

Motivation to learn? An advanced exploratory study of learning motivation of Central-East European Business Students

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THE AIM OF THE PAPER

We used self-determination theory to examine the motivation of business school students in Hungary. The research aimed to clarify whether extrinsic or intrinsic motivation or both dominates learning intentions among these students. Although student motivation to learn has been studied extensively, there is an absence of research evidence using this framework in Central-Eastern European higher education. Given the increasing prominence of the region in global geo-political and business affairs, this absence of understanding is important to correct.

METHODOLOGY

Our questionnaire-based study shows a strong link between some forms of extrinsic motivation and intrinsic motivation, along with evidence for the coexistence of extrinsic and intrinsic motivators in the same person. We used a modified version of Vallerand *et al.* (1992-1993) motivation-survey the “Academic Motivation Scale AMSC-28”. We added 11 plus questions to the questionnaire. The empirical research was a confirmative study about self-determination theory. The methodology used was descriptive statistics, correspondence, and correlation analysis. The size of the sample was 471. The purpose of our study was to check if the theory of Deci and Ryan are valid on the students of a university in Central Europe.

MOST IMPORTANT RESULTS

The purpose of our study was to check how the theory of Deci and Ryan applies to the students of a university in Central Europe. The results of the research highlight that the students could have both intrinsic and extrinsic motivation at the same time and intrinsic motivation is not the only type of motivation that could lead to good performance in learning and other activities.

RECOMMENDATIONS

The findings could help to evaluate currently used motivational strategies for students and to stimulate further research on the subject using the framework of self-determination theory.

Keywords: university students, education, organizational behavior, self-determination theory, motivation to learn

Acknowledgements: The authors would like to thank Professor John Schermerhorn and Professor Gábor Rappai for their valuable comments and critique in writing this article. With the support of the EFOP-3.6.3-VEKOP-16-2017-00007 project.

DOI: 10.15170/MM.2021.55.02.03

INTRODUCTION

Dramatic global changes are presenting new challenges as educators struggle to adjust methods of teaching and learning, and even change the nature of colleges and universities themselves. Students face a complicated learning environment that includes a diverse selection of distractions from strictly academic pursuits. There can be a gap among different groups of society regarding experience and knowledge (Töröcsik 2017). Professional organizations, student clubs, recreational sports, planned and spontaneous social gatherings, the world of social media, streaming entertainment options, part-time and full-time work, relationships and family demands, and more, can all be attractive options to put in extra time on studies.

The COVID-19 pandemic crisis also changed our everyday life in Hungary and around the world in a short period of time. Students face a fundamentally changed situation concerning schooling and their life. In the current situation, psychological well-being in terms of positive emotion and intrinsic learning motivation are key factors according to Holzer *et al.* (2021). Holzer *et al.* (2021) used the Self-Determination Theory to examine the role of basic psychological need for satisfaction for the aforementioned emotional, motivational and behavioral outcomes and investigates if core postulates of SDT remain valid during the exceptional situation of COVID-19. The data were collected from Europe, Asia, and North America. Holzer *et al.* (2021) found that the role of experienced competence for positive emotion and intrinsic learning motivation, as well as active learning behavior in terms of engagement and persistence is consistent in the examined multicultural situation.

The role of educators in higher education today is challenging and replete with a substantial risk that non-academic activities will overwhelm or displace academic ones in students' busy lives. Whether meeting students in face-to-face or online classrooms, whether dealing with full-time or part-time students, whether counseling them about academics and careers, and whether dealing with new school leavers or mature non-traditional students, educators must meet the challenge and compete successfully for students' time and attention. According to Farkas *et al.* (2015) Higher Education Institutions and educators plays important role in student's motivation, future carrier opportunities in the business sector and learning activities.

The research question guiding the present study is: To what extent do business students in Hungary

study to graduate and achieve degree certification – to obtain high-paying jobs, and to what level do they study for the sake of knowledge acquisition and to have meaningful work? The building blocks are self-determination theory (Ryan & Deci 2004) and the intrinsic/extrinsic motivation distinction (Ryan & Deci 2000a).

The paper is structured as follows: after introducing a short perspective on students' motivation, we provide the hypotheses, then in the second part, the research design, the sample, and the instrument. In the third part, we show the results of the analysis; in the fourth, we discuss the findings, and in the last section, we offer the limitations of this research and the conclusions.

MATERIAL AND METHOD: PERSPECTIVES ON STUDENT MOTIVATION TO LEARN

Among the motivation models, concepts, and directions of potential relevance to the research question, Dweck and Leggett's (1988) performance and mastery orientation links student motivation to both performance goals –focused on gaining the approval of others, and learning objectives – focused on increasing individual competence. Bandura's (1971) social learning combines the motivational influences of reinforcement and cognitive processes. Havas (2003) reflected Bandura's social learning theory, according to this author the combined result of cultural evolution and social learning is learning motivation. Komarraju *et al.* (2009) highlight the relationship between personality traits and motivation in the self-determination theory framework. Expectancy-value theories concentrate on whether the individual will achieve success based on their beliefs (Eccles & Wigfield 2002). At the same time, attribution theory focuses on the causal explanations that are established by the individual between events and consequences (Weiner 1985).

Motivation research in education raises a variety of issues, including the relationship between autonomous and controlled motivation (Ratelle *et al.* 2007, Koestner *et al.* 2008), perceived autonomy support (Hagger *et al.* 2015), achievement (Vansteenkiste *et al.* 2010) and the role of rewards (Deci *et al.* 2001a). Specific to the business school context, Vansteenkiste *et al.* (2006) describe a materialistic value orientation among students. Their research found that business students had a more extrinsic orientation than did future teacher students.

Our approach to the research question draws mostly from the perspective of self-determination theory (Ryan & Deci 2004) and the extrinsic/intrinsic motivation distinction (Ryan & Deci 2000b). The setting for the research is a university in Hungary, whose population of students represents a cross-cut of Hungarian society – socially, economically, and politically. Given the importance of Hungary and Central Europe in the emerging economic environment in both the European and global contexts, an understanding of today’s generation of Hungarian college students offers useful insight into the research question and its potential implications.

Research Hypotheses

The starting point for our research is the distinction between extrinsic and intrinsic motivation (Ryan & Deci 2000a). Studying for the enjoyment of learning represents an intrinsically motivated action while studying to achieve certification and degree accomplishment represents an extrinsically motivated action (Ryan & Deci 2000b). Leal *et al.* (2012) analyzed accounting students’ motivation in Brazil, looking to study motivation patterns. Their findings showed that students have varied reasons for studying, and the purposes are manifold. In our research, we examined similar patterns looking for which motivation predominates among our business students:

H1: Students are more likely to pursue university business studies for career advancement opportunities offered by certification and degree accomplishments than for the enjoyment of business learning itself.

Since both extrinsic and intrinsic motivations are likely to exist in any student population, we wonder if one or the other is most associated with higher academic performance.

H2: Students who are intrinsically motivated in their business studies achieve higher academic results than those who are extrinsically motivated.

Self-determination theory (Ryan & Deci 2000a) opens the possibility that students entering university studies with primarily extrinsic motivations will undergo an internalization of motivation as they progress in their programs. The theory does not suggest that the shift from extrinsic toward intrinsic motivation will happen in all cases. However, this may happen if the needs of autonomy, competence, and relatedness are supported by the actions the individual will take. Deci and Ryan (1994) claim that individuals have an innate tendency to internalize previously extrinsically induced behaviors. The

internalization process, though, may not be carried out totally towards intrinsic motivation; it may stop at introjected actions or be more integrated.

H3: A shift away from extrinsic motivation and toward intrinsic motivation will be most pronounced among students who achieve higher academic results.

Self-determination theory (Reeve *et al.* 2004) also claims that extrinsic rewards encourage intrinsic motivation to the extent they induce a feeling of competence and support autonomy, but thwart it when they are perceived as controlling. There is a study by Gillet *et al.* (2017) that found that high levels of controlled motivation did not hurt achievement among university students. This finding is also reinforced by Howard *et al.* (2016) in asserting that external regulation was not harmful to outcomes if it was combined with autonomous forms of motivation. The question of the effect of incentives on motivation is still an issue to be clarified. Vansteenkiste *et al.* (2006) agree with Kasser and Achuvia (2002) that a materialistic orientation, which can be linked with controlled motivation, leads to less self-actualization and happiness. This orientation is also associated with a flawed pattern of psychological functioning and physical health. The evaluation of this orientation in a transition country where incomes are lower than in the West can add new information about students’ attitudes there.

H4: Extrinsic motivation can lead to high academic results but also less enjoyment by students with the learning process.

Student success requires tenacity and continuous engagement, but can a “social” or “relationships” element also have a significant influence on academic performance? In a sample of Canadian students, Ratelle *et al.* (2013) found that perceived autonomy support from parents, friends, and romantic partners contributed to students’ subjective well-being.

H5: Perceived support from significant others can increase both extrinsic and intrinsic motivation for students.

Ryan and Deci (2000a) note that a successful teacher has to arouse active and volitional forms of extrinsic motivation since not all student tasks are enjoyable even though they are obligatory. Over time the rewards associated with extrinsic motivation may have detrimental effects on intrinsic motivation. If a student starts intrinsically motivated to study for the sake of learning, what will be the motivational effect of a prize won or a good mark, for example? Will the student become even more engaged in studies, or will motivation and enthusiasm wane?

H6: *The motivational profile of students who study in their home language will differ from that of those who study in a foreign language.*

One of our aims was to examine how learning in a different language than one’s mother tongue influences student motivation. A Swedish study (Martensson *et al.* 2012) showed that language learning increased volume and thickness in several brain parts. Neuroplasticity, or the capability of the brain to change in response to stimuli coming from the environment, has a connection with second language learning (Li *et al.* 2014). Thus, we expect that attitudes towards studies would be more ambitious and optimistic among students who have mastered a second language than among those who have not.

H7: *Among students high in intrinsic motivation, extrinsic motivation to achieve diminishes.*

Research Sample, Design, and Methods

The location of the research was the Faculty of Business and Economics at the University of Pécs in Southern Hungary, one of the largest higher educational institutions in Hungary (Centre for 2019). The business school has a wide range of academic programs from undergraduate programs to Ph.D. in Hungarian and also in English.

Participants

The participants were students, the total size of the sample was 471; gender distribution was: 49,9 % female, 50,1% male. The age range was from 18 to 35 years. See Table 1 for a breakdown of the sample characteristics.

Table 1. Participant characteristics based on the study program

Characteristic	Frequency	Percentage (% of 471)
Business school students	471	100
College for advanced study group (those students who listen special subjects and working on own research)	38	8
International business school students	40	8
Erasmus exchange students	31	7
Hungarian language master students	193	41
Hungarian language bachelor students	96	20
English program students	73	16

Source: own construction

Instrument

We used a modified version of Vallerand *et al.* (1992-1993) motivation-survey the “Academic Motivation Scale AMSC-28”. The questionnaire was used in English, and it was also translated into Hungarian (Brislin 1970) The scale was modified to show the relationship between the individual items.

The common core characteristic was the student’s status; they were all studying at the business school. Sampling was random, and self-selecting

answering the questionnaire was rewarded only with a thank you – students filled in the questionnaire as a hard copy or via the Internet. The answers were analyzed with SPSS software.

FINDINGS

In this section, we describe the results of the analysis of the students’ answers and hypotheses testing.

H1: *Students are more likely to pursue university business studies for career advancement*

opportunities offered by certification and degree accomplishments than for the enjoyment of business learning itself.

We did correspondence and multi-correspondence analysis. This method is more suitable to use for comparison of categorical variables than correlation analysis (Greenacre 2009). We composed pairs from the questions and looked for stochastic relationships between these; then, we presented these cases with cross tabs that show the stochastic relationships. The comparisons were: questions about high salaries, the importance of jobs, and good life. We found weak to average stochastic relationships between questions dealing with “good life” or “prestige” and a university degree. Students associate a “prestigious job” with a “good life” and a “better salary” with a “prestigious job,” here, the level of the stochastic relationship was high. These results do not prove that the certificate is more important than knowledge, but it shows that students value extrinsic motivators, such as a “prestigious job,” or a “better salary.” Interestingly though, when we examined the connection between a “better salary” and the “feeling of importance,” we got an only average relationship. When testing the relationship between “pleasure in studying,” “to surpass myself,” “better salary,” and “university education,” we found no connection. This fact can be interpreted that way that students in this model did not associate studies with “pleasure.”

H2: Students who are intrinsically motivated in their business studies achieve higher academic results than those who are extrinsically motivated.

We examined two extreme cases: entirely intrinsically motivated students and entirely extrinsically motivated students, by considering the average values of the answers and the grade point averages. The focal point of concern here was the GPA of students with the two different motivational attitudes, and if the intrinsically motivated students would have better GPAs than the extrinsically motivated ones. (In Hungary, grades range from 1 – failure to 5 – excellent.) We found that the GPA of students having extrinsic motivation is lower (3.733) than the GPA of students having intrinsic motivation (4.067). The difference is not high (0.334), but there is an absolute difference, so students with intrinsic motivation have a better GPA than students with extrinsic motivation.

H3: A shift away from extrinsic motivation and toward intrinsic motivation will be most pronounced among students who achieve higher academic results.

We examined those students who had the best GPAs in the last two semesters (more than 4.02)

and considered the type of these students' motivation. The results point towards students having high GPAs who also have a high level of intrinsic motivation. Still, at the same time, they also have a very high level of extrinsic motivation. Even if this shift happens, extrinsic motivation stays important for academically excellent students.

H4: Extrinsic motivation can lead to high academic results but also less enjoyment by students with the learning process.

With correspondence analysis and comparison of 72 question pairs, we looked for a connection between extrinsic motivation and happiness. In all cases, the level of significance was higher than 0.1, so there is no relationship between extrinsic motivation and happiness. We tried to test the opposite case: if there is no connection between extrinsic motivation and happiness, then *is there one* between intrinsic motivation and happiness? We found the because of the research design, this kind of testing was not possible to do. Moreover, happiness is a complex construct where studying is just one factor among many others.

H5: Perceived support from significant others can increase both extrinsic and intrinsic motivation for students.

Research points to a significant number of problems of student-faculty relationships, how they are managed, and what faculty can do to care and still not to become burned out in the process (Chory & Offstein 2017). In our case, in a Central-Eastern European environment, it was interesting to test students' attitudes towards faculty and parental support. Our findings were that extrinsic reference persons have a significant influence on the motivation process. Students in this sample expressed their preference towards lecturers who are helpful and who aided them in their academic problems. When testing for parental support, the conclusion was that 65.4% of parents support their children's studies in this sample. The nature of the support was not specified; besides money, non-monetary forms of aid could be implied.

H6: The motivational profile of students who study in their home language will differ from that of these who study in a foreign language.

We tested this hypothesis using cluster analysis. The assumption was that students who study in a foreign language would have a better GPA. We created five student clusters from the answers: bad (GPA < 2.5), weak (GPA > 3.25), average (GPA > 3.8), good (GPA > 4.5), excellent (GPA > 4.5). Results:

- The students in the select College for advanced study group (elite group) and the Erasmus

students had the *best* grade point averages. It was more than 4.5 in the last two semesters.

- The students who studied in the English language business program of the University – both at bachelor and master level – had *good* grade point averages in the last two semesters.
- The students who studied at the University's business school in Hungarian at the master level and in Hungarian at the bachelor level had *weak and average* grade point averages in the last two semesters.
- International students who had relationships with the business school and who studied in any foreign language had the *worst* grade point averages in the last two semesters.

We had to reject H6. Those students had the best results who were on the Erasmus exchange and in the College for advanced study group. Language did not appear here as a primary influencing element.

H7: Among students high in intrinsic motivation, extrinsic motivation to achieve diminishes

Testing H3, we examined those students who had more than 4.02 GPA in the last two semesters and found that both extrinsic and intrinsic motivation was vital for them. Results show that these two kinds of motivation coexisted in the same student in this sample, so H7 was not supported.

DISCUSSION

In this study, we explored university students' motivation in the framework of self-determination theory to find out whether students study for the sake of extrinsic motivators: or for the sake of intrinsic motivators: that is, knowledge.

Context matters here, the students in the research were business students, and their materialistic attitude and instrumental approach to life are proved by, for example, Kasser and Achevia (2002) or Vansteenkiste *et al.* (2006). Our findings similar; students valued extrinsic motivators they could obtain by learning and getting their degree. This approach has a positive side, as well as students value the extrinsic motivators, so they work hard to get them. Through this process, they obtain the knowledge that is necessary for their future career.

We also approached a controversial and still intensely debated issue: the question of extrinsic motivators undermining intrinsic motivation. Ryan and Deci (2000a) claim that internalization of behavior may happen sequentially from totally extrinsic to intrinsic motivation via introjected, identified, and integrated regulation. They also

express that the sequence is not necessarily in this order. Self-determination theorists agree in general that extrinsic motivators can undermine intrinsic motivation in specific contexts (for example, in Deci *et al.* 2001). Fang and Gerhart (2012) found no evidence of a damaging effect of pay-for-performance plans on intrinsic interest at the workplace. Research done by Lepper *et al.* (2005) proved an even more complicating aspect of this dichotomy; in young students (from primary to secondary school), intrinsic motivation diminished as they progressed in their studies.

In this student sample, extrinsic and intrinsic motivation coexisted in the same person. Moreover, rewards were significant for intrinsically motivated students. The question is still open; how far do we have to go in chasing intrinsic motivation?

Although learning is not necessarily associated with happiness, it is essential to examine what causes more joy or satisfaction to the student. The context seems to be meaningful and controversial as Kasser and Ryan (2001) found that a high relative focus on extrinsic goals was associated with lower levels of well-being. High attainment of extrinsic goals was negatively or neutrally associated with functioning as an individual. As our research design was not suitable for testing happiness, we cannot say that intrinsic motivation leads to higher levels of happiness. Hypothesis H1 was supported without any doubt: H5; students need the help and support of their social environment, parents, and teachers, the results confirm the self-determination theory's statement (Ryan & Deci 2000b).

In the 21st century, in the context of globalization, teaching and learning will also happen at languages that are not the mother tongue of the student. We expected that students who learn at a foreign language would have a more ambitious attitude towards learning than those students who do not speak a language well enough to study a profession in it. The results were controversial; on the one hand, students who studied in a foreign language had the worst grade point averages. On the other hand, students in the English language business program were in the "good group." The results of the students could have been influenced by other factors than motivation, for example, the level of language knowledge, or problems of adaptation to a foreign land, difficulties of managing cultural differences at the Erasmus students. In this case, we specifically wanted to test the relationship between motivation and language, but this connection has moderating factors that were not handled here.

APPLICATIONS, LIMITATIONS, AND FUTURE DIRECTIONS

This study showed that in this business school environment, ambitious students value both intrinsic and extrinsic motivators. The value of extrinsic motivators supports the motivational strategies educators use at universities, such as competitions, markings, and students' lists, league tables. Their nature does not seem to be significantly detrimental in this materialistic environment as it does not destroy learning motivation. One of the limitations of this study was that we could not discern among students who study purely for the awards and others who study for *both* the extrinsic motivators and knowledge. Our database is not yet fully developed to generalize our findings, and the research was via a self-report questionnaire. We did not examine the different social groups of students in our sample and gender differences.

A severe limitation of this research is the self-reporting nature of the questionnaire. The answers come via the students' perception. Their perception of studies might not be corresponding to the perception of their lecturers about them. In the next phase of the research, we plan to build in measures that come from the environment about the student.

CONCLUSIONS

The hypothesis at the beginning of the research was: *Students are more likely to pursue university business studies for career advancement opportunities offered by certification and degree accomplishments than for the enjoyment of business learning itself.*

The answer cannot be a simple “for the certificate” or “for the knowledge,” in this case, results in support that both are important for those students who study in business school. Students who are eager to learn are also keen to be recognized for their effort and knowledge, and they value extrinsic motivators.

Results give ample food for thought for further research. Should university lecturers encourage intrinsic motivation at all costs? If a student can be induced to learn by integrated regulation, the activity will be autonomous, well recognized, and valued by the individual, although not done for the “fun” of the action. The other side is not so positive. There is evidence of less happiness and less life – fulfillment if the individual concentrates exclusively on extrinsic motivators. Important though, for schools that self-fulfillment can come from a wide range of activities, not necessarily from studying. Learning can be a means to an end, and if done honestly and with sincere effort, then schools can accomplish their goals of teaching.

On the other hand, student motivation has its importance from the point of view of the employer as well. If a student is studying (that is working) for the reason of getting better knowledge and the intrinsic value of work, then this attitude may stay later on the job. In the employment situation, the employer frequently meets circumstances where there are no or very few extrinsic motivators. Money may be scarce; leaders may not be very well educated in providing coaching feedback, or may not have fine-honed motivating skills. The employee may do work for the feeling of accomplishment or being an honest and ethical individual, not only for money. Money *is* an important issue, but the employee attitude goes further than gold.

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