PHYSICAL ACTIVITY OF FEMALE STUDENTS OF SELECTED ACADEMIC SPECIALTIES AT THE UNIVERSITY OF RZESZOW

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Abstract:
Introduction: Systematic physical activity helps to keep health at the optimum level - in relation to age - the health level, it has an impact on slowing down the natural aging process of the human body. The aim of this study was to characteristic of physical students' activity of selected courses at the University of Rzeszow.
Material and Methods: The study involving the method of diagnostic survey included 120 students from four randomly selected full-time courses at the University of Rzeszow. The research method were questionnaire. The collected research results were analyzed with the use of a non-parametric test of independence Chi-square (χ^2), with significance level of α=0,05.
Results: Studies show statistically significant dependences between answers on question about meaning of physical activity and profile of study (p=0,00016). Answers to the questions about frequency of physical activity were subordinated from profile of study (p=0,04801). The course of study were variable, which haven't statistically significant influence on the kind to take up the physical activity (p>0,05).
Conclusions: Profile of study is the factor which determined attitude for physical activity. For students of physiotherapy and nursing, physical activity is significantly more important than in the case of students of europeistics and administration. Students of medical profiles are more likely to undertake physical activity than students of europeistics and administration. Preferences of physical activity are not dependent on the course of study.

INTRODUCTION

Physical activity is taking part in active rest as games of different kind, exercises and sports disciplines, for pleasure, recreation and health, enhancements of the strength ability, of getting special efficiency and physical abilities, preventing diseases associated with the progress of civilization, increasing the physical and intellectual productivity [Barankiewicz 1998].

The physical activity constitutes the important factor, affecting the health and the frame of mind of the man. Hippocrates observed, that exercises are strengthening, and the inaction is weakening the body. The physical activity constitutes the crucial and integral element of the healthier lifestyle. It is one of essential needs of the man. It has a good influence to the number of physiological properties, the metabolic and hormone processes. The physical activity has a good influence not only to the physical fitness, but also to the mental health. Emotional experiences during taking different forms of the activity influence for lowering of the stress

and emotional level. Active spending the time is giving satisfaction, relax, lets forget about problems.

The physical activity is conditioned with individual needs and possibilities, resulting from age, sex, medical condition. Therefore the optimal selection is important for its optimal level. With opinion of Cendrowski [1997] the move is effective, when is being performed at the appropriate frequency, intensity and the volume and the optimum pattern of the physical activity: 3 x 30 x 130 is indicating, that every man, particularly not doing physical labour, should exercise at least 3 times during the week, and at least 30 minutes of every training should be so intense so that the pulse is 130. To the most popular forms of the physical activity belong: classes at fitness clubs, Nordic Walking marches, runs, walks, recreational-sports games, dance, team sports games.

Undertaking studies for many young persons is connected with becoming involved in an independent living, and acquireing the certain independence from the home environment. With opinion of some authors [Duda and Suliburska 2002, Czeczelewski and Czeczelewska 2013] it is supporting forming of the new, not always correct patterns of behaviours which can result in the degeneration of the health of graduates in next decades of the life.

AIM OF THE RESEARCH

The aim of this research was to characteristics of the physical activity of students of selected courses of study at the University of Rzeszow. The following research questions were posted:

1. How looks the awareness of students in relation to the healthier lifestyle and what are differences appearing in this scope depending on the courses of study?
2. Whether the frequency of taking the physical activity is diversifying students of different courses?
3. What forms of the motor activity most often choose asked students as well as whether subject is affecting preferences in this scope?
4. What are the motives for taking the physical activity by students and what are the differences in this scope depending on subject?
5. What is the matter of not-taking the physical activity by students and what are differences appearing in this respect depending on studies?

MATERIAL AND METHOD

Examinations in academic year 2012/2013 was carried out students representing four randomly selected stationary courses of study (administration, europeistics, physiotherapy, nursing) at the University of Rzeszow. The age of examined women was located in a period of 20-24 years.

The research was carried out the method of diagnostic survey. The research tool was a questionnaire form. The structure of the questionnaire form gave the possibility of comparing the opinion of students about the physical activity. Examined expressed views about the own physical activity, were giving the answer to questions for the frequency and preferred forms. The examination was anonymous. Students gave only a mode, direction and the year of studies as well as their age and the environment of settling.

Representativeness of the sample was ensured by the randomized selection of the study group by means of the ballot-box method, with the technique of the straight draw, without returning [Ryguła 2005]. A two-stage draw was carried out. In the first phase of the sampling were chosen 4 courses of study. During the second stage 30-person female groups were selected in each of the directions. 120 women were asked for the filling of the questionnaire form, in addition the maneuverability of questionnaire forms amounted to the 83% of the population marked out for examinations. From formal accounts 2 forms were rejected, and 1

was illegible. The final analysis included 103 survey result (23 questionnaires performed by administration students, 25 questionnaires performed by europeistics students, 30 questionnaires performed by physiotherapy students and 25 questionnaires performed by nursing students), based on which quantitative and percentage schedules of answers on individual questions of questionnaire were estimated to the final analysis. The collected research results were analyzed with the use of a non-parametric test of independence Chi-square (χ^2), with significance level of α=0.05.

RESULTS

A schedule of the answer to a question about healthier lifestyle was placed in tbl. 1. Results doesn't sum up, because respondents could show more than 1 reply. The analyze with Chi-square test indicate no significant diversification of the replies to the above question depending on studies to which belonged questionnaired (tbl. 1).

Table 1. Healthier lifestyle in students opinion

Answer	Administration		Europeistics		Physiotherapy		Nursing		χ^2	df	p
	n	%	n	%	n	%	n	%			
Systematic motor activity	16	70,0	17	68,0	20	67,0	16	64,0	0,183	3	0,980
Lack of the stress	12	52,0	6	24,0	15	50,0	14	56,0	6,426	3	0,093
Correct diet	20	87,0	22	88,0	26	87,0	21	84,0	0,185	3	0,980
Rational rest (appropriate amount of the dream)	11	48,0	12	48,0	22	73,0	18	72,0	6,653	3	0,084
Other	10	43,0	11	44,0	10	33,0	10	40,0	0,838	3	0,840

The data included in tbl. 2. shows, that students of courses: physiotherapy and the nursing granted more positive answers to a question about positive interaction of physical activity on human health in comparing to listeners europeistics and administration. The anwer "definitely positive" gave the 77% of students of courses: physiotherapy, 68%: nursing, 57% : administration and the 40% of europeistics students. The answer: "rather positive" chose the 40% of students of europeistics, 35% of course: administration, and appropriately: the 32% of listeners of the nursing and the 23% of physiotherapy. The contradict answers marked 12% of listeners of europeistics and 4% of administration, however are lacking of knowledge demonstrated 8% of students of europeistics and 4% of administration. Statistically significant diversifying the reply to the above question wasn't stated (p=0.093).

Table 2. Students opinions about positive interaction of physical activity on human health

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Definitely positive	13	57,0	10	40,0	23	77,0	17	68,0
Rather positive	8	35,0	10	40,0	7	23,0	8	32,0
Does not have opinion	1	4,0	2	8,0	0	0,0	0	0,0
Lack of positive interaction	1	4,0	3	12,0	0	0,0	0	0,0
TOTAL	23	100,0	25	100,0	30	100,0	25	100,0

χ^2 (9) = 14,915; p = 0,093

Students representing individual subjects granted similar answers to a question about personal physical activity (p=0.626). The affirming answer emphasized 91% of listeners of administration, 90% of direction: physiotherapy, 88% noursery and 80% europeistics (tbl. 3).

Table 3. Students opinions about personal physical activity

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Active	21	91,0	20	80,0	27	90,0	22	88,0
Unactive	2	9,0	5	20,0	3	10,0	3	12,0
TOTAL	23	100,0	25	100,0	30	100,0	25	100,0

$\chi^2(3) = 1{,}751$; $p = 0{,}626$

The next question of the questionnaire form concerned students, who was declared as active physically. This question has multiple choice. It was about obtaining information, what forms of activities prefers the student (tbl. 4). Results of analyses carried out with Chi-square test let claim, that polled students are demonstrating similar preferences as for forms of the activity, irrespective of course of studies ($p>0.05$).

Table 4. Forms of the motor activity prefer by students

Answer	Administration		Europeistics		Physiotherapy		Nursing		χ^2	df	p
	n	%	n	%	n	%	n	%			
Fitness	11	52,0	9	45,0	13	48,0	10	45,0	0,289	3	0,962
Walking	6	29,0	7	35,0	10	37,0	4	18,0	2,358	3	0,501
Swimming	6	29,0	4	20,0	10	37,0	5	23,0	2,043	3	0,563
Riding on bicycle	6	29,0	1	5,0	6	22,0	8	36,0	6,187	3	0,103
Running	9	43,0	8	40,0	9	33,0	10	45,0	0,844	3	0,839
Horse-riding	3	14,0	1	5,0	4	15,0	4	18,0	1,717	3	0,633
Team games	15	71,0	17	85,0	14	52,0	12	55,0	6,944	3	0,074
Other	5	24,0	12	60,0	15	56,0	13	59,0	7,623	3	0,054

The examinations indicated that 30% of students physiotherapy and the 23% of students of the nursing are taking the physical activity three times during a week. Then 67% of students of administration, 60% of europeistics students, 54% of nursing students and the 37% of physiotherapy are taking the physical activity two times during a week. A 14% of students of physiotherapy, a 11% of the nursing and a 5% of administration declare taking up the physical activity once during a week. Analyses conducted with Chi-square test showed important differences in the frequency of taking the physical activity by students representing individual directions ($p=0.048$). Students of physiotherapy and nursings indeed more often take the physical activity than students of courses: europeistics and administration (tbl. 5).

Table 5. Frequency of use from indicated forms of the motor activity

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Three times a week	0	0,0	0	0,0	8	30,0	5	23,0
Twice a week	14	67,0	12	60,0	10	37,0	12	54,0
One a week	1	5,0	0	0,0	3	11,0	3	14,0
Once in two weeks	1	5,0	1	5,0	1	4,0	0	0,0
Other	5	23,0	7	35,0	5	18,0	2	9,0
TOTAL	21	100,0	20	100,0	27	100,0	22	100,0

$\chi^2(12) = 21{,}184$; $p = 0{,}048$*

* statistic essentiality at the level $p<0{,}05$ check off star

Answers to a question for motives for taking the physical activity are unfolding as follows: under the influence of the physical activity a 70% of students of direction is demonstrat-

ing willing of the improvement of the medical condition: administration, the 60% of students of the nursing, the 50% of physiotherapy and the 44% europeistics. The need of relieving the stress is particularly important in case of students of physiotherapy (17%), and willingness of the improvement in the frame of mind in the case of europeistics (28%). Other responses are unfolding similarly in case of students of individual directions. Analyses conducted with Chi-square test demonstrated statistically essential group diversifying in replies to the above question of the questionnaire form (tbl. 6). The main reason of taking the physical activity by students of physiotherapy is relieving the stress (p=0.043), and in case of listeners of europeistics - willingness of the improvement in the frame of mind (p=0.001).

Table 6. Motivations for taking up of physical activity

Answer	Administration		Europeistics		Physiotherapy		Nursing		χ^2	df	p
	n	%	n	%	n	%	n	%			
Willingness of the improvement in the psychophysical medical condition	16	70,0	11	44,0	15	50,0	15	60,0	3,750	3	0,290
Need of relieving the stress	0	0,0	0	0,0	5	17,0	2	8,0	8,172	3	0,043*
Care of the slim silhouette	5	22,0	1	4,0	6	20,0	4	16,0	3,670	3	0,299
Willingness of the improvement in the frame of mind	0	0,0	7	28,0	1	3,0	1	4,0	15,637	3	0,001*
Desire for checking its possibilities	1	4,0	1	4,0	2	7,0	1	4,0	0,305	3	0,959
Other	1	4,0	3	12,0	3	10,0	2	8,0	0,966	3	0,809

* statistic essentiality at the level p<0,05 check off star

The results included in tbl. 7. shows, that 60% of students of direction: nursing and the 50% of students of physiotherapy and less, because the 35% of students of administration and the 36% of europeistics students acknowledged that the physical activity was very important to them. The 40% of students of physiotherapy and the 20% of students of the nursing and the 22% of students of administration claim that the physical activity is important in their life. For the 44% of students europeistics and 30% of students of administration the physical activity is unimportant. Replies "I don't know" are more or less evenly and are negotiating in range between 10-20 %. Examinations showed statistically essential diversifying of the reply to the above question of the questionnaire form: for students of physiotherapy and the nursing the physical activity is significantly more important than in case of students of europeistics and of administration (p=0.00016).

Table 7. Meaning of the physical activity

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Very important	8	35,0	9	36,0	15	50,0	15	60,0
Important	5	22,0	0	0,0	12	40,0	5	20,0
Unimportant	7	30,0	11	44,0	0	0,0	1	4,0
I don't know	3	13,0	5	20,0	3	10,0	4	16,0
TOTAL	23	100,0	25	100,0	30	100,0	25	100,0

χ^2 (9) = 32,614; p = 0.00016*

* statistic essentiality at the level p<0,05 check off star

Data included in tbl. 8 is indicating to the lack statistically important difference in answers: "Whether somebody/something of forms have/the influence on taking the decision concerning planting by you chosen forms of the physical activity?" (p=0.991).

Table 8. Who or that have/the influence on taking the decision about taking up physical activity

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Parents	2	9,0	2	8,0	3	10,0	2	8,0
Familiar	5	22,0	2	8,0	6	20,0	5	20,0
Television	8	35,0	8	32,0	8	27,0	7	28,0
Internet	7	30,0	10	40,0	11	36,0	9	36,0
Other	1	4,0	3	12,0	2	7,0	2	8,0
TOTAL	23	100,0	25	100,0	30	100,0	25	100,0

χ^2 (12) = 3,446; p = 0,991

The next question of the questionnaire form concerned students which stated, that weren't active persons in terms of physics. It was about obtaining information, why students representing individual subjects aren't taking the physical activity. It results from data included in tbl. 9, that in case of students of directions: physiotherapy and the nursing (for the 67%) it is a lack of time, but a 50% of students of direction: administration and the 40% of students of direction europeistics acknowledges that there is no such need. It is puzzling, that 50% of students of direction: administration and the 33% of direction: physiotherapy is ashamed to take the physical activity and the 20% of listeners of europeistics and the 33% of the nursing prefers other entertainment but the 40% of students of europeistics is afraid of injury. They didn't state statistically essential group diversifying in this respect (p=0.221).

Table 9. Reasons of escapes the physical activity

Answer	Administration		Europeistics		Physiotherapy		Nursing	
	n	%	n	%	n	%	n	%
Lack of time	0	0,0	0	0,0	2	67,0	2	67,0
Lack of requirement	1	50,0	2	40,0	0	0,0	0	0,0
Shame	1	50,0	0	0,0	1	33,0	0	0,0
Preferring of other entertainment	0	0,0	1	20,0	0	0,0	1	33,0
Afraid about injury	0	0,0	2	40,0	0	0,0	0	0,0
TOTAL	2	100,0	5	100,0	3	100,0	3	100,0

χ^2 (12) = 15,383; p = 0,221

DISCUSSION

The physical activity has material meaning in the life of the man. It influences his normal development and the psychophysical condition, and hence to the quality of life. In the writing research on the physical activity and its role in a lifestyle of students representing different centres of higher education is well-known. Miązek [2005] on the base of examinations of 573 students of randomly chosen Cracow colleges: the Economics Academy, the Mining-Metallurgical Academy, the Pedagogic Academy, the Agricultural Academy and the Cracov University of Technology states, that university students of Cracow rarely spend their free time in the active way in terms of physics. For almost a half of those polled a reason of the motor passivity was a lack of the free time, but a 26% "likes laziness". In response for preferences as to forms of spending the free time as far as the 52% is mentioning the social round. The motor activity over halves of those polled is forced with course of studies what he/she is marking, that compulsory classes in the physical education are a sole reason of taking any

motor activity. On the other hand, Prusik et al. [2009] stated that out of 154 students of direction: the tourism and the recreation of the Academy of Physical Education and Sport in Gdańsk, the 95% is taking different physical activity in the leisure time, in addition almost the half of those polled has a free time at its disposal in the period of holidays, 24% during the weekend but the 12% in weekdays. Drawing pleasure from the active leisure and desire for keeping the good health are a main motive for taking the initiative by students. The majority assumes that the physical activity will be important for them through the entire life. Behaviours of respondents have environmental conditioning and are dependent on health behaviours, ratio to the physical activity of remaining family members, acquaintances, partners. The research of Motylewski et al. [2006] indicate that for the 30% of students of direction physiotherapy is associating comprehending the physical activity oneself mainly with an physical and psychological active holiday but for the 15%: with the improvement in the medical condition. In the leisure time team sports games, swimming and the cycling are included in preferred forms of the physical activity. Questionnaire forms given in the questionnaire let claim, that majority of examined is spending the leisure time rather not very actively even though correctly are associating the physical activity with an active holiday having a positive impact on health. Over the 60% of respondents are taking the initiative in the month with the frequency 1-3 times, but only the 10% is allocating times for exercises of 30 minutes 5 times a week. In planting the physical activity burdens associated with studying and family responsibilities are a biggest problem, limiting students. Kijo [2010] is emphasizing that listeners of full-time studies unlike students of nonfull-time studies are taking the physical activity more systematically and to a lesser degree are demonstrating so-called "motor laziness". Persons studying on the directions associated with the physical culture are characterized by a smaller rate of the "lack of the activity", as well as a larger rate "the systematic moderate activity above 30 minutes" towards other groups and these are differences statistically essential. Achieved results can attest to the greater awareness in this respect at future teachers and physical education teachers. Students of the directions associated with the early-school teaching are characterized by the lowest ratios of activity. According to results Lipka-Nowak and Dudek [2005] persons studying on direction: physical education, undergoing the motor class at the increased assessment, willingness isn't demonstrating undertaking additional, extracurricular motor classes. The research of Pańczuk and Bergier [2005] revealed that students of nursing have habits supporting the health, but the majority of the free time are allocating for the motor activity and the social and family life.

Based on own examinations it is possible to state that the awareness of polled students of chosen subjects of the Rzeszow University in the healthier lifestyle is sufficient and is developing on a little bit on the highest level in case of students of medical directions. For students of directions: physiotherapy and the nursing the physical activity is more important and significantly more often than listeners of directions: europeistics and administration. Students are often involved in more than one kind of the physical activity, and preferences as for forms of the activity aren't conditioned with direction of studies The majority is practising team sports games, different forms of the fitness and runs and walks. In case of students of physiotherapy a main motive for taking the physical activity is relieving the stress, and for students of europeistics - an improvement in the frame of mind. In case students of physiotherapy and nursing a lack of the free time constitutes the barrier in taking the physical activity

To sum up it is necessary to emphasize one more time that the physical activity constitutes the important factor of preventing diseases associated with the progress of civilization. Maturity systematic and adapted to needs of the man in the period is slowing the ageing processes down. Therefore action directed at vaccinating the avocation for the movement is gaining the special significance in this aspect. In order to increase engagement of young people into active spending the time in frameworks of actions undertaken in progress, being aimed at

propagating the physical activity and the promotion of pro-health behaviours we should get practical arrangements and good store of knowledge in what way it is possible and one should care about the own psychophysical condition and in what way rationally manage the free time. Considering the fact that studies constitute the last stage before beginning the adult life, starting a family and assuming professional obligations, educating real pro-health habits at university students are an essential contribution to the health of next generations.

CONCLUSIONS

1. The awareness of respondents in the healthier lifestyle is sufficient and is developing he and highest level in case of students of courses: physiotherapy and the nursing.
2. Students of physiotherapy and nursings more often take the physical activity than students of directions: europeistics and administration.
3. The majority of respondents is practising team games, different forms of the fitness and runs and walks. Preferences for forms of the physical activity aren't conditioned by subject.
4. In case of students physiotherapy a main motive for taking the physical activity is relieving the stress, and for students of europeistics - an improvement in the frame of mind.
5. A lack of time is a main cause of not-taking the physical activity by students representing medical subjects. The main reason for failing to exercise by students representing europeistics and administration is no such need.

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