Political Economy, 1962/5. No. pp. 9-49.
- Benke, M. Haraszty, G. Kispál-Vitai, Zs. Rappai, G. (2014): Empirical research on a Central European University in a transition country in (2014), Research Group University of Pécs 2014
- David P. Lepak Scott A. Snell (1999): The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development, In: Academy of Management Review, vol. 24, no. 1., pp. 31-48.
- Deci, L. E. Ryan M. R. (2000): Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being, In: American Psychologist 2000/1. No. pp. 68-78.
- Deci, L. E. Vanteekiste, M. (2004): Self-determination theory and basic need satisfaction: Understanding human development in positive psychology, In: Ricerche di Psicologia, 2007/1. No. pp. 23-40.
- Schulz, E. Chowdhury, S. Van De Voort, D. (2013): Firm productivity moderated link between human capital and compensation: the significance of task-specific human capital, In: Human Resource Management 2013/3. No. pp. 423-439.
- Nikos, L. D. C. Stuart J. H. B. (1998): Functional significance of psychological variables that are included in the Theory of Planned Behaviour: a Self-Determination Theory approach to the study of attitudes, subjective norms, perceptions of control and intentions, In: European Journal of Social Psychology 1998/3. No. pp. 303-322.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C, & Vallieres, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. Educational and Psychological Measurement, Vol.53, 159-172.A
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Seneca], C, & Vallieres, E.F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. Educational and Psychological Measurement, Vol. 52, 1003-1019.