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INFORMATION TECHNOLOGY IN SPORTS SESSION

PERCEPTION OF ACTIVE LIFESTYLE OF SINGIDUNUM UNIVERSITY FRESHMEN STUDENTS

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Abstract:

Physical activity plays a crucial role in maintaining a healthy lifestyle in general. Physical activity (PA) steadily decreases from childhood to adolescence, hence university students could be considered a risk group. An active/healthy lifestyle should be seen as a multidimensional system of one's behavior determined by physical activities, other behaviors, and habits that are linked with health, such as proper diet, regular preventive health and dental examinations, regular blood pressure control, stress control, eliminating harmful lifestyle habits (consuming alcohol, smoking, etc.)

This survey aimed to assess individual evaluation of basic elements of active lifestyle perception among university freshmen students with the research instrument Perception of Active Lifestyle (PAL) that covers key elements of active lifestyle (physical activity, dietary habits, relation towards own health, the condition of personal emotions, and safety habits.

Results from the current study indicate that students' perception of their health is relatively high, however, safety habits had below-average scores indicating lower medical awareness among this population. PA level of our sample suggests that they are more physically active than their peers from 23 countries.

Universities have the responsibility of teaching students not only how to do things and earn a living, but also how to live a healthy life and educational authorities who care about its youth should put more effort into providing resources that could contribute to their PA and overall well-being.

Keywords:

Health, Physical Activity, Lifestyle Habits, Youth.

INTRODUCTION

Physical activity plays a crucial role in maintaining a healthy lifestyle in general. This claim should be especially emphasized in a university student's environment. A crucial motive for steering the attention of academia towards the virtues of sports and its integration within the university setting is the well-documented rise in youth inactivity. This growing trend is increasingly being recognized as a global challenge. The decline in physical activity, notably evident during the transition from high school (where physical education is a standard subject) to university (where physical education is not mandatory), is of special concern.

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Freshmen students are transitioning into a new phase of their lives, stepping into adulthood, and forming lifelong habits. However, the perception of an active lifestyle among them can vary significantly. Some may view it in a very positive way, while others may see it as a burdening task amidst their academic responsibilities. One argument in favor of promoting an active lifestyle among freshmen students is the numerous benefits it offers. Previous studies found that regular exercise not only improves physical health but also enhances mental wellbeing, concentration, and overall academic performance [1], [2]. Engaging in physical activities can also help freshmen students manage stress and adapt to the challenges of university life more effectively [3]. On the other hand, some may argue that the demands of academic life leave little time for extracurricular activities, including physical exercise. The pressure to perform well in studies and the temptation to prioritize academic achievements over physical health can lead young students to neglect their well-being. This perception can remain a sedentary lifestyle that may have detrimental consequences on their psychological and physical health [4], [5].

Active lifestyle, or healthy way of life, according to Sharkey and Gaskill includes: [6]

- a. physical activity;
- b. healthy and proper diet;
- c. weight control;
- d. stress control; and
- f. safety habits.

According to Nešić, Srdić & Jezdimirović active/ healthy lifestyle ought to be observed as a multidimensional system of one's behavior that is not exclusively determined by physical activities but by other behaviors and habits that are linked with health, such as proper diet, regular preventive health and dental examinations, regular blood pressure control, stress control, eliminating harmful lifestyle habits (consuming alcohol, smoking, etc.) [7]. This empirical, cross-sectional, non-experimental study (survey) aimed to assess the individual evaluation of basic elements of active lifestyle perception among university freshmen students from different study programs.

2. MATERIAL AND METHOD

In the research context, it is difficult to determine the best instruments to assess physical activity and active lifestyle when a gold standard does not exist. The most frequently used instrument for the assessment of physical activity levels in children and adolescents is self-report measures since they are low in cost and easy to administer to large populations. However, very few of those instruments have strong validity and reliability. Based on Sharkey and Gaskill's model of health doctrine, Nešić, Srdić & Jezdimirović, constructed the research instrument Perception of Active Lifestyle (PAL) that covers key elements of active lifestyle [7]:

- a. physical activity;
- b. dietary habits;
- c. relation towards own health;
- d. the condition of personal emotions; and
- e. safety habits.

The PAL questionnaire consisted of 15 items and its reliability and validity were estimated as high and suitable (Scale Reliability Analysis - Cronbach's alpha coefficient = 0.865) [7]. The part of the PAL questionnaire used for the evaluation of attitudes regarding active lifestyle was constructed as a 5-degree Likert-type scale, where value 1 expressed the lowest, and 5 expressed the highest degree of agreement with an item indicator. A total of 16 item indicators were included, with the addition of one item to the original instrument (Sleep - duration and quality). The items included the following indicators/claims:

- 1. Regularity of engaging in sports or sports-recreational activities (at least three times a week);
- 2. The level of daily activities outside the home performed on foot;
- 3. Using a bicycle in performing daily tasks and activities;
- 4. Outdoor stay in nature during the weekend;
- 5. Current physical condition;
- 6. Current health status;
- 7. State of personal emotions;
- 8. Regularity of taking meals (at least three times a day);
- 9. Quality of daily meals;
- 10. Regularity of breakfast consumption;
- 11. Consumption of water as the basic daily drink;
- 12. Fruit consumption in the daily diet;
- 13. Vegetable consumption in the daily diet;
- 14. Sleep (duration and quality);
- 15. Regularity of preventive medical examinations; and
- 16. Regularity of blood pressure control.

Data analysis was conducted in two ways. Basic measures of central tendencies and measurements of variability (means and standard deviations) were calculated for all the variables with the minimally ordinal level of measuring, and frequency distribution (percentage distribution) was used for the variables with a nominal level of measurement. Two hundred and two (61,4% female, 38,6% male) Singidunum University freshman students from 14 study programs participated in the current study. The average age of the participants was 20,8. The PAL questionnaire was conducted via Google Forms. The distribution of the sample by study programs is presented in Table 1.

As shown in Table 1, the sample response was unevenly distributed and ranged from 0 to 58 responses by the study program. Considering the topic, it is interesting to note that students from computer science and information technology responded well, while physical education and sports students did not.

3. RESULTS WITH DISCUSSION

Active lifestyle perception among Singidunum University freshmen students was assessed through a PAL questionnaire. Basic measures of central tendencies and measurements of variability (means and standard deviations) were calculated for all the variables as presented in Table 2.

Considering the mean and standard deviation values of the variables Health status (Mean=4.23, SD=0.86), and Personal emotions (Mean=3.53, SD=1.15) we can conclude that students' perception of their health is relatively high.

Study programme	Number	Percentage
Tourism and Hospitality	13	6,4%
Business Economics	58	28,7%
Informatics and Computing	12	5,9%
Electrical Engineering and Computing	1	0,5%
Information Technology	27	13,4%
Physical Education and Sport	5	2,5%
Tourism, Hospitality and Food Economics	15	7,4%
Software and Data Engineering	41	20,3%
Sports Management	2	1%
Anglistics	13	6,4%
Computer Science	10	5%
Environment and Sustainable Development	4	2%
Applied Artificial Intelligence	0	0%
Pharmacy	1	0,5%

 Table 1. A sample distribution of the sample by study programme.

Table 2. Means and standard deviations of PAL variables.

No.	Variable	Mean	SD
1.	Regularity of engaging in sports or sports-recreational activities (at least three times a week)	3.25	1.60
2.	The level of daily activities outside the home performed on foot;	3.40	1.15
3.	Using a bicycle in performing daily tasks and activities	1.36	0.86
4.	Outdoor stay in nature during the weekend	2.78	1.27
5.	Current physical condition	3.38	1.17
6.	Current health status	4.23	0.86
7.	State of personal emotions	3.53	1.15
8.	Regularity of taking meals (at least three times a day)	3.60	1.30
9.	Quality of daily meals	3.53	1.11
10.	Regularity of breakfast consumption	3.69	1.41
11.	Consumption of water as the basic daily drink	4.33	1.02
12.	Fruit consumption in the daily diet	3.24	1.29
13.	Vegetable consumption in the daily diet	3.57	1.15
14.	Sleep (duration and quality)	3.54	1.20
15.	Regularity of preventive medical examinations	2.37	1.31
16.	Regularity of blood pressure control	2.09	1.36

This is in line with previous findings where high self-rated health status was reasonably used in the comparison of health across different student populations [8]. The physical activity segment of the PAL variables demonstrated a rather even distribution of the results (first five variables, Means range from 2.78 to 3.40) except for the variable Using a bicycle in performing daily tasks and activities (Mean = 1.36). The dietary habits segment (variables 8-13) revealed that this population has above-average consideration for dietary habits, especially in terms of water consumption (Figure 1). It is encouraging to note that the student population from our sample predominantly consumes water as a basic daily drink because unhealthy drinks (energy drinks) are consumed quite regularly among their peers from other countries [9]-[11].

On the other hand, safety habits, expressed as Regularity of preventive medical examinations (Figure 2) show that less than half of survey participants do regular medical check-ups and had below-average scores indicating lower medical awareness among this population. We considered the frequency of scores 4 and 5 (21,8% together) and after comparison with the student population from other countries, we found that our sample had lower health awareness than students from Spain (67%), Lithuania (79%), and Germany (82%) [12].

This is somewhat understandable since university students' physical and psychological health and wellbeing are comprised of a wide range of aspects [13].

Within the assessment of the individual evaluation of basic elements of active lifestyle perception among university freshmen students from different study programs, we considered the variable Regularity of engaging in sports or sports-recreational activities as the most important one.

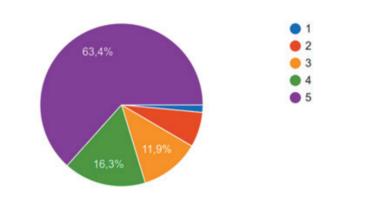


Figure 1. Students' water consumption on daily basis. **Legend:** 1 – very unlikely; 2 – unlikely; 3 - neutral; 4 – likely; 5 – very likely.

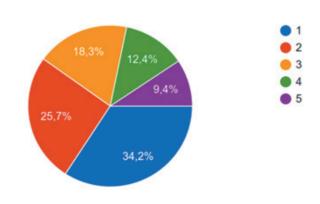


Figure 2. Students' regularity of medical check ups. Legend: 1 – very unlikely; 2 – unlikely; 3 - neutral; 4 – likely; 5 – very likely.

Figure 3. illustrates that 50,5% of students (scores 4 and 5) engage in sports activity three times a week.

This finding suggests that students from our sample are more physically active than US university-age students who participate in regular leisure-time PA (physical activity) at a mere 36.6% [14]. Results from the large survey that assessed leisure-time physical activity in university students from 23 countries indicate that our sample is physically more active than their peers from that survey and only students from Poland exhibited the same level of PA [15].

4. CONCLUSION

Regular physical activity can be considered an important contributor to achieving a healthy lifestyle. It is well documented that physical activity steadily decreases from childhood to adolescence, hence university students could be considered a risk group [16], [17]. Another reason for worry is that 81% of inactive university-age students continue to show stagnant or worse PA patterns after leaving the educational institution [18]. In the former Yugoslavia physical education at the university level was given due importance. Faculties and colleges were places where students could engage in sports activities on a regular basis. However, after 1998 sports activities at the university level in Serbia were almost extinct [19]. Although the results from the current study show better PA levels of our students in comparison to their international peers there is always room for improvement. Universities have the responsibility of teaching students not only how to do things and earn a living, but also how to live a healthy life and educational authorities who care about their youth should put more effort into providing resources that could contribute to their PA and overall well-being.

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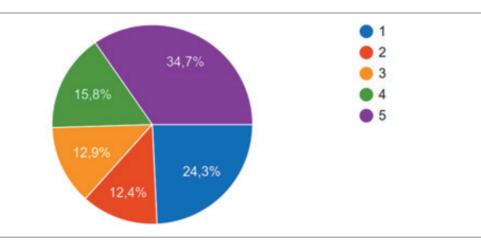


Figure 3. Students' regularity of engaging in sports or sports-recreational activities. **Legend:** 1 – very unlikely; 2 – unlikely; 3 - neutral; 4 – likely; 5 – very likely.

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