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THE LEVEL OF ACADEMIC MOTIVATION AND PERCEIVED STRESS AMONG
ESTONIAN-SPEAKING AND RUSSIAN-SPEAKING STUDENTS FROM UNIVERSITY OF
TARTU

Research paper

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Abstract

This research purpose was to find the difference between the level of academic motivation and stress of Estonian-speaking and Russian-speaking students at the University of Tartu. For data collection were used Stress questionnaire ASQ and questions about academic motivation and self-efficacy from General Self-Efficacy Scale. Sample consisted of 70 Estonian-speaking and 40 Russian-speaking students from the University of Tartu. Comparison of means, factor analysis and Pearson correlation were used as data processing methods. It was found that Estonian-speaking students have higher level of academic motivation and lower level of stress from relationships and uncertainty related to study process. Also the research found weak negative link between native language and academic motivation and weak positive link between native language and stress from relationships and uncertainty related to study process.

Keywords: Students, motivation, self-efficacy, stress, native language

Pealkiri: TARTU ÜLIKOOLI EESTI JA VENE EMAKEELEGA ÜLIÕPILASTE AKADEEMILISE MOTIVATSIOONI JA STRESSITASEME VÕRDLUS

Kokkuvõte

Selle uurimistöö eesmärk oli leida erinevusi Tartu ülikooli eesti ja vene emakeelega üliõpilaste akadeemilise motivatsiooni ja stressi taseme vahel. Andmete kogumiseks kasutati stressi küsimustikku ASQ ja küsimusi akadeemilise motivatsiooni ja enesetõhususe. Valim koosnes 70 Tartu ülikooli tudengist, kelle emakeel on eesti keel ja 40, kelle emakeel on vene keel. Andmetöötlusmeetoditena kasutati keskmiste võrdlust, faktorianalüüsi ja Pearsoni korrelatsiooni. Leiti, et eestikeelsetel tudengitel on kõrgem akadeemiline motivatsioon ning madalam suhete ja õppeprotsessi ebakindlusega seotud stressitase. Samuti leiti uurimistöös nõrk negatiivne seos emakeele ja akadeemilise motivatsiooni vahel ning nõrk positiivne seos emakeele ning stressiga suhetest ja õppeprotsessiga seotud ebakindlusest vahel.

Märksõnad: üliõpilased, motivatsioon, enesetõhusus, stress, emakeel

Introduction

The object of given research is the relation between level of academic motivation and percieved stress among Estonian-speaking and Russian-speaking students. Topic is very essential and actual in the modern world with the high level of stress stimuluses and in the educational conditions where academic motivation is the priority of a student himself. There are many psychological, social and cultural factors that have signifcant impact on academic motivation: parental influence, peer pressure, self-efficacy, expectations, effort, anxiety and stress, goal-setting skill, learning strategies, teaching style and school environment, extra priorities, language (Yilmaz et al., 2017). All this creates a complex concept of motivation but how perceived stress affects the academic motivation is not so certainly studied.

For many university students, new educational and social environments often lead to stress. Students have to adapt to new amount of class work and actually going to the new class where must fit to new social networks they face. Many students try to work along studying in university and also they deal with home longing, they may experience it because of being away from home for the first time. Here is important to assess the whole student's life in new conditions. And this stress caused by new life conditions may also contribute to anxiety, depression or risky behavior which can interfere with students' academic performance. (Martin et al., 2006)

There are no research papers and statistics in open access that study the difference of level of motivation and stess between Estonian-speaking students and students from the biggest national minority in Estonia – Russian-speaking people whose mother tongue is not Estonian. Free higher education in Estonia is mostly on Estonian and there commes additional obsticle for Russian-speaking students. Students of Russian-medium schools study Estonian as foreign language (Estonian as the second language) therefore the level of language comparing to native speakers is lower. (Ministry of Education and Research of the Republic of Estonia, 2020) Russian-speaking students must to learn the same amount of academic material as Estonian-speaking students and be assessed according by the same criterias, additionally they must to pay more attention on learning the foreign language and usually without any language support and mentorship. In several research papers was found that students whose main language of learning process is second language get less social support and it is directly linked to their stress level (Poyrazli et al., 2004) and they can feel cultural separation (Khawaja and Dempsey, 2008). This students require more effort for communication and it was more exhaustive for them (Brown, 2008). Second language can have a significant negative impact on students' learning of the subject content (Phakiti et al., 2013). They experience relational difficulties and issues due to their

communication in a second language (Andrade, 2006). Social interaction in second language may include feelings of embarrassment, sadness, and frustration associated with expressing oneself and not being understood by native speakers because it is the spoken aspect that is most stressful part of the second language experience (Brown, 2008). In addition there is second language anxiety that can have an impact on students' well-being and academic achievement (Crawford and Candlin, 2013).

The aim of given research paper is to figure out the relation between academic motivation, stress and native language and to figure out the difference of level of motivation and stess between Estonian-speaking and Russian-speaking students. A greater understanding of the factors underlying academic stress of students with different native languages may lead to improved stress-management strategies and better cultural and social integration process in higher education in Estonia.

The dissertation consists of two chapters. The first chapter provides a theoretical overview of motivation, stress and the relations between them. In addition the relatioship between level of stress and the mother tongue. The second chapter contains the empirical part of the study, which describes the method and results of the study.

Motivation

Motivation is an important psychological concept in academic learning. Motivation may be casaully described as something that gives energy to the action, directs and sustains it and every action requires effort and insistence (motivation) to operate for a long period of time. Motivation has been and still is studied in an academic context, as it is one of the most important factors in learning.

In the literature, motivation is identified as a force that stimulates, directs and sustains behavior (Brophy, 1998, Glynn and Koballa, 2006; Palmer, 2005), caused by certain needs (Weiner, 1985). Motivation is a fundamental and essential variable in education that helps to promote new learning and performance (Cavas, 2011). Even with proper curriculum, good instructions and methods, it is not enough to guarantee the success of learning without motivation (Dornyei and Csizer, 1998). A motivated person is consistent and willing to act (Ryan & Deci, 2000b).

While learning motivation is defined as "the tendency of a student to find meaningful and useful academic activities and to try to obtain academic benefits from them". Learning motivation or academic motivation leads to purposeful activities in the performance of learning tasks in order

to possess some skills. (Brophy, 1998) In the school or university context, we usually talk about motivation as a student's low or high interest in learning (Krull, 2000). Whether student is eager to be involved in learning process or not. Motivated students enjoy learning and performing challenging academic tasks, are mastery-oriented, want to understand the material and are good at the subject. They are ready to participate in the learning process and are responsible for it. (Mägi, 2015) In addition when a person is motivated to study or work, they are more willing to to spend time and energy on it (McMillan and Weyers, 2011).

There are different reasons why somebody feels interest and have motivation. Some students study to get smarter and provide themselves with well-paid job in future, some of them study to please their parents, some students just enjoy the process of learning etc. Those reasons may be called as motives. Motives are hypothetical constructions that explain why people do what they do. Motives are distinguished from related objectives (direct goals of successive activities) and strategies (methods used to achieve the objectives and thus to satisfy the motive). For example - a person responds to hunger (motive) by going to a restaurant (strategy) to eat (goal). (Brophy, 2010) Thus in situation with university, student want to become competetive on the labor (motive) that is why attends lessons and studies learning materials (strategy) to get knowledge, skills and in the end degree (goal). As it was written earlier motivation can be caused by different needs and the difference of strategy choosen affects the final result like academic performance. That is why there are different reasons why students are at university and still studning there.

One of the most widely acknowledged theories on this topic is the self-determination theory. It suggests that learning motivation can be divided into three forms of motivation: intrinsic motivation, extrinsic motivation, and amotivation. The idea of self-determination theory is based on the influence of personal needs, drive and their interaction with external pressures. (Vallerand et al., 1992)

Intrinsic motivation comes from personal needs and satisfaction. It may be described as "I want to do it" motivation. It is also split into three subcategories based on the type of satisfaction: motivation to know, motivation to accomplish, and motivation to experience stimulation. First subcategory of motivation refers to motivation based on the enjoyment of learning new things. Second subcategory refers to the motive to accomplish, to achieve or to create new things. And the third one refers to motivation to achieve sensory stimulation while performing an activity. Extrinsic motivation depends on environmental factors or a sense of obligation. It may be described as "I must to do it" motivation. This kind of motivation is deriving from external influences or rewards. For example in university this motives may be grades, praising from

teacher or classmates, better social status, avoidance of shame, fear to be punished or excluded etc. The combination of both types is called integrated regulation. It involves the highest level of self-determination (internal motivation) among the external motivation subtypes. This type of motivation is externally regulated and at the same time the individual enjoys the activity itself. In contrast, amotivation is the absence of drive and self-determination. (Ryan and Deci, 2000) When students do not want to attend university or to be involved in education at all – they have no motives for that.

In the context of educational process this model may be described with an example. In case of external motivation student is preparing for the exam out of fear to get bad mark and to be kicked out of the college. On the other hand internally motivated students mostly prepare for the exam out of the interest for course and they understand the practical implementation of it in own life. But there is always a combination of different kinds of motivation and there may be even different level of motivation towards certain parts of the course at the university.

Feeling of interest or better to say liking or disliking the learning is closely related to emotions. Students who strive only for mastery experience more positive emotions than students who value only good results, they experience less positive and more negative emotions (Mägi, 2015). Positive emotions between the strong motivation and the learning process affect the cognitive process positively, the cognitive process delivers new knowledge; new knowledge learned also strengthens positive feelings (motivation). It means that positive emotions are very significant factor to obtain high-quality motivation. Students who experience more negative emotions and have negative attitude towards learning process itself are less motivated. (Kim and Pekrun, 2014) Autonomous learning motivation (inner motivation and integrated regulation) is related to positive emotions and effective learning strategies. Autonomously motivated students focus better, manage their time more efficiently, have higher grades and are more active in the learning process. (Mägi, 2015) It means that students have to feel mostly positive emotions towards learning and that helps to keep motivation high. It is important that students have access to mental support and that they do not experience many negative emotions like frustration, fear, loneliness.

Moreover motivation involves also a set of beliefs, perceptions, values, information and actions that are totally related to each other (Dobos, 1996). Motivation cannot be adequately described without taking in account personal, social and cultural factors (Krull, 2000). This mean that people with different social and cultural background may have different motives and intensity of them also varies. Bandura (1982) in his Self-efficacy theory describes how self-confidence is related to interpretation of ones achivements. People with stronger self-efficacy do not give up

easily when they should encounter obstacles, unlike those with low self-efficacy who give up even with a slight obstacle. Students with higher self-efficacy who believe in their success also have better academic success.

Stress and Motivation

Students face issues related to learning, family, work, and finance in their daily lives. If there are many difficulties and they exceed the load that they can undertake, pressure called stress is generated. Students often feel stress over grades, relationships, money, being lonely, and their parents. Concerns about academic performance (grades) are the most common form of stressor for college (Martin et al., 2006).

Stress can be generated in different ways and by various circumstances. Lazarus defined stress as the relationship between a person and the environment, where a person evaluates the situation and opportunities to cope with stress (Folkman, 2013). According to the transactional model of stress, the occurrence of stress is extremely subjective based on how individuals evaluate the stressful events they encounter (Lazarus and Folkman, 1984).

Besides Bandura (1982) suggested that self-efficacy is connected with the stressor appraisal process. It was found that self-efficacy was positively associated with challenging, as opposed to obstructing, stressor appraisals. This may mean that students' perceptions of their own abilities could be essential in predicting how they will respond to stress. For instance, students low in self-efficacy may perceive stressors that normally should be considered challenging as in fact hindering. Low opinion of student's own abilities may cause them to look at any academic requirement as something that is impossible to accomplish. Once a student perceives a challenge stressor as an obstacle, he may be at risk for a variety of negative academic outcomes. (Martin et al., 2006)

Moreover Schwabe and Wolf (2010) showed that stress during learning in humans can have negative effects on memory performance, therefore it affects on academic performance and causes more negative emotions. Here stress acts as a distractor during studying the learning material. Stress has the impact on academic performance and motivation and vice versa (Park et al., 2012). According to the Yerkes–Dodson law there is a certain optimum of motivation at which the activity is performed best (for a given person, in a specific situation). Different tasks require different levels of arousal for optimal performance. For simple tasks performance improves as arousal increases. For complex tasks, the performance thereafter declines as arousal increases. Means that moderate stress can be good and motivating to take action. However, excessive stress can have a detrimental effect on motivation. (Yerkes and Dodson, 1908) This

law shows that there is positive and negative stress, it is also supported by Hans Selye theory. So-called „Father of stress" Hans Selye has introduced the concept of stress dichotomy. He extended his work in stress to distinguish good and bad in terms of adaptiveness toward stress response (Perdrizet, 1997). Good stress is called eustress, which is positive for both emotions and the physical body. Eustress improves performance. Thus, eustress is necessary for us to be ready to act, for example, a student may feel stressed before the exam, but at the same time his performance on the exam is high. Bad stress or distress is associated with negative feelings and can damage the human immune system (Lazarus and Folkman, 1984). Negative stress is an imbalance between risk and protective factors that is expressed in negative thoughts, feelings, and behaviors. (Li et al., 2016)

Students, who face the optimum level of stress that can be caused by complex and difficult tasks, seem have higher level of motivation and performance but the high level of stress and especially if students doubt in own abilities lessen the motivation.

Hypoteses:

H1 - Estonian-speaking students have higher level of academic motivation and lower level of stress than Russian-speaking students.

H2 – Native language has significant relation with level of stress and academic motivation.

H3 - There is significant relation between academic motivation and stress.

Method

The survey was conducted among the students of the University of Tartu, using various questionnaires submitted through the research environment Kaemus of the Institute of Psychology of the University of Tartu. The invitation to participate in the study was disseminated in different faculties and colleges of University of Tartu, social media groups and among course mates.

To measure stress and motivation were used two scales: stress questionnaire ASQ (Abouserie, 1994) and General Self-Efficacy Scale (Rimm and Jerusalem, 1999).

Estonian version of stress questionnaire ASQ (Tiirik, 2019) was used to measure students' level of stress. There are 23 questions in scale and it measures academic sources of stress. Summarizing the answers of all 23 questions gives the academic stress score. The higher score indicates the higher level of stress.

Estonian version of General Self-Efficacy Scale (Üpraus, 2009) consist of 13 questions about the motivation and self-efficacy of students in higher education. 7 questions were about academic motivation and 6 questions about self-efficacy in higher education.

Answers on both scales were given on on a 5-point Likert scale.

In addition to the scales, an additional questions about participants for background, demographic data and average grade were asked.

IBM SPSS Statistics 22 was used to process the data. Mean and mode were used as descriptive statistics. Factor analysis was used as data processing methods. Pearson correlation was used to find relationships between variables.

Sample

The sample was a comfort sample that included students from the University of Tartu. 207 students started filling in the questionnaire, unfortunately many students stopped answering at the very beginning. The reason for the large drop-out can be the fact that we distributed the Estonian-language questionnaire also among students whose mother tongue is Russian, however, they probably did not want to answer on the Estonian-language questionnaire or it seemed complicated for them.

110 of them remained in the final sample (90 of them are women). The age of the sample ranged from 19 to 57 years, the mean age was 25.4 (SD = 7.5) years, and most respondents were in the age of 22. Among the respondents 64.9% (N = 72) studied in bachelor's, 24.3% (N = 27) in master's and 10.8% (N = 12) in integrated studies. There are 70 (64%) students who have chosen Estonian as their mother tongue and 40 (36%) students with Russian mother tongue.

Results

In order to lessen the amount of factors a factor analysis of the questionnaire of General Self-Efficacy Scale was conducted. Principle Component method was used to separate the factors and the oblique rotation method (Direct Oblimin) to rotate the factors. The results of the factor analysis showed that the two-dimensional model describes the data well (Table 1). The model describes 43% of the variability of the observed variables. Two statements had low connections with any of factors and they did not fit well into the model. That is why they were left out for further analysis. The first factor was named as "self-efficacy in learning" and its' Cronbach's

alpha was α = .78. The second factor was called as „learning motivation" and its' Cronbach's alpha α = .71, which indicates that the internal reliability of the questionnaire is good.

Table 1. General Self-Efficacy Scale factors

	Self-efficacy in learning	Learning motivation
I am interested in many of the subjects taught at the university.		0.64
Learning allows me to get to know the world around me better.		0.69
Knowledge allows me to achieve more in life.		0.77
What I have learned allows me better to understand my relationships with other people.		0.59
When I leave college, I have many opportunities to use my knowledge.		0.67
If necessary, I spend more time studying, but I want to understand things.	0.52	
I am usually good at learning tasks.	0.85	
I have no difficulty in understanding what is being discussed in the lecture.	0.57	
I'm a good student.	0.75	
I think I can succeed in college.	0.84	
I know that if I work harder, my learning outcomes are better.	0.55	

Note: the minimum value for factor loads was set to 0.35. The model describes 43% of the variability of the observed variables.

Secondly, a factor analysis of Stress scale was conducted. Principle Component method was used to separate the factors and the oblique rotation method (Direct Oblimin) to rotate the factors. The results of the factor analysis showed that the five-dimensional model describes the data well (Table 2). The model describes 52% of the variability of the observed variables. Two statements had low connections with any of factors and they did not fit well into the model. They were left out for further analysis.

The first factor was named as "Learning and results" and its' Cronbach's alpha was α = .33. The second factor was called as „Management of time" and its' Cronbach's alpha α = .71. Third factor was called as „Concern about future" and its' Cronbach's alpha α = .69. Fourth factor was called as „Social relationships and health" and its' Cronbach's alpha α = .69. Fifth factor was called as „Uncertainty related to study process" and its' Cronbach's alpha α = .68.

Table 2. Stress scale factor load

To what extent do the following situations/ statements cause stress in you?	Learning and results	Management of time	Concern about future	Social relationships and health	Uncertainty related to study process
Exams and their results	-0.74				
Studying for exams	-0.74				
The inner need to do everything perfectly	-0.42				
Boring lectures	0.63				
Too much is going on at once		0.69			
There is too much to learn		0.81			
Not enough time to study		0.77			
Difficulties with time planning		0.42			
Not enough time to pursue your interests		0.55			
Material worries (money, etc.)			0.6		
The expectation of others that I would do everything very well			0.46		
Concern for the future			0.72		
I'm not sure I've made the right career choices			0.73		
Difficulties in relationships				0.66	
Conflicts with the people I live with				0.45	
Problems with your health				0.61	
Loneliness				0.68	
Home longing				0.64	
Unclear tasks					0.73
Unclear course objectives					0.77
Uninteresting curriculum					0.5

Note: The minimum value for factor loads is set to 0.4. The model describes 52% of the observed variable variability.

Then the sums of factors „learning motivation" and „self-efficacy in learning" were calculated the measure means of this factors according to native language. The difference between Estonian-speaking and Russian-speaking score of the factor „learning motivation" is 1.67 and the size of effect is medium (Cohen's $d = 0.57$). This difference is statistically significant ($p < 0.05$). The difference between Estonian-speaking and Russian-speaking score of the factor „self-efficacy in learning" is 1.63 and the size of effect is medium (Cohen's $d = 0.43$). This difference is statistically significant ($p < 0.05$) (Table 3). Based on this, it can be said that Estonian-speaking students are more academically motivated and have higher academic self-efficacy than Russian-speaking students.

Table 3. Difference of motivation of Estonian-speaking and Russian-speaking students

Factor	Native language	Mean	Difference of mean	SD	Cohen's d
Learning motivation	Estonian	21.14	1.67*	2.88	0.57
	Russian	19.48		3.00	
Self-efficacy in learning	Estonian	24.14	1.63*	3.35	0.43
	Russian	22.51		4.25	

Note: N = 110 (Estonian-speaking - 70, Russian-speaking - 40); * differences statistically significant p < 0.05

Later on the sums of factors „Learning and results", „Management of time", „Concern about future", „Social relationships and health" and „Uncertainty related to study process" were calculated the measure means of this factors according to native language. The differences between Estonian-speaking and Russian-speaking scores of the factors „Learning and results", „Management of time", „Concern about future" are small and difference is statistically insignificant (p > 0.05). But the difference between Estonian-speaking and Russian-speaking score of the factor „Social relationships and health" is -2.18 and the size of effect is medium (Cohen's $d = 0.56$). In addition the difference between score of the factor „Uncertainty related to study process" is -1.01 and the size of effect is medium (Cohen's $d = 0.44$). Differences of last two factors are statistically significant (p < 0.05) (Table 4). Based on this, it can be said that Estonian-speaking students experience less stress than Russian-speaking students from relationships and health and from uncertainty related to study process.

Table 4. Difference of stress of Estonian-speaking and Russian-speaking students

Factor	Native language	Mean	Difference of mean	SD	Cohen's d
Learning and results	Estonian	10.33	-0.07	2.50	0.03
	Russian	10.4		2.39	
Management of time	Estonian	12.97	0.15	3.63	0.04
	Russian	12.83		4.04	
Concern about future	Estonian	9.11	-0.17	3.59	0.05
	Russian	9.28		3.56	
Social relationships and health	Estonian	6.76	-2.18*	3.33	0.56
	Russian	8.95		4.38	
Uncertainty related to study process	Estonian	5.76	-1.01*	2.33	0.44
	Russian	6.77		2.25	

Note: N = 110 (Estonian-speaking - 70, Russian-speaking - 40); * differences statistically significant p < 0.05

Then the Pearson correlation method was used for further analyze the data (Table 5). Correlation was found between students' native language, learning motivation, self-efficacy and stress factors.

Table 5. Correlation table

	Native language	Learning motivation	Self-efficacy in learning	Learning and results	Management of time	Concern about future	Social relationships and health
Learning motivation	-0.27*						
Self-efficacy in learning	-0.21*	0.44*					
Learning and results	0.01	-0.08	0.01				
Management of time	-0.02	-0.12	-0.16	0.39*			
Concern about future	0.02	-0.23*	-0.2*	0.24*	0.24*		
Social relationships and health	0.27*	-0.15	-0.19	0.32*	0.22*	0.41*	
Uncertainty related to study process	0.21*	-0.26**	-0.15	0.42*	0.48*	0.32*	0.42*

Note: * correlation is statistically significant p < 0.05

In the present research three hypotheses were presented. The first hypotese stated "Estonian-speaking students have higher level of academic motivation and lower level of stress than Russian-speaking students" and it was confirmed. Estonian-speaking students have higher score in learning motivation (p = 0.005, Cohen's d = 0.57) and self-efficacy in learning (p = 0.04, Cohen's d = 0.43) and lower lever of stress from relationships, health (p = 0.005, Cohen's d = 0.56) and uncertainty related to study process (p = 0.03, Cohen's d = 0.44) than Russian-speaking students. The second hypotese was "Native language has significant relation with level of stress and academic motivation". Native language has low and positive relation with stress factors like „Social relationships and health" (r = 0.27, p = 0.005) and „Uncertainty related to study process" (r = 0.21, p = 0.03). And native language has low and negative relation with factors of motivation like „learning motivation" (r = -0.27, p = 0.005) and „self-efficacy in learning" (r = -0.21, p = 0.03). Therefore second hypotese was partually confirmed. Third hypotese stated that „There is significant relation between academic motivation and stress" and that was partually confirmed as well. Factor „learning motivation" is weakly and negatively

related to stress factors „Concern about future" (r = -0.23, p = 0.01) and „Uncertainty related to study process" (r = -0.26, p = 0.006). Factor of motivation „self-efficacy in learning" is weakly and negatively related to stress factor „Concern about future" (r = -0.2, p = 0.04).

Discussion

The goal of the research paper is to find the difference of level of motivation and stess between Estonian-speaking and Russian-speaking students and relation between native language, motivation and stress. 110 students of University of Tartu took part in the questionnaire. 70 of them have Estonian as mother tongue and 40 have Russian as native language. Considering that students in higher education use mostly Estonian language in learning process, Russian-speaking students have more variety of stress factors comparing to Estonian-speaking because of language aspect that may affect learning process, social life, network, use of city facilities in city, leisure etc (Khawaja and Dempsey, 2008). In the reseach paper was stated first hypotese that Estonian-speaking students have higher level of academic motivation and lower level of stress than Russian-speaking students. This hypotese was confirmed by data collected from students. The differences of levels of academic motivation and stress have medium size effect and are statistically significant. It may me be explained by the amount of stress that student who learn on their secong language get. By several researches was shown that students who use second language for studying require greater effort to overcome difficulties in their learning environment compared to native students (Andrade, 2006). This students have less social support (Poyrazli et al., 2004), feel cultural separation (Khawaja & Dempsey, 2008), have difficulties in communication in a second language (Andrade, 2006) and may experience negative feelings when expressing oneself (Brown, 2008). Communicating with others in second language is one of the most stressful aspects in second language experience and that is why significant stress factor for Russian-speaking students is related to relationships, loneliness and home longing. This kind of communication is quite exhaustive for them (Brown, 2008). This kind of stress may be also caused by second language anxiety that certainly have an impact on students' well-being and academic achievement (Crawford and Candlin, 2013). Also there is a significant negative impact of Second language on students' understanding the subject content and preparation for exams (Phakiti et al., 2013). It explains why Russian-speaking students' stress may be caused by factor of uncertainty related to study process. Therefore second hypotese was partially confirmed. Second hypotese stated that native language has significant relation with level of stress and academic motivation. Weak negative relation was found with academic motivation and weak positive stress factors realtionships and health and uncertainty related to study process.

Means that those two variables are significantly related to the language and if you know native language better you experience less stress and have higher academic motivation. But the correlation is quite weak, so futher studies needed. Language is an additional stressor for Russian-speaking students and may have more distressful impact (Perdrizet, 1997) and cause more negative feelings (Lazarus and Folkman, 1984). And according to the Yerkes–Dodson law this stress factor may play a significant role. Estonian-speaking students may have higher level of motivation becuase of optimum level of stress and Russian-speaking students experience more than optimum amount of stress therefore have lower level of motivation. (Yerkes and Dodson, 1908) Despite on different limitation it may be suggested by the results of given research paper that Russian-speaking students require more social support and cultural integration during learning process other vise they may have lower academic motivation, higher stress, have difficulties with communication and understanding and feel separated.

Third hypotese said that there is significant relation between academic motivation and stress. And it was also partually confirmed. Learning motivation factor is weakly negatively linked to stress factors of concern about future and uncertainty about learning process. Means that students who know that they have made right career choise, who have no concerns about money and future plans, who do not exerience stress when do not understand the learning subject, it's tasks and goals have higher level of academic motivation. And students with higher academic self-effeicacy stress out less about future plans. Different studenst obtain various psychological, social and cultural backgrounds and those factors have effect on the level of academic motivation and how they interprete stress factors (Yilmaz et al, 2017). This low correlation may be explained by the transactional model of stress that says that occurrence of stress is extremely subjective based on how individuals evaluate the stressful events they encounter (Lazarus and Folkman, 1984). Also Bandura (1982) stated that self-efficacy is connected with the stressor appraisal process. So it is depends on individual how he explains this stressor to himself. But in this research found weak correlation does not support Yerkes-Dodson law that explains how moderate stress can be good and motivate to take action. And does not correlate with the found relation of stress and academic motivation in Park's (2012) work. The problem may be explained in the next part where limitations are described.

Limitations

There are several limitations to this research paper. First, there were problems with the small sample, which was not balanced by native language, gender or age. Significantly more female students and students who know Estonian well to pass the survey participated in the study. Second, a significant amount of the initial respondents left answering the questions in the very beginning of survey. It may be caused because of the length of survey and that language was Estonian. Russian-speaking students with lower level of Estonian could not participate, but they may have lover level of motivation and higher level of stress. Third, it was a comfort sample and is not very representative. Therefore certainly no definite conclusions should be done on the basis of this research. In order to get better results, this study should be repeated already with a larger and representative sample.

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