11 - RELATIONSHIPS BETWEEN ATTITUDES AND MOVEMENT ACTIVITIES PERFORMANCE OF SLOVAK UNIVERSITY STUDENTS

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INTRODUCTION

Attitudes belong to the important motivation factors and to factors of the whole personality development, too. Generally the attitude is relatively stable man readiness to react at certain way to persons, groups, situations, things, opinions and ways of behaviour. This enable to define attitude like readiness to react at certain way and it must be stressed that attitudes are accented by emotions and oriented on values (Kollárik, Sollárová, 2004). They cannot be considered being person qualities, but as a relatively firm characteristics, which express his positive or negative position on certain sphere of concrete situation. Attitudes that are formed in connection with activity are defined like clearer, more stable in time, in memory better fixed and more resisting to a change (Výrost, 1989). Olson, Vernon, Harris (2001) realized genetic determination research of individual differences in attitudes and found, that attitude to physical activities demanding movement activity, position to organized sports playing, or attitude to physical fitness are genetically conditioned. By correlation they found, that attitude to physical fitness and attitude to emotion experience positively significantly correlate with physical fitness. The process of attitudes formation takes a course during adolescence, for in this period of individual development man comes into contact with social phenomenon in larger extent. Majority attitudes are stabilized in third person ontological decade. Historical research and findings show even on mutual relationships of terms attitude and value, attitude and need, attitude and behaviour.

At content definition of attitude conception there is the possibility to form following components:

-cognitive (COG), or rational component – it is formed by ideas, opinions of individual about any thing or phenomenon, while as the most complicated are considered opinions regarding evaluation. There was found by research, that in relationship to studies most persons better keep facts, which support their attitudes, than facts that are with it in contradiction,

-emotional (EMO), or feelings component – it relates to emotions connected with thing or phenomenon, while emotions express attitude dynamism to favourable or unfavourable thing related with pleasant or unpleasant emotional feeling to attitude subject,

-behavioural, or action component (tendency to act: TEA) – it means readiness to behaviour and acting connected with attitude.

University students´ attitudes and their interest for regular movement activity reflect education and motivation also in subject physical and sport education from the level of elementary schooling till university studies. Student should entrance the life with trained habits and positive approach to regular movement activities performance.

OBJECTIVES

The purpose of the research is to reveal relationships between attitudes and movement activities performance of Bratislava university students.

METHODS

At present attitudes are mostly measured by indirect way that is realized as a rule by questionnaire method and this is in context of attitudes measurements like a scale character. For the purpose of our research we prepared questionnaire, in which we used for attitudes evaluation Lickert scale of summed estimations. Male and female students attitudes to movement activities performance were learned in three components by questionnaire; cognitive or rational (COG), emotional or expressive (EMO) and in component tendency to act (TEA). In single attitude components each respondent evaluated questions on 5 rate scale (numerical value of scale from 1 to 5), while each component was formed by 4 questions. The minimum of gained score were 4 points (4 questions x 1 point), medium value 12 points and maximum 20 points }4 questions x 5 points). Sum of points was total score of respondent in concrete component. On the bases of distance of single means from central value in watched groups we evaluated respondents attitudes.

Tab. 1 Total number of male and female students in our research

	Fakulties	Males	`Females	Total
1.	FSPORT	171	41	212
2.	FMEDC	28	39	67
3.	FCHEM	31	25	56
4.	FMATH	36	41	77
5.	FLAW	27	31	58
6.	FNSCI	32	39	71
7.	FECON	19	28	47
8.	FPEDAG	-	18	18
		344	**262**	**606**

Abbreviations

FSPORT: Faculty of physical education and sports, Comenius University, FMEDC: Faculty of Medicine, Comenius University, FCHEM: Faculty of chemical nutrition technologies of Slovak technical university, FMATH: Faculty of mathematics, physics and informatics, Comenius University, FLAW: Faculty of law, Comenius University, FNSCI: Faculty of natural sciences, Comenius University, FECON: Economic university, FPEDAG: Pedagogical faculty, Comenius university.

For questionnaire evaluation we used these parameters: arithmetical mean, numerical and percentage calculations. For learning significance of differences between groups we used parametrical un-pair t-test for independent groups. Results were evaluated on **1 % and *5 % statistical value level. For evaluation, estimation and interpretation we used basic logical approaches and methods.

RESULTS AND DISCUSSION

In table 2 are basic statistical characteristics of attitudes student components from selected faculties and universities.

Cognitive component (COG) says about sufficient student information why they should practice movement activities. The component includes opinion for good health, physical fitness and aesthetic view, too.

By comparison of selected faculties and universities students we found, that average points values in cognitive component moved in range from 12,06 of FNSCI students till 15,22 of FSPORT students. All values were higher like average medium value 12. Supposed very higher values to the opposite groups were confirmed in case of the FSPORT students. The highest value 20 was found in groups of FSPORT and FMEDC, too. The group FMEDC had also the highest variation range (13 points). In 5 groups we found among respondents the lowest minimal value 7 points.

Tab. 2 Fundamental statistical characteristics of attitude components of male and female students of selected faculties and universities

Males		COG	EMO	TEA	Females	COG	EMO	TEA
FSPORT	x	15,22	15,06	14,43	FSPORT	15,46	16,24	14,12
	s	2,405	2,603	2,962		3,001	2,914	2,812
	min.	9,0	7,0	6,0		8,0	6,0	9,0
n=171	max.	20,0	20,0	20,0	n=41	20,0	20,0	20,0
	v_r	11,0	13,0	14,0		12,0	14,0	11,0
FMEDC	x	13,54	14,11	10,75	FMEDC	14,54	13,74	10,03
	s	3,097	3,270	2,824		2,882	3,006	3,116
	min.	7,0	4,0	4,0		6,0	7,0	5,0
n=28	max.	20,0	19,0	16,0	n=39	20,0	20,0	16,0
	v_r	13,0	15,0	12,0		14,0	13,0	11,0
	x	13,65	13,90	11,10		15,00	13,44	11,28
FCHEM	s	3,006	3,390	2,844	FCHEN	2,646	2,987	2,851
	min.	7,0	5,0	5,0		8,0	7,0	5,0
n=31	max.	18,0	18,0	17,0	n=25	20,0	18,0	15,0
	v_r	11,0	13,0	12,0		12,0	11,0	10,0
	x	12,44	14,36	10,42		13,41	13,49	9,41
FMATH	s	2,677	3,146	2,892	FMATH	3,074	3,059	2,510
	min.	7,0	8,0	5,0		6,0	7,0	5,0
n=36	max.	18,0	20,0	17,0	n=41	20,0	19,0	16,0
	v_r	11,0	12,0	12,0		14,0	12,0	11,0
	x	12,52	14,04	10,52		15,26	14,84	11,29
FLAW	s	3,105	2,738	2,792	FLAW	2,280	2,325	2,686
	min.	7,0	9,0	6,0		11,0	8,0	6,0
n=27	max.	19,0	20,0	18,0	n=31	20,0	18,0	19,0
	v_r	12,0	11,0	12,0		9,0	10,0	13,0
	x	12,06	14,34	11,28		14,95	14,79	10,74
FNSCI	s	2,313	2,194	2,453	FNSCI	2,790	2,793	3,242
	min.	7,0	8,0	6,0		8,0	8,0	6,0
n=32	max.	17,0	18,0	15,0	n=39	20,0	20,0	19,0
	v_r	10,0	10,0	9,0		12,0	12,0	13,0
	x	12,11	13,32	10,37		14,07	14,50	11,29
FECON	s	1,912	2,964	2,290	FECON	3,018	3,249	2,522
	min.	8,0	8,0	5,0		8,0	7,0	7,0
n=19	max.	15,0	18,0	14,0	n=28	20,0	20,0	16,0
	v_r	7,0	10,0	9,0		12,0	13,0	9,0
	x					15,78	14,67	12,33
FPEDAG	s				FPEDAG	3,191	3,029	3,498
	min.					9,0	8,0	6,0
n=0	max.				n=18	20,0	20,0	18,0
	v_r					11,0	12,0	12,0

The average values of points by comparison of female groups of selected faculties ranged from 13,41 to 15,78. In female groups were these results far higher like medium value. The highest score we found in group FPEDAG, girls from FSPORT reached the second highest value (15,46). The lowest minimal value 6 points reached girl from FMEDC. In this group we learned even highest variation range (14 points). Maximal possible value of individuals we found in all groups.

In table 3 we state significance of differences in COG attitudes component among all groups of male and females. Significant differences on 1% level of probability we found in groups of boys and girls between groups of FSPORT and groups of FMEDC, FCHEM, FLAW, FNSCI and in case of boys also with group of FECON. Statistically significant differences on 1% we learned also between girl groups of FMATH and groups FLAW and FPEDAG. 5% significance level differences were reached in boys groups between FNSCI and groups FMEDC and FCHEM, in groups of girls between group of FMATH and FCHEM and FNSCI. Significance differences testing between sexes in single schools we found significant differences on 1% level at FLAW and FNSCI, on 5% level at FECON, why in all three cases reached higher average levels groups of girls.

Tab. 3 Significance differences in cognitive attitudes component in groups of males and females of selected faculties and universities

COG		FSPORT	FMEDC	FCHEM	FMATH	FLAW	FNSCI	FECON	FPEDAG
FSPORT	Males	1							
n=212	Females	1							
FMEDC	Males	3,294**	1						
n=67	Females	1,405	1						
FCHEM	Males	3,226**	0,138	1					
n=56	Females	0,636	0,645	1					
FMATH	Males	6,173**	1,510	1,729(*)	1				
n=77	Females	3,054**	1,685(*)	2,139*	1				
FLAW	Males	5,203**	1,216	1,402	0,101	1			
n=58	Females	0,318	1,136	0,392	2,805**	1			
FNSCI	Males	6,861**	2,104*	2,346*	0,626	0,645	1		
n=71	Females	0,793	0,639	0,073	2,333*	0,499	1		
FECON	Males	5,456**	1,971(*)	1,995(*)	0,489	0,514	0,068	1	
n=47	Females	1,888(*)	0,641	1,185	0,878	1,714(*)	1,227	1	
FPEDAG	Males	-	-	-	-	-	-	-	1
n=18	Females	0,363	1,459	0,872	2,688**	0,663	0,996	1,830(*)	1

Legend: * p<0,05; ** p<0,01; (*) p<0,10

Emotional component (EMO) expresses about need of strain feeling, relaxation, good humour and reaching of demanded aims of university students. By comparison of selected faculties and universities students we found, that average point values in emotional component ranged from 13,32 in FECON students till 15,06 in FSPORT students. FSPORT students again reached significantly higher values in opposite to other faculties groups. Also in this component we found all values higher like average value 12. The highest maximal value was found in FSPORT group and in FLAW. Group from FMEDC had also in EMO component the largest range (15 points). The lowest minimal value was found in one boy from FMEDC.

Average point values moved at comparison female groups of selected faculties and universities in range from 13, 44 in group FCHEM till 16, 24 in group FSPORT. All found values were higher like average value. The highest score with significant differences reached females of FSPORT. The lowest found minimal value 6 points reached surprisingly female from FSPORT that coursed also the highest variation range (14 points). By comparison with COG component we found the highest maximal value 20 points only in four groups.

In tab. 4 we can see significant differences in EMO attitudes component of all boys and girls students. Significant differences on 1% level were found in groups of males only between FSPORT and group FECON, in groups of female between FSPORT and FMEDC, FCHEM and FMATH. Statistically significant differences on 5% level we found among boys only between FSPORT and FCHEM, among girls between FSPORT and groups of FLAW, FNSCI and FECON; and also between group of FMATH and FLAW and FNSCI.

In EMO component the average values changed in some cases in favour of girls, in some other in favour of boys. Significant difference on 1% level we did not find in any group and 5% level significance was found only in group of FSPORT (2,558). Reached higher average value of girls can be explained by higher need of strain feeling, relaxation, humour at movement activities performance.

Tab. 4 Significance of differences in emotional attitude components in boys and girls of selected faculties and universities

EMO		FSPORT	FMEDC	FCHEM	FMATH	FLAW	FNSCI	FECON	FPEDAG
FSPORT	Males	1							
n=212	Females	1							
FMEDC	Males	1,726(*)	1						
n=67	Females	3,778**	1						
FCHEM	Males	2,164*	0,235	1					
n=56	Females	3,757**	0,395	1					
FMATH	Males	1,407	0,315	0,573	1				
n=77	Females	4,178**	0,377	0,062	1				
FLAW	Males	1,882(*)	0,086	0,164	0,427	1			
n=58	Females	2,205*	1,669(*)	1,971(*)	2,050*	1			
FNSCI	Males	1,459	0,333	0,614	0,026	0,478	1		
n=71	Females	2,269*	1,600	1,843(*)	1,993*	0,070	1		
FECON	Males	2,730**	0,845	0,623	1,195	0,850	1,417	1	
n=47	Females	2,330*	0,982	1,231	1,316	0,464	0,398	1	
FPEDAG	Males	-	-	-	-	-	-	-	1
n=18	Females	1,892(*)	1,075	1,321	1,367	0,223	0,157	0,174	1

Legend: * p<0,05; ** p<0,01; (*) p<0,10

Component tendency to act (TEA) expressed about need to do movement activities. By comparison selected faculties and universities students we found, that average points values in TEA component ranged from 10,37 between FECON students to 14,43 in FSPORT students. By comparison single components mutually we found decrease average gained points in all groups. FSPORT student like single group reached higher value like it is average value 12. Though students from other faculties are knowing the need of movement (COG), and also are knowing feelings connected with strain and relaxation (EMO), they prefer sedentary way of life and like themselves expressed they are influenced by conformity and laziness. The lowest learned minimal value of 4 points we found of respondent from FMEDC, maximal value 20 points we found only in group of FSPORT students.

Average point values by comparison of female groups of selected faculties and universities students ranged from 9,41 among FMATH to 14,12 in FSPORT. Higher point score like medium value 12 reached clearly group of FSPORT and slightly FPEDAG. The lowest found minimal value 5 points were in groups FCHEM and FMATH, maximal found value 20 points reached only FSPORT group.

In tab. 5 we can see significant differences in TEA attitude component of involved students. Significant differences on 1% level we found between male and female FSPORT groups and other groups except FPED girls, where there was difference on 5% level significance. 1% level significance we learned also between female FMATH group and FCHEM, FLAW, FECON and FPEDAG and on 5% level significance with FNSCI.

Tab. 5 Significance of differences in emotional attitude components in boys and girls of selected faculties and universities

TEA		FSPORT	FMEDC	FCHEM	FMATH	FLAW	FNSCI	FECON	FPEDAG
FSPORT	Males	1							
n=212	Females	1							
FMEDC	Males	6,127**	1						
n=67	Females	6,178**	1						
FCHEM	Males	5,793**	0,469	1					
n=56	Females	3,962**	1,623	1					
FMATH	Males	7,412**	0,462	0,967	1				
n=77	Females	7,996**	0,968	2,782**	1				
FLAW	Males	6,419**	0,306	0,779	0,140	1			
n=58	Females	4,312**	1,791(*)	0,014	3,047**	1			
FNSCI	Males	5,652**	0,780	0,276	1,321	1,117	1		
n=71	Females	4,986**	0,997	0,676	2,056*	0,755	1		
FECON	Males	5,778**	0,489	0,943	0,063	0,193	1,316	1	
n=47	Females	4,286**	1,764(*)	0,008	3,035**	0,007	0,738	1	
FPEDAG	Males	-	-	-	-	-	-	-	1
n=18	Females	2,086*	2,500*	1,087	3,634**	1,171	1,679(*)	1,180	1

CONCLUSIONS

1.The most significant differences in attitude components were found between students of FSPORT on one side and

students of faculties and universities on another side (similar in groups of boys and girls). This was found in components cognitive and tendency to act.

2.In cognitive and emotional components reached all our watched faculties and universities groups over average values. Compared with tendency to act, where only FSPORT students reached clearly over average values. Other students are on average, mostly under average values.

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RELATIONSHIPS BETWEEN ATTITUDES AND MOVEMENT ACTIVITIES PERFORMANCE OF SLOVAK UNIVERSITY STUDENTS

ABSTRACT

In the contribution authors deal with research of attitudes to performance movement activities of Bratislava university students (Slovakia). By questionnaire method (606 respondents) were used Lickert scale of summed estimations that is statistically and logically evaluated. Authors found the most significant differences between students of Faculty of physical education and sport with other faculties students (same for boys and girls) in attitude components tendency to act and cognitive; slighter smaller difference was found in emotion component.

KEY WORDS: attitudes components, recreation movement activities, university students

LES RELATIONS ENTRE LES ATTITUDES ET LES ACTIVITÉS DU MOUVEMENT DE PERFORMANCE DES ÉTUDIANTS UNIVERSITAIRES SLOVAQUES

RÉSUMÉ

Dans la contribution des auteurs s´occupent de la recherche d'attitudes à l'égard des activités de mouvement de performance des étudiants de l'université de Bratislava (Slovaquie). Par la méthode du questionnaire (606 répondants) les auteurs ont utilisé utilisées l´échelle de Likert des estimations résumées qui est statistiquement et logiquement évaluée. Les auteurs ont constaté les différences les plus significatives entre les étudiants de la Faculté de l'éducation physique et du sport avec des étudiants d'autres facultés (même pour les garçons et les filles) dans l'attitude des composants tendance à agir et cognitives; plus légère petite différence a été trouvée dans le composant émotion.

MOTS CLÉS: composants attitudes, activités de loisirs de mouvement, étudiants universitaires

LAS RELACIONES ENTRE LAS ACTITUDES Y EL DESEMPEÑO DE LAS ACTIVIDADES DE MOVIMIENTO EN ESTUDIANTES UNIVERSITARIOS ESLOVACOS

RESUMEN

En la contribución los autores se ocupan de la investigación de las actitudes hacia las actividades de movimiento de desempeño en los estudiantes universitarios de Bratislava (Eslovaquia).Por medio de cuestionarios (606 encuestados) se implementó la escala Lickert y las estimaciones se resumieron estadística y lógicamente. Los autores encontraron diferencias significativas entre los estudiantes de la facultad de ciencias del deporte y los alumnos de otras facultades (igual para hombres y mujeres) en la tendencia en componentes de actitud para actuar y en el desarrollo cognitivo. Una diferencia menor fue encontrada en el componente de emoción.

PALABRAS CLAVE: componentes de actitudes, actividades de recreación del movimiento, estudiantes universitarios

RELAÇÕES ENTRE AS ATITUDES E EXECUÇÃO DO MOVIMENTO DE PERFORMANCE DOS ESTUDANTES UNIVERSITÁRIOS DA ESLOVÁQUIA

RESUMO

Na colaboração, os autores tratam a pesquisa das atitudes no que toca as atividades do movimento de performance dos estudantes da Universidade de Bratislava (Eslováquia). Os autores utilisaram , através do método do questionário (606 respondentes), a escala de Likert das estimativas resumidas que é avaliada do ponto de vista estatístico e lógico. Os autores constataram as maiores diferenças entre os estudantes da Faculdade da Educação Física e do Esporte com os estudantes de outras faculdades (também no caso dos garotos e garotas) nos componentes de atitude tocantes à tendência de agir e cognitivo; uma diferença menor foi encontrada no componente de emoção.

PALAVRAS-CHAVE: componentes de atitude, atividades de passa-tempo quano ao movimento, estudantes universitários