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## THE ANALYSIS OF THE RECIPROCITY OF SUBJECTS AND ITS IMPACT ON THE QUALITY OF STUDIES

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**Annotation.** The article treats the interaction of subjects of studies' programme, its impact on the average of subject groups of study course and study results of the whole semester. In 2005 the ministers responsible for higher education who took part in the meeting in Bergen especially put stress on the significance of one function of higher education studies such as the importance of preparation of a proper specialist for the labour market. One of the major conditions of this function implementation is the balanced and properly prepared studies' programme. The academic law of the Republic of Lithuania regulates the extent of studies' programmes which are prepared and kept in our country and it is supplemented by the schedule of the first level of provided degree and general requirements of integral studies' programmes. The more detailed instructions for the scheme of studies' programme are introduced in the regulations of particular study courses. The training group of studies' programme presents the final version of a programme. Our analysed studies' programmes are structured according to the provided order but the training process affects the fundamental aspects of police power specialists' training. The major programme part is amounted to the subjects of studies' course, the less part is structured by the subjects of special course studies and the least part is amounted to the subjects of general academic studies. Students gain not only theoretical knowledge but also its practice skills which are well-established enough. The article treats the studies' results of students of Mykolas Romeris University such as exam evaluation differences and similarities, statistical interrelationships and potential aspects of their impact on studies' quality. The results of studies achievements' evaluation of 5 semesters have been analysed and the article explains how the general progress level of students varies, how the studies of subjects of different studies' courses influence the studies' progress and if specific studies aspects influence the changes of mental features of students, if they involve the reflective results of acquirement of specific abilities.

**Keywords:** a studies' programme; a regular studies' form; studies course subjects; specific abilities; an impact on the studies' result; a correlation between subjects.

### INTRODUCTION

Education is the long-term and purposeful process of the formation of a personality. The deliberate and single-minded impact is kept during the course of upbringing on purpose to acquire physical, intellectual, moral and spiritual powers<sup>1</sup>.

The studies in a higher education institution could be named as the common stage of formation of a particular order, personality or specialist. The process of studies, stage condition and quality have been analysed large enough and in various aspects<sup>2,3</sup>. The studies'

<sup>1</sup> Stonkus S. *Sporto terminų žodynas*. 1 Tomas. Kaunas: LKKA, 2002.

<sup>2</sup> Aleksandravičiūtė B. ir kt. *Lietuvos studijų būklės apžvalga*. - Kaišiadorys: Printėja, 2014.

process in this article is analysed in significantly narrow regard such as in the framework of analysis of subjects' results of two autonomous studies' programmes. We go deep into the studies' process relatively differently, whereas we survey the peculiarities of subjects' interaction and in the train of them the formative tendencies of the change of programme structure.

The significant part of education process is also the practice training of special abilities. The practice of this character is closely linked with the development of human mental traits; such cognitive processes as senses, perception, memory, thinking and attention concentration are activated; the abilities of stimulation of efforts of will are developed; the intense causes of chosen practice are formed and so on<sup>4</sup>.

The studies' subjects which give knowledge about the formation of attitudes of healthy and physically active life are not registered as compulsory ones in the studies' programmes of many higher education institutions. On purpose to train a competitive specialist it is not enough to give only problem-oriented knowledge in respect of a prospective profession. Agreeably to the circumstances of contemporary competition self-education and learning process do not terminate on receipt of a diploma of higher education. On purpose not to get behind with sufficiently high life pace the permanent life studies<sup>5</sup> and operative changes are essential. It is important to choose proper attitudes correctly and form skills and abilities which could support the level of physical and psychical health which is adequate to person's objectives that a human could intensively be able to set goals to achieve<sup>6</sup>.

The motivation of purposeful and specific work (particular tasks, references) helps to train the essential physical abilities such as the common endurance of speed and strength. In pursuance of results of a long while continuous practice both physical and special psychical endurance is necessary which is inseparable from well-established goals' motivation, strong will and so on<sup>7</sup>. The work which requires particular manual efforts affects a person's will single-mindedly and positively, whereas the implementation of psychological attitudes help to

<sup>3</sup> *Mokslo ir studijų būklės apžvalgos*. 2014 m. [interactive], <http://www.mosta.lt/lt/stebesena/bukles-apzvalgos> [accessed 2015-04-08].

<sup>4</sup> Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.

<sup>5</sup> Gonestas E., Strielčiūnas R. *Taikomoji statistika*. Kaunas: LKKA, 2003.

<sup>6</sup> Penedo F., Dahn J.R. Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*. 2005. (18)2: 189-193

<sup>7</sup> Muliarčikas A. *Lengvaatlečių fizinių ypatybių ugdymo aspektai*. Ištvermė. *Lengvoji atletika*. Sudarytojas Stanislovaitis A., Poderys J. – Kaunas: LKKA, 2008. p. 431-443.

train peculiar endurance by executing the particular practice. An aim and motivation are closely linked with a will because the will without motivation cannot assert<sup>8</sup>.

The conception of a will is explained diversely, however, the essential peculiarities of its treatment are similar ones. A. C. Puny has defined it as the part of active mind and moral senses<sup>9</sup>. C. G. Jung describes a will as power process which is evoked by voluntary motivation<sup>10</sup>. The scientists who analyse the aspects of sports education treat a will as “mental process which is the deliberate choice and regulation of actions which help a person to clear obstacles to achieve a goal. A will is externally evidenced by actions and movements.”<sup>11,12,13</sup>. Other researchers do not use the concept of a will they use the conception of motivation which unites a will, senses, instincts and others<sup>14,15,16</sup>. The reasons which determine and stimulate a deliberate demand to make a reach for particular goals activate and formulate the system of motives’ implementation which is named as motivation<sup>17,18,19,20</sup>. The leading factor which encourages to act is a demand. Some people’s requirements are more important than the other ones and take a different place in the hierachic system<sup>21,22,23,24</sup>. It is very important to choose relevant means to an end. A pushing action usually allows desirable results to be achieved with reason by overcoming difficulties. In those cases the obstacles come into existence by making a reach for a goal a strong-willed person demonstrates sufficiently strong power of a will<sup>25</sup>.

<sup>8</sup> Ilin E.P. *Psychologia voli* [The psychology of will]. 2-e izd. – Spb.: Piter, 2009.

<sup>9</sup> Puny A.C. O suchnosti dvigatelnix navikov [About the essence of the movement skills]. *Voprosi psychologiji*. 1964.(1): 94-103.

<sup>10</sup> Jung C.G. *Psichologiniai tipai*. Vilnius: Margi raštai, 2013.

<sup>11</sup> Augis R. ir kt. *Psichologijos žodynas*. Vilnius: Mokslo ir enciklopedijų leidykla, 1993.

<sup>12</sup> Stonkus S. *Sporto terminų žodynas*. 1 Tomas. Kaunas: LKKA, 2002.

<sup>13</sup> Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.

<sup>14</sup> Myers. D.G. Psichologija. –Kaunas: Poligrafija ir informatika, 2008, p. 575-628.

<sup>15</sup> Fürst M. *Psichologija*. –Vilnius: LUMEN, 1998 .

<sup>16</sup> Jusienė R., Laurinavičius A. *Psichologija*. Vilnius: Mykolo Romerio universiteto Leidybos centras. 2007.

<sup>17</sup> Myers. D.G. op.cit. p. 575-628.

<sup>18</sup> Lekavičienė R., Vasiliauskaitė Z., Matulienė G. ir kt. *Psichologija šiandien*. Kaunas: Technologija, 2007.

<sup>19</sup> Augis R. ir kt. *Psichologijos žodynas*. Vilnius: Mokslo ir enciklopedijų leidykla, 1993.

<sup>20</sup> Malinauskas R. *Sporto psichologijos pagrindai*. Kaunas : LKKA, 2003.

<sup>21</sup> Maslow A.H. *Motivation and personality* (2nd ed.). New York: Harper&Row. 1970.

<sup>22</sup> Myers. D.G. op.cit. p. 575-628.

<sup>23</sup> Lekavičienė R., Vasiliauskaitė Z., Matulienė G. ir kt. „*Ibid*“.

<sup>24</sup> Jusienė R., Laurinavičius A. „*Ibid*“.

<sup>25</sup> Lapė J., Navikas G. *Psichologijos jvadas*. Vilius: Lietuvos teisės universiteto leidybos centras, 2003 .

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The personalities who control their feelings, who are pushing, determined, sure of their facilities and able to use their abilities of physical fitness most have more chances to achieve provided objectives in the stressful situations in practice<sup>26</sup>.

During the course of lifetime a human collects information and forms practical skills. Intelligence is consistently trained and the chances of the use of human abilities are expanded by practising them in the new specific situations and by tackling problems<sup>27,28,29</sup>.

The analysis of intelligence like of many psychology objects is done by various aspects or sections. In the nonfiction there are given the characteristics of intelligence types such as common, multiple, emotional<sup>30</sup>, social, particular and conceptual<sup>31</sup>. It is also characterised “kinetic” (almost perfect one’s body perception and control) and sporting intelligence which is “the common level of thinking abilities and mental development which allows to prepare in series, single-mindedly and purposefully” for physically active practice<sup>32</sup>.

By way of complex objectives in any practice, physical and mental energy is used which is closely linked. The physically active lifestyle of purposeful impact positively influences a general working condition, physical and mental health. The higher level of movement abilities and physical fitness the hotter senses of a human and more intense sensibility, it is possible to concentrate better, prepare and accomplish work properly in difficult conditions<sup>33,34</sup>.

Studies are defined as practice, at the same time energetic resources of a human are being used. Nerve energy is used by the major part. Consistent and purposeful mental practice positively influences the training of attention concentration, persistence, will and other psychical qualities<sup>35</sup>. The subjects of sports studies are not on the list of compulsory subjects in the programmes of studies of many higher education institutions (physical education and the like). The aim of such subjects is to give information about the methodical aspects of formation of attitudes of healthy and physically active lifestyle. The main part of studies’ process takes place in auditoriums. The process of more active physical practice is

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<sup>26</sup> Meidus L. Sportininkų (rankininkų) valios ugdymo galimybės. *Acta paedagogica vilnensis*. 2005, 15: 156-164.

<sup>27</sup> Myers. D.G. *Psichologija*. –Kaunas: Poligrafija ir informatika, 2008, p. 529-574.

<sup>28</sup> Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.

<sup>29</sup> Fürst M. *Psichologija*. – Vilnius: LUMEN, 1998 .

<sup>30</sup> Myers. D.G. „*Ibid*“.

<sup>31</sup> Meidus L. „*Ibid*“.

<sup>32</sup> Stonkus S. *Sportyto terminų žodynas*. 1 Tomas. Kaunas: LKKA, 2002.

<sup>33</sup> Meidus L. „*Ibid*“.

<sup>34</sup> Martens R. *Coaches Guide to Sport Psychology*. Illinois: Human Kinetics Publishers Campaign 1987.

<sup>35</sup> Buzan T. *Lavinkite atmintj*. Vilnius: Alma littera, 2012.

almost at a standstill which combines the formation of movement abilities and physical qualities' training, the use and accumulation of physical energy flows. It is understandable that deliberate and pushing students choose an extra subject of sports or exercise themselves in the athletic clubs.

The studies of a chosen programme in the Faculty of Public Security of Mykolas Romeris University take from 3,5 to 4 years. The major part of studies' programmes consists of the subjects of law and public security. The specific subjects are being studied while peculiar knowledge is being given and phenomenally physical abilities are being trained during 3 – 6 semesters.

The **aim** of the article is to find out the peculiarities of interrelationship of subjects.

The **object** and **methods** of the research. The results of sessions of 5 semesters of students ( $n=80$ ) from Mykolas Romeris University Faculty of Public Security have been analysed. The exam values of two groups (40 students in each) and two different studies' programmes have been researched. The subjects have been linked up to the groups according to the findings on view and studies programme structure of regulation references of studies' courses. We have a theory that such batching has helped to look at the influence of subjects on the quality of studies' process by the more objective aspect.

The exam values of 30 subjects of each studies' programme have been analysed. The methods of literary analysis and mathematical statistics have been used. The SPSS 12.0 package was used for statistical analysis of empirical data. The reliability of correlation rate has been determined by assessing the meanings of Student's criterion the correlation has been characterised according to the references of the 1<sup>st</sup> table<sup>36</sup>.

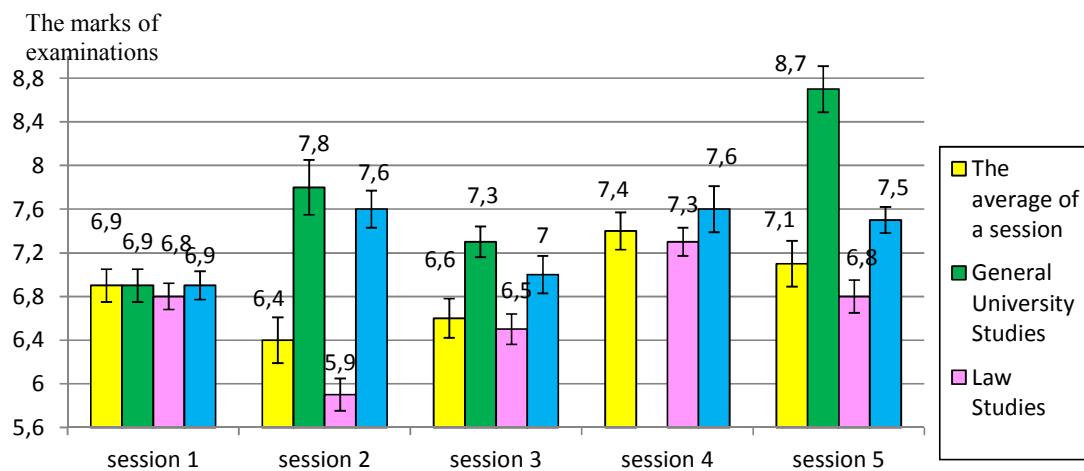
**Table 1.** Correlation evaluation

Number meaning of correlation rate	Correlation evaluation
0	Correlation does not exist; findings under consideration do not affect each other
$\pm(0,09 - 0,19)$	Particularly weak correlation (statistical)
$\pm(0,2 - 0,49)$	Weak correlation (statistical)
$\pm(0,5 - 0,69)$	Average correlation (statistical)
$\pm(0,7 - 0,99)$	Strong correlation (statistical)
$\pm 1$	The straight-line functional link between findings under consideration

<sup>36</sup> Gonetas E., Strielčiūnas R. *Taikomoji statistika*. Kaunas: LKKA, 2003.

## THE RESULTS OF THE RESEARCH

The average of results of the first session of a semester of students who study in the Field of Law Studies has amounted to the point of  $\bar{X}=6,9+0,15$ . The knowledge of students' group of subjects of general university studies ( $\bar{X}=6,9 \pm 0,15$ ), Special Studies ( $\bar{X}=6,9 \pm 0,13$ ) and Law Studies ( $\bar{X}=6,8 \pm 0,12$ ) has been evaluated by nearly equal marks. Only the values of three exams from 7 subjects in the research such as Theory of Law ( $p<0,001$ ), Psychology ( $p<0,001$ ) and Executive Activities of the Police ( $p<0,05$ ) have been statistically credibly different than the general average of a semester (1 pic.).



**1 pic.** The results of examinations of 1 – 5 sessions of the Field of Law Studies (according to the groups of subjects of studies' fields)

The knowledge of Law Studies has been evaluated by the lower score than the average of the session; other subjects have been rated by the higher marks. The reliable average correlation has been determined between the exam results of all subjects in the first semester (Table 2).

The average of examinations of the 1<sup>st</sup> semester of students from the Field of Public Security has amounted to the point of  $\bar{X}=7,14+0,19$ . The results of a group of Society and Special (Professional) Studies have been statistically credibly ( $p<0,01$ ) higher compared with the significance of the average of session's examinations. Only one result of Law Studies' examination has been lower ( $p<0,001$ ) than the average of a session (2 pic.). The reliable difference has not been determined between the average of other subjects' examinations and a session. The results of subjects' exams of this semester are connected by the statistically reliable correlation of medium intensity (Table 3).

**Table 2.** The rates of correlation of exams' results of the first session of the Field Law Studies

SUBJECTS	TC(S)	PSM(G)	ITPS(S)	CL(L)	EAP(L)	P(G)
<b>TC(S)</b>						
<b>PSM(G)</b>	0,676**					
<b>ITPS(S)</b>	0,286***	0,528**				
<b>CL(L)</b>	0,599**	0,681**	0,375***			
<b>EAP(L)</b>	0,473***	0,578**	0,318***	0,306***		
<b>P(G)</b>	0,467***	0,422***	0,282***	0,535**	0,398***	
<b>TL(L)</b>	0,599**	0,610**	0,480***	0,498***	0,345***	0,395***

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies  
 \*\*Average correlation; \*\*\*Weak correlation

**Table 3** The rates of correlation of exams' results of the first session of the Field of Public Security Studies

SUBJECTS	CL(L)	EAP(S)	PE(P)	PLF(G)
<b>CL(L)</b>				
<b>EAP(S)</b>	0,540**			
<b>PE(P)</b>	0,543**	0,621**		
<b>PLF(G)</b>	0,575**	0,367***	0,564**	
<b>LST(L)</b>	0,593**	0,583**	0,520**	0,575**

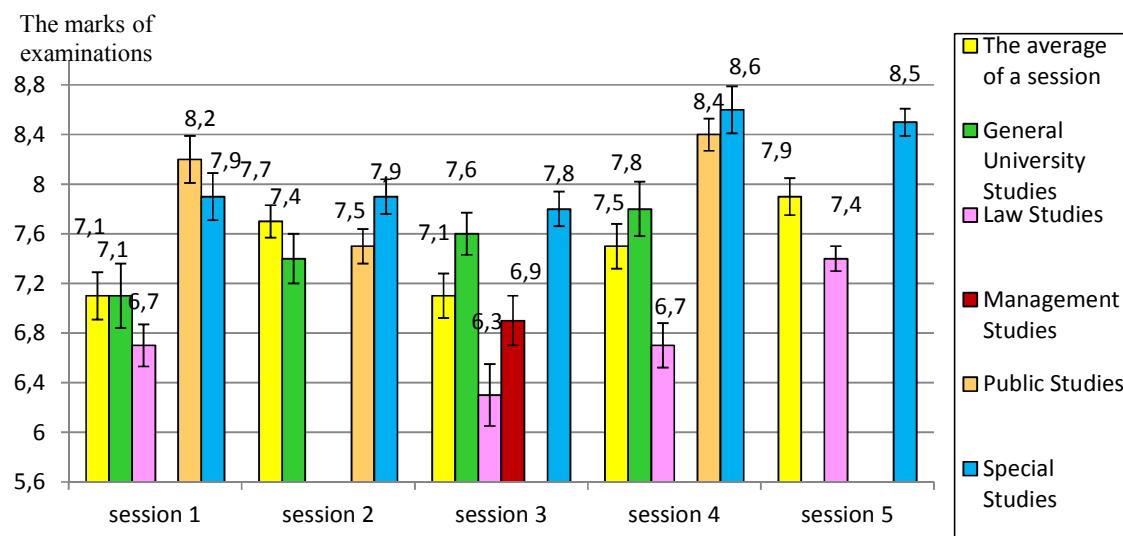
\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies; (P) – Public Studies  
 \*\*Average correlation; \*\*\*Weak correlation

The students of the Field of Law and Public Security Studies took 5 examinations in the session of the second semester. The average of results of the second session of students from the Field of Law Studies ( $\bar{X}=6,37+0,21$ ;  $p<0,05$ ) is statistically credibly lower than the first one. The averages of examinations of a group of this field have been lower ( $\bar{X}=5,9+0,15$ ;  $p<0,01$ ) than they are of the subjects of General University ( $\bar{X}=7,8+0,25$ ) and Special Studies ( $\bar{X}=7,60+0,17$ ) (1pic.). The reliable correlative statistical link has been related only to the results of subjects of Law Studies group, Law and General University Studies (Professional Ethics) and one of the examinations of Special (Tactics of Police Activity) Studies' group (Table 4).

**Table 4.** The rates of correlation of exams' results of the second session of the Field Law Studies

SUBJECTS	AL(L)	LL(L)	WS(S)	TPA(S)
<b>AL(L)</b>				
<b>LL(L)</b>	0,423***			
<b>WS(S)</b>	-0,203***	-0,202***		
<b>TPA(S)</b>	0,259***	-0,090	0,057	
<b>PE(G)</b>	0,498***	0,531**	-0,166	-0,164

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies  
 \*\*Average correlation; \*\*\*Weak correlation



**2 pic.** The results of examinations of 1 – 5 sessions of the Field of Public Security Studies  
 (according to the groups of subjects of studies' fields)

The average of results of the second semester's session of students from the Field of Public Security Studies ( $\bar{X}=7,7+0,13$ ) has been statistically credibly ( $p<0,01$ ) higher than the first one. The subjects of this semester have been referred to the group of special, public and general university studies. Only the knowledge of subjects of Society Studies (Psychology –  $\bar{X}=8,4+0,21$ ;  $p<0,01$  and Traffic Check –  $\bar{X}=6,6+0,21$ ;  $p<0,01$ ) has been evaluated by a higher and lower mark as compared to the average of a session (1 pic.). The reliable correlation has not been defined only between the results of examinations of Information Technologies and Professional Tactics (Table 5).

**Table 5.** The rates of correlation of exams' results of the second session of the Field of Public Security Studies

SUBJECTS	PT(P)	IT(B)	PT(S)	P(P)
<b>PT(P)</b>				
<b>IT(G)</b>	0,305***			
<b>PT(S)</b>	0,447***	-0,069		
<b>P(P)</b>	0,648**	0,134	0,294***	
<b>Opt.curs.(S)</b>	0,463***	0,192	0,237***	0,419***

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (P) – Public Studies

\*\*Average correlation; \*\*\*Weak correlation

There are 7 subjects provided in the programme of Law Studies in the third semester, whereas 6 subjects are in the programme of Public Security. The students of both fields of studies have started studying the subjects of special physical training (Combat Self-Defence

and Combat Wrestling) since the third semester. The content of these subjects is structured of the studies of theoretical and practical aspects such as the methods of manual abilities' training and combat wrestling movements. The corresponding mental qualities (courage, persistence, will and others) are being developed collectively during the studies of aforesaid subjects which have to influence all the process of studies positively.

The average of examinations of students from the Field of Law Studies has amounted to the point of  $\bar{X}=6,61+0,18$ . It is statistically credibly higher ( $p<0,01$ ) only than the average of the second session. The knowledge of general university subjects has been evaluated by full marks ( $\bar{X}=7,3+0,14$ ;  $p<0,01$ ) and the knowledge of subjects of a group of Special Studies ( $\bar{X}=7,0+0,17$ ;  $p<0,05$ ) and Law Studies ( $\bar{X}=6,5+0,14$ ;  $p>0,05$ ) has been valued by slightly lower marks (1 pic.). The correlative relations have been analysed between the evaluation of examinations and it has been estimated that they all are related by a reliable or weak statistical link except the subjects of Combat Self-Defence and Administrative Law (Table 6).

The average of results of the third session of Public Security Studies has amounted to the point of  $\bar{X}=7,1+0,18$ . It is statistically credibly lower ( $p<0,01$ ) than the average of the second session. The examinations of subjects of Special Studies ( $\bar{X}=7,8+0,14$ ;  $p<0,001$ ) and general university studies ( $\bar{X}=7,6+0,17$ ,  $p<0,05$ ) have been evaluated by higher marks than the average of a session, whereas the examinations of subjects of Law Studies ( $\bar{X}=6,3+0,25$ ;  $p<0,01$ ) have been valued by lower marks (2 pic.). The exams' results of many subjects are related by a reliable correlative (statistical) link (Table 7). There is not a reliable relation only between the results of examinations of subjects as Foreign Languages and Theory of Economics.

**Table 6.** The rates of correlation of exams' results of the third session of the Field Law Studies

SUBJECTS	AL(L)	CL(L)	CSD(S)	ESP(G)	PL(G)	FMFMA(S)
AL(L)						
CL(L)	0,469 ***					
CSD(S)	0,029	0,253 ***				
ESP(G)	0,202 ***	0,708**	0,236 ***			
PL(G)	0,170 ***	0,485 ***	0,555**	0,547**		
FMFMA(S)	0,344 ***	0,329 ***	0,355 ***	0,200 ***	0,440 ***	
APP(LT)	0,198 ***	0,521**	0,436 ***	0,481 ***	0,575**	0,211 ***

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies

\*\*Average correlation; \*\*\*Weak correlation

**Table 7.** The rates of correlation of exams' results of the third session of the Field of Public Security Studies

SUBJECTS	AL(L)	TEFT(M)	P(G)	CW(S)	FLSP(G)
<b>AL(L)</b>					
<b>TEFT(M)</b>	0,524**				
<b>P(G)</b>	0,551**	0,322***			
<b>CW(S)</b>	0,533**	0,416***	0,324***		
<b>FLSP(G)</b>	0,374***	0,056	0,401***	0,223***	
<b>APP(S)</b>	0,377***	0,365***	0,197	0,390***	0,312***

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies; (M) – Management Studies  
 \*\*Average correlation; \*\*\*Weak correlation

The students from the Field of Law Studies took 4 examinations in the fourth session which are assigned to the group of subjects of Law and Special Studies. The results of subjects' exams of groups from the Field of Law and Special Studies ( $\bar{X}=7,3\pm0,13$  and  $7,6\pm0,21$  points) have been similar in accordance with mathematical statistics ( $p>0,05$ ) (1 pic.). The importance of exams' average of all subjects of a session is related by a weak or modest (statistical) relation of interdependence (Table 8).

The students from the Field of Public Security Studies took 6 examinations in the 4<sup>th</sup> session which belong to four groups of subjects of studies. The average of a session has amounted to the point of  $\bar{X}=7,5\pm0,18$ . The averages of examinations according to the groups of subjects of studies have been as follows:  $\bar{X}=6,7\pm0,18$  ( $p<0,001$ ) – the subjects of Law Studies,  $\bar{X}=7,8\pm0,22$  ( $p>0,05$ ) – the subjects of general university studies,  $\bar{X}=8,4\pm0,13$  ( $p<0,01$ ) – the subjects of Public Studies,  $\bar{X}=8,6\pm0,19$  ( $p<0,001$ ) – the subjects of Special Studies. The importance of marks of all other examinations except the subject of general university studies (foreign language,  $\bar{X}=7,5\pm1,06$ ) has differed statistically credibly from the average of a session (2 pic.). A reliable correlative (statistical) relation is between the results of examinations of all subjects (Table 9).

**Table 8.** The rates of correlation of exams' results of the fourth session of the Field Law Studies

SUBJECTS	CL(L)	Cr.L(L)	CI(L)
<b>CL(L)</b>			
<b>Cr.L(L)</b>	0,503**		
<b>CI(L)</b>	0,506**	0,138	
<b>Opt.curs.(S)</b>	0,419***	0,185	0,420***

\*The groups of studies' subjects: (S) - Special Studies; (L) - Law Studies. \*\*Average correlation; \*\*\*Weak correlation

**Table 9** The rates of correlation of exams' results of the fourth session of the Field of Public Security Studies

SUBJECTS	APL(L)	CL(L)	CW(S)	FKAFM(P)	FLSP(G)
<b>APL(L)</b>					
<b>CL(L)</b>	0,682**				
<b>CW(S)</b>	0,215***	0,590**			
<b>FKAFM(P)</b>	0,572**	0,550**	0,349***		
<b>FLSP(G)</b>	0,638**	0,459***	0,167	0,490***	
<b>Opt.curs.(P)</b>	0,205***	0,245***	0,189	0,212***	0,141

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies; (P) – Public Studies  
 \*\*Average correlation; \*\*\*Weak correlation

There are 7 subjects in the programme of the Field of Law Studies in the 5<sup>th</sup> semester. The average of exams of a session has amounted to the point of  $\bar{X}=7,1\pm0,21$ . As compared to this, the averages of examinations of subjects which were grouped according to the field of studies have been as follows:  $\bar{X}=6,8\pm0,15$  ( $p>0,05$ ) – Law Studies;  $\bar{X}=7,5\pm0,12$  ( $p<0,05$ ) – Special Studies;  $\bar{X}=8,7\pm0,21$  ( $p<0,001$ ) – general university studies (1 pic.). Almost all indices of evaluation of exams of aforesaid studies' groups have been interdependent by a reliable correlative relation. The statistical relation does not exist between the subjects' results of Weapons and Shooting and the European Union Law according to the data of correlation of exams' evaluation. The results of Combat Self-Defence have been related by the reliable correlation only to the exams' results of Weapons and Shooting and Management of Public Statutory Services (Table 10).

**Table 10.** The rates of correlation of exams' results of the fifth session of the Field Law Studies

SUBJECTS	CL(L)	EUL(L)	WS(S)	CSD(S)	CI(L)	MPSS(G)
<b>CL(L)</b>						
<b>EUL(L)</b>	0,504**					
<b>WS(S)</b>	0,140	-0,027				
<b>CSD(S)</b>	0,085	0,099	0,295***			
<b>CI(L)</b>	0,472***	0,199	-0,177	-0,194		
<b>MPSS(G)</b>	0,200***	0,640**	-0,294***	0,022	0,365***	
<b>IPL(L)</b>	0,527**	0,705**	-0,133	0,074	0,515**	0,646**

\*The groups of studies' subjects: (G) - General University Studies; (S) - Special Studies; (L) - Law Studies  
 \*\*Average correlation; \*\*\*Weak correlation

The average of 6 examinations of the fifth session of the Field of Public Security Studies has amounted to the point of  $\bar{X}=7,9\pm0,15$ . The average of exams of a group of Law Studies has made the point of  $\bar{X}=7,4\pm0,1$  ( $p<0,05$ ), whereas the average of Special Studies has

amounted to the point of  $\bar{X}=8,6\pm0,11$  ( $p<0,05$ ). The importance of exams' average of subjects of both fields of studies has differed from the average of a semester significantly credibly (2 pic.). The meanings of average of exams' results of all the subjects (4 from the Field of Law Studies and 2 from the Field of Special Studies) have been related by the modest correlative (statistical) relations of average intensity or weak but really close ones (Table 11).

**Table 11.** The rates of correlation of exams' results of the fifth session of the Field of Public Security Studies

SUBJECTS	CL(L)	CPL(L)	CLP(L)	CW(S)	BCI(L)
<b>CL(L)</b>					
<b>CPL(L)</b>	0,525**				
<b>CLP(L)</b>	0,661**	0,619**			
<b>CW(S)</b>	0,501**	0,459***	0,576**		
<b>BCI(L)</b>	0,615**	0,639**	0,728**	0,413***	
<b>PSP(S)</b>	0,486***	0,563**	0,643**	0,445***	0,563**

\*The groups of studies' subjects: (S) - Special Studies; (L) - Law Studies

\*\*Average correlation; \*\*\*Weak correlation

There has not been any statistically reliable difference ( $p>0,05$ ) between the results of an exam of Combat Self-Defence of the 3<sup>rd</sup> and 5<sup>th</sup> semesters of students from the Field of Law Studies. The tendency of score development of endurance tests' results has been estimated only in complex parts of an exam such as common muscles (from  $\bar{X}=6,5\pm0,37$  to  $\bar{X}=6,7\pm0,28$ ;  $p>0,05$ ), arm muscles (from  $\bar{X}=9,1\pm0,66$  to  $\bar{X}=9,9\pm0,84$ ;  $p<0,001$ ) and stomach muscles (from  $\bar{X}=9,2\pm0,51$  to  $\bar{X}=10\pm0,47$ ;  $p<0,001$ ). The results of evaluation of movement technique of Combat Self-Defence have increased statistically significantly (from  $\bar{X}=6,0\pm0,10$  to  $\bar{X}=6,9\pm0,11$ ;  $p<0,001$ ). The marks of results of quickness and explosive strength have decreased insignificantly ( $p>0,05$ ).

The difference of exams' averages of the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> sessions of the subject of Combat Wrestling of the Field of Public Security Studies has been statistically reliable (i.e.  $\bar{X}=7,5\pm0,21$ ;  $\bar{X}=8,6\pm0,19$ ;  $\bar{X}=8,1\pm0,16$ ;  $p<0,05$ ). The indices of evaluation of movement technique of Combat Self-Defence have varied by a similar tendency like the exam results: they were higher in the fourth semester ( $\bar{X}=7,9\pm0,16$ ) than in the third one ( $\bar{X}=6,6 \pm0,17$ ) ( $p<0,001$ ), whereas they were slightly lower in the fifth semester ( $\bar{X}=7,7\pm0,17$ ) ( $p>0,05$ ) than in the fourth one. The results of evaluation of general physical fitness have been increasing steadily ( $\bar{X}=7,4\pm0,32$ ;  $\bar{X}=7,7\pm0,32$ ;  $\bar{X}=7,9\pm0,33$ ;  $p<0,05$ ).

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## THE CONSIDERATION OF RESULTS

The various evaluation areas of studies' process are being widely analysed in the scientific literature from the aims of studies' programmes to the reviews of employers about the quality of specialists' preparation<sup>37,38</sup>. It is defined that various factors influence on students' progressiveness, whereas active attendance of lectures and profound acquirements and sure students' attitudes to pass an examination well increase the chances to gain profound knowledge and receive the higher final mark of an examination<sup>39,40</sup>. There are some factors which also form positive assumptions to implement the studies' process of high quality and make a reach for high results such as the admission to a desirable studies' programme, lecturers' work of high quality, good-natured communication with students, relevant organisation of studies' process and surroundings accommodated to studies and recreation<sup>41</sup>.

Students entered the programmes which peculiarity fragments of studies' process have been analysed in this article by signing on the application list of general admission organisation of association of higher education institutions in Lithuania as the first or second one. It seems likely that initial attitudes (the choice to study a particular studies' programme) have been fairly sure. The studies' programme is readied<sup>42</sup> to provide with the most necessary academic knowledge and to form career skills<sup>43</sup> how it is expected during the studies' process.

The dynamics of results of analysed studies varies according to the subjects' dependence on a studies' field<sup>44,45,46</sup>. The averages of exams' marks of different groups of

<sup>37</sup> Pukelis K., Savickienė I. *Studijų kokybės vertinimo sistemos: institucinių ir programų lygmenys*. [interactive] [http://www.biblioteka.vpu.lt/pedagogika/PDF/2004/73/Pukelis\\_Savickiene\\_.pdf](http://www.biblioteka.vpu.lt/pedagogika/PDF/2004/73/Pukelis_Savickiene_.pdf) [accessed 2015-04-10]

<sup>38</sup> Rastauskienė G.J., Kardelis K., Šeščilienė I.M. ir kt. Lietuvos aukštųjų universitetinių mokyklų dėstytojų požiūris į psichosocialines akademinių darbo sąlygas. *Filosofija. Sociologija*. 2008, 19(4): 80–92.

<sup>39</sup> Kriauzienė R., Laukevičius T., Krylovas A. Studentų mokyklinės matematikos žinių įtaka taikomosios matematikos dalyko studijoms. *Socialinės technologijos*. 2011, 1(2): 316–327.

<sup>40</sup> *Mokymasis visa gyvenima – žinioms, kurybiškumui ir naujovėms skatinti* [ interactive] <http://www.sac.smm.lt/images/12%20Vertimas%20SAC%20Kuribiskumas%20ir%20naujoves%20lietuviu%20k.pdf>

<sup>41</sup> Krautienė S., Jonuševičienė J., Jakubauskienė V., Kavoliūs R. Studentų pasitenkinimo studijų kokybe analizė: Klaipėdos valstybinės kolegijos atvejis. *Mokslo taikomųjų tyrimų įtaka šiuolaikinių studijų kokybei*. 2011, 1(4): 69-78.

<sup>42</sup> Lamanauskas V., Augienė D. Makarskaitė-Petkevičienė R. Universitetinių studijų problematika studentų požiūriu: privalumai ir trūkumai. *Švietimas: Politika, vadyba, kokybė*. 2012, 3(12): 7-18.

<sup>43</sup> *Studijų programų katalogas*. [interactive], [https://stdb.mruni.eu/studiju\\_programu\\_katalogas.php?l=lt](https://stdb.mruni.eu/studiju_programu_katalogas.php?l=lt) [accessed 2015-04-08]

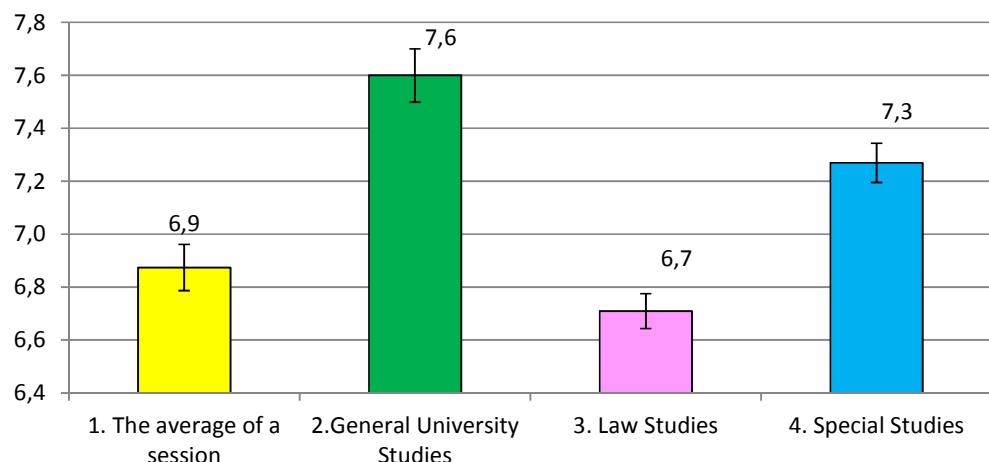
<sup>44</sup> Lietuvos Respublikos švietimo ir mokslo ministro 2008 m. liepos 24 d. įsakymas Nr. ISAK-2208 „Dėl Visuomenės saugumo studijų krypties reglamento patvirtinimo“. *Valstybės žinios*. 2008, Nr. 87-3510.

<sup>45</sup> Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. rugpjūčio 19 d. įsakymas Nr. V-1385 „Dėl teisės studijų krypties aprašo patvirtinimo“. *Valstybės žinios*, 2010, Nr. 102-5306.

<sup>46</sup> Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. balandžio 9 d. įsakymas Nr. V-501 „Dėl laipsnį suteikiančių pirmosios pakopos ir vientisųjų studijų programų bendrujų reikalavimų aprašo patvirtinimo“. *Valstybės žinios*, 2011, Nr. 9-399.

subjects of the Field of Law Studies are almost analogous (1 pic.). The reliability of correlation rates of evaluation of all subjects' knowledge (table) lets us assume that subjects are grouped appropriately to form the programme of 1<sup>st</sup> semester. The averages of examinations of subjects of different studies' fields in the second and third sessions differ reliably significantly from the session averages which are represented in the university information system. The groups' knowledge of special and law subjects in the fourth session has been evaluated by relatively similar marks, whereas the averages of exams' marks of all subjects' groups have reliably differed again in the fifth session. To review the exams' results of groups of 2 – 5 sessions' subjects, the most reliable interdisciplinary statistical interrelationships have been registered in the third semester. Students had to pass 4 subjects' examinations in the fourth semester. It is possible it has influenced that the highest studies' results have been achieved in this semester. The marks of subjects' exams of the Field of Law Studies have been the highest ones in this semester too to compare with the results of other session (pic.). The averages of groups of all studies' subjects of 1 – 5 sessions have varied on the oscillatory curve. The tendency has been observed that the evaluations of examinations of subjects of the Field of Law Studies have been lower than other subjects' (1, 3 pic.).

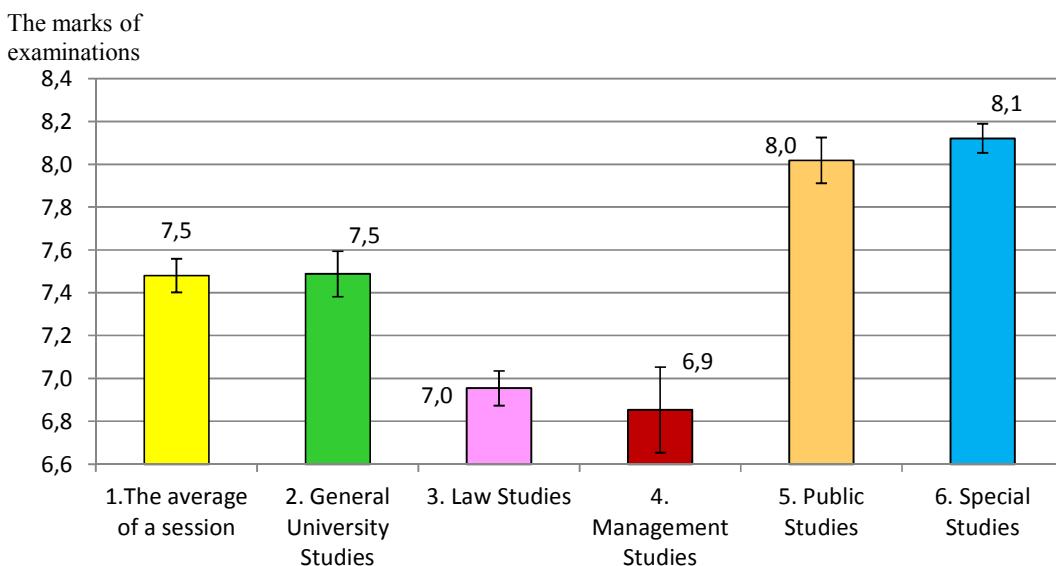
The marks of examinations



**3 pic.** The common average of exams' results of 1 – 5 sessions of the Field of Law Studies (according to the groups of subjects of studies' fields)

The averages of exams' results of groups' subjects of the Field of Public Security Studies have varied diversely from the 1<sup>st</sup> to the 3<sup>rd</sup> session: some of them have increased in series (General University Studies), some of them have decreased (Public and Law Studies). The averages of all subjects' groups have varied on the spiral line since the third session

differently than the averages of the Field of Law Studies (2 pic.). The averages of examinations of students of the Field of Law Studies of all sessions are also lower than the averages of other subjects' groups (4 pic.).



**4 pic.** The common average of exams' results of 1 – 5 sessions of the Field of Public Security Studies  
(according to the groups of subjects of studies' fields)

The average correlation of exams' results of almost all subjects of the first and fifth sessions (Table 3, 5) lets us state the appropriate subjects' choice to design the programmes of these semesters. The analogous assumptions could be made by talking about the second, third and fourth semesters' programmes except some cases. The exams' results of these sessions are related by a weak statistical relation in a larger cases' amount.

The attention should be paid to the content of studies' subjects and tests' requirements by analysing other factors which could influence the studies' quality and session results. Since the third semester the students of the Field of Public Security and Law Studies start studying the subject which is immediately related to special physical training. The students of the first studies' programme study combat wrestling movements for four semesters from the third one for 6 hours a week and improve physical abilities. The students of the Field of Law Studies study the subject of similar content only for two semesters for 3 hours a week. The students of both programmes have to do particular tests of rapidity, strength and endurance and accomplish provided requirements at the end of a semester. Systematically valid activeness, appropriate physical training and purpose to make a reach for particular requirements' implementation make the peculiar system of reciprocity of physical and psychical energy

which has got feedback<sup>47,48,49</sup>. The similar consistent patterns have been noticed in both programmes by analysing the peculiarities of studies' process – the students whose averages of session results are defined as "good" or "very good"<sup>50</sup> have passed the exams of Combat Self-Defence or Combat Wrestling in fairly high marks (from 8 to 10). The specific purposeful physical work influences in parallel psychological preparation too; it strengthens attitudes to make a reach for a goal, helps to lose apathy, neutralizes psychological barriers, concentrates on a proper moment, difficult or long-acting activity and so on<sup>51,52</sup>. It seems likely that the formation of similar qualities is being reflected by the gradual increase of exams' averages of groups of the Fields of Public Security Studies (3 – 5 sessions).

It could be stated that the results of analysis of studies' process of such character generate the necessity of development actions of studies' programme and all studies' process. The stage check-up of studies process and correlation are the essential elements of quality management. Renewal actions have been implemented on purpose to improve the available version of a programme and eliminate the occurred negative aspects of destructive processes such as the lack of studies' quality, lecturers' indifference to their subject, lack of teaching skills, overload of studies' content, insufficient evaluation objectivity, no offering or inadequate support rendering to students and etc.<sup>53,54,55,56,57</sup>.

## CONCLUSIONS

The permanent thorough analysis of studies' programmes and their objectives' implementation structures optimal assumptions to do the essential purposeful corrections on purpose to improve the process of future specialists' preparation. The statistical analysis of

<sup>47</sup> Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.

<sup>48</sup> Martens R. *Sporto psichologijos vadovas treneriui*. Vilnius: Lietuvos sporto informatizacijos centras, 1999.

<sup>49</sup> Adaškevičienė E., *Silpnos sveikatos vaikų fizinis ugdymas*., Klaipėda: Klaipėdos universitetas, 2008.

<sup>50</sup> *Studijų rezultatų vertinimo tvarka*. [ interactive],

[http://www.mruni.eu/mru\\_lt\\_dokumentai/centrai/akademiniu\\_reikalau\\_centras/teises\\_aktai/Vert\\_tvark\\_akt\\_redakc\\_2014\\_06\\_30\\_1.pdf](http://www.mruni.eu/mru_lt_dokumentai/centrai/akademiniu_reikalau_centras/teises_aktai/Vert_tvark_akt_redakc_2014_06_30_1.pdf) [accessed 2015-04-10].

<sup>51</sup> Malinauskas R. *Sporto psichologijos pagrindai*. Kaunas : LKKA, 2003.

<sup>52</sup> Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.

<sup>53</sup> Allan, A., Pileičikienė, N. Dėstymo kokybės vertinimas universitetinėse studijose: studentų apklausos panaudojimo galimybės. *Aukštojo mokslo kokybė*. 2010, (7): 60–87.

<sup>54</sup> Bobrova L., Grajauskas L., Norkus S. Kūno kultūros specialybės universitetinių studijų kokybės vertinimas: studentų nuomonė. *Mokytojų ugdymas*. 2010, 15 (2): 162–176.

<sup>55</sup> Lamanauskas V., Augienė D. Makarskaitė-Petkevičienė R. Universitetinių studijų problematika studentų požiūriu: privalumai ir trūkumai. *Švietimas: Politika, vadyba, kokybė*. 2012, 3(12): 7-18.

<sup>56</sup> Sajienė L., Tamulianė R. Paramos studentams kokybės vertinimo parametrai aukštojo mokslo institucijose. *Aukštojo mokslo kokybė*. 2012 (9): 120-139.

<sup>57</sup> Savickienė I., Pukelis K. Institucinės studijų kokybės vertinimas: dimensijos, kriterijai, rodikliai . *Aukštojo mokslo kokybė*. 2004, (1): 26–37.

dynamics of exams' results lets us evaluate the availability of formation of terminal projects of studies' programmes realistically in a qualitative aspect whereas it indicates its transformation necessity when negative tendencies emerge. The collected data gives a chance to find out the possible variation aspect of students' attitudes in regard to studies and undertake the corresponding means under the necessity. The marked reliable difference of results of particular subjects or their groups signalizes the aspects which have to be noticed such as the studies' quality, lecturers' capacity, their educational abilities, attitude towards a studies' process, availability of studies' methods and tests' format, evaluation objectivity, size of studies' content.

The changes of studies' programme could be done by the larger probability of decision objectivity considering the results of such an analysis and not outgoing 20% limit due to the law. It is likely that the range of correction of studies' programmes and development of educational process could be broadened in consequence of the correlative analysis of session's indices by accomplishing the safe substitution of subjects between semesters. We are of the opinion that it could be purposeful to implement the mathematical statistical analysis between the groups' results of both sessions' subjects and subjects of studies' fields. It could be purposeful to compare the results of analogous sessions of students who study in a particular year.

## REFERENCE

1. Adaškevičienė E., *Silpnos sveikatos vaikų fizinis ugdymas*. Klaipėda: Klaipėdos universitetas, 2008.
2. Aleksandravičiūtė B. ir kt. *Lietuvos studijų būklės apžvalga*. - Kaišiadorys: Printėja, 2014.
3. Allan, A., Pileičikienė, N. Dėstymo kokybės vertinimas universitetinėse studijose: studentų apklausos panaudojimo galimybės. *Aukštojo mokslo kokybė*. 2010, (7).: 60–87.
4. Augis R. ir kt. *Psichologijos žodynas*. Vilnius: Mokslo ir enciklopedijų leidykla, 1993.
5. Bobrova L., Grajauskas L., Norkus S. Kūno kultūros specialybės universitetinių studijų kokybės vertinimas: studentų nuomonė. *Mokytojų ugdymas*. 2010, 15 (2): 162–176.
6. Buzan T. *Lavinkite atmintį*. Vilnius: Alma littera, 2012.
7. Fürst M. *Psichologija*. – Vilnius: LUMEN, 1998 .
8. Gonestas E., Strielčiūnas R. *Taikomoji statistika*. Kaunas: LKKA, 2003.
9. Jung C.G. *Psichologiniai tipai*. Vilnius: Margi raštai, 2013.
10. Ilin E.P. *Psychologia voli* [The psychology of will]. 2-e izd. – Spb.: Piter, 2009.
11. Jusienė R., Laurinavičius A. *Psichologija*. Vilnius: Mykolo Romerio universiteto Leidybos centras. 2007.
12. Kraniauskienė S., Jonuševičienė J., Jakubauskienė V., Kavoliūs R. Studentų pasitenkinimo studijų kokybe analizė: Klaipėdos valstybinės kolegijos atvejis. *Mokslo taikomujų tyrimų įtaka šiuolaikinių studijų kokybei*. 2011, 1(4): 69-78.
13. Kriauzienė R., Laukevičius T., Krylovas A. Studentų mokyklinės matematikos žinių įtaka taikomosios matematikos dalyko studijoms. *Socialinės technologijos*. 2011, 1(2): 316–327.

14. Lamanauskas V., Augienė D. Makarskaitė-Petkevičienė R. Universitetinių studijų problematika studentų požiūriu: privalumai ir trūkumai. *Švietimas: Politika, vadyba, kokybė*. 2012, 3(12): 7-18.
15. Lapė J., Navikas G. *Psichologijos įvadas*. Vilius: Lietuvos teisės universiteto leidybos centras, 2003 .
16. Lekavičienė R., Vasiliauskaitė Z., Matulienė G. ir kt. *Psichologija šiandien*. Kaunas: Technologija, 2007.
17. Lietuvos Respublikos švietimo ir mokslo ministro 2008 m. liepos 24 d. įsakymas Nr. ISAK-2208 „Dėl Visuomenės saugumo studijų krypties reglamento patvirtinimo“. *Valstybės žinios*. 2008, Nr. 87-3510.
18. Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. rugpjūčio 19 d. įsakymas Nr. V-1385 „Dėl teisės studijų krypties aprašo patvirtinimo “. *Valstybės žinios*, 2010, Nr. 102-5306.
19. Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. balandžio 9 d. įsakymas Nr. V-501 „Dėl laipsnį suteikiančių pirmosios pakopos ir vientisųjų studijų programų bendrujų reikalavimų aprašo patvirtinimo“. *Valstybės žinios*, 2011, Nr. 9-399 .
20. Malinauskas R. *Sporto psichologijos pagrindai*. Kaunas : LKKA, 2003.
21. Martens R. *Coaches Guide to Sport Psychology*. Illinois: Human Kinetics Publishers Campaign 1987.
22. Martens R. *Sporto psichologijos vadovas treneriui*. Vilnius: Lietuvos sporto informatizacijos centras, 1999.
23. Maslow A.H. *Motivation and personality* (2nd ed.). New York: Harper&Row. 1970.
24. Meidus L. Sportininkų (rankininkų) valios ugdymo galimybės. *Acta paedagogica vilnensis*. 2005, 15: 156-164.
25. Meidus L. *Sporto psichologija*. Vilnius: Vilniaus pedagoginio universiteto leidykla, 2005.
26. Myers. D.G. *Psichologija*. –Kaunas: Poligrafija ir informatika, 2008, p. 529-574.
27. Myers. D.G. *Psichologija*. –Kaunas: Poligrafija ir informatika, 2008, p. 575-628.
28. *Mokymasis visų gyvenimą – žinioms, kurybiškumui ir naujovėms skatinti* [ interactive] <http://www.sac.smm.lt/images/12%20Vertimas%20SAC%20Kuribiskumas%20ir%20naujoves%20lietuviu%20k.pdf> [ accessed 2015-04-10] .
29. *Mokslo ir studijų būklės apžvalgos*. 2014 m. [interactive], <http://www.mosta.lt/lt/stebesena/bukles-apzvalgos> [accessed 2015-04-08].
30. Muliarčikas A. Lengvaatlečių fizinių ypatybių ugdymo aspektai. Ištvermė. *Lengvoji atletika*. Sudarytojas Stanislovaitis A., Poderys J. – Kaunas: LKKA, 2008. p. 431-443.
31. Penedo F. Dahn J.R. Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*.2005. (18)2: 189-193
32. Pukelis K., Savickienė I. *Studijų kokybės vertinimo sistemos institucinis ir programų lygmenys*. [interactive] [http://www.biblioteka.vpu.lt/pedagogika/PDF/2004/73/Pukelis\\_Savickiene.pdf](http://www.biblioteka.vpu.lt/pedagogika/PDF/2004/73/Pukelis_Savickiene.pdf) [accessed 2015-04-10]
33. Puni A.C. O suchnosti dvigatelnix navikov [About the essence of the movement skills]. *Voprosi psychologiji*. 1964.(1): 94-103.
34. Rastauskiene G.J., Kardelis K., Šeščilienė I.M. ir kt. Lietuvos aukštųjų universitetinių mokyklų dėstytojų požiūris į psichosocialines akademinio darbo sąlygas. *Filosofija. Sociologija*. 2008, 19(4): 80–92.
35. Sajienė L., Tamulianė R. Paramos studentams kokybės vertinimo parametrai aukštojo mokslo institucijose. *Aukštojo mokslo kokybė*. 2012 (9): 120-139.
36. Savickienė I., Pukelis K. Institucinis studijų kokybės vertinimas: dimensijos, kriterijai, rodikliai . *Aukštojo mokslo kokybė*. 2004, (1): 26–37.
37. Stonkus S. *Sporto terminų žodynas*. 1 Tomas. Kaunas: LKKA, 2002.
38. *Studijų programų katalogas*. [interactive], [https://stdb.mruni.eu/studiju\\_programu\\_katalogas.php?l=lt](https://stdb.mruni.eu/studiju_programu_katalogas.php?l=lt) [accessed 2015-04-08].
39. *Studijų rezultatų vertinimo tvarka*. [ interactive], [http://www.mruni.eu/mru\\_lt\\_dokumentai/centrai/akademiniu\\_reikalau\\_centras/teises\\_aktai/Vert\\_tvarck\\_akt\\_redakc\\_2014\\_06\\_30\\_1.pdf](http://www.mruni.eu/mru_lt_dokumentai/centrai/akademiniu_reikalau_centras/teises_aktai/Vert_tvarck_akt_redakc_2014_06_30_1.pdf) [accessed 2015-04-10].

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## STUDIJUOJAMŲ DALYKŲ TARPUSAVIO SĄVEIKOS IR JOS ĮTAKOS STUDIJŲ KOKYBEI ANALIZĖ

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Mykolo Romerio Universitetas

### S a n t r a u k a

Studijų programoms, jų parengimo kokybei taikomi tam tikri reikalavimai - pakankamai tiksliai, aiški ir teisingai suvokiamą informaciją apie programą, jos tikslus, studijų rezultatus, išgyamas kompetencijas; institucijos, kurioje ji vykdoma, galimybę organizuoti ir kokybiškai vykdyti studijų procesą ir t.t. Tai tik keletas sėlygų, pagal kurias reikalaujama parengti programą, ją patvirtinti, gauti leidimą ir pradėti jos vykdymą. Siekiant patikrinti programas kokybę, ivertinti jos aktualumą bei atitinkamą nustatytiems reikalavimams, nacionalinės ir tarptautinės patirties kontekste vykdomas išorinio vertinimo ir akreditavimo procesas. Teigiamai ivertinta studijų programa gali būti akredituota 6 metų laikotarpiui. Per šį periodą studijų proceso eigoje nuolat vykdomas vidinis jos kokybės testavimas, o esant būtinybei gali būti pakoreguota iki 20% studijų programos turinio, kurio šerdž sudaro studijų dalykai. Studijų rezultatus siaurajā prasme įtakoja daugelis sėlygų: studentų nuostatos renkantis studijų programą, studijų proceso organizavimo ypatumai, studijų programos vidinė struktūra, studentų socialinės sėlygos, studijų dalykų programos turinys, apimtis, perteikimo, atsiskaitymų - žinių, mokėjimų, gebėjimų vertinimo ypatumai bei nemažai kitų aspektų. Studijų dalykų nuoseklumas, suderinamumas studijų plane taip pat labai reikšmingi. Labai svarbios yra ir studijuojančiųjų nuostatos, jų poreikis studijuoti ir siekti žinių, kompleksiškai lavinti intelektą, didinti motyvaciją tinkamai pasirengti profesinei veiklai. Studentų studijų kokybei įtakos turi ir valia, kuri aiškinama esanti veikloji proto dalis, jėga, padedanti realizuoti poreikius. Ši „jėga“ stiprinama nuoseklios protinės bei protinės ir fizinės veiklos dėka. Straipsnyje pakankamai siauru aspektu analizuojami Mykolo Romerio universiteto Viešojo saugumo fakulteto dviejų studijų programų 5 sesijų rezultatai, jų dinamikos ypatumai. Statistinės matematikos metodų pagalba nustatytas dviejų imčių po 40 studentų atitinkamai 30 ir 28 egzaminų vertinimų skirtumo patikimumas bei koreliacinis (statistikinis) ryšys. Straipsnio tikslas – išsiaiškinti studijuojamų dalykų tarpusavio ryšio ypatumus. Studijų dalykai, atsižvelgiant į teisės bei visuomenės saugumo studijų krypteių reglamentus, buvo suskirstyti į grupes. Dalykų grupių rezultatai ir sesijų vidurkiai buvo lyginami tarpusavyje. Koreliacinis (statistikinis) ryšys vertintas tarp kiekvienos sesijos dalykų egzaminų rezultatų. Apžvelgus studijų dalykų grupių rezultatų vidurkio dinamikos ypatumus sesijoje, jų tarpusavio bei skirtumo patikimumo nuo sesijos vidurkio reikšmes, sesijos dalykų rezultatų vidurkijų koreliaciinius ryšius, pateiktos apibendrintos rekomendacijos bei išvados apie galimą studijų programos analizės ir studijų proceso kokybės valdymo variantą.

**Pagrindinės sąvokos:** studijų programa; nuolatinė studijų forma; studijų krypties dalykai; specifiniai gebėjimai; įtaka studijų rezultatui; koreliacinis ryšys tarp dalykų.

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