

Some Aspects of the Lifestyle of Future Educators

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Abstract

Introduction: The profession of preschool teacher is physically and mentally demanding. Physically, because they usually spend most of the day with more than 20 children in a small and relatively noisy room, where they often have to lift the children, bend down to them, hold them in suboptimal postures, etc., and mentally, because they have to perform pedagogical and administrative work, communicate with parents, coordinate with other professionals and deal effectively with stress. It is therefore important for preschool teachers to start early to adopt a healthy lifestyle, which makes an important contribution to maintaining good health. Factors that influence health often include diet, physical activity, sleep, weight stability, coping strategies, etc. Lifestyle shaping begins in childhood, but is also important in adolescence and the transition to adulthood, when future preschool teachers are at faculty. This paper therefore analyses selected aspects of the lifestyles of future Slovenian preschool teachers with the aim of examining the current situation, addressing potential gaps and identifying opportunities for appropriate support. *Methods:* 154 third-year students of Preschool Education at the Universities of Koper, Maribor and Ljubljana were included in the sample, 81 full-time and 73 part-time. A questionnaire (adapted from Maučec, 2017; Health of Slovenian Students, 2012) containing 39 questions on selected lifestyle indicators was used to collect data on students' daily migration patterns, weight maintenance, eating habits, sleep duration, avoidance of certain habits, e.g. smoking, taking painkillers, etc., time, frequency and intensity of physical activities, as well as their opinions on their knowledge and actual implementation of some aspects of a healthy lifestyle. *Results:* We found that 24% of students live within 2 km of the faculty and 10.4% live between 2 and 5 km. Others live further away. All those who live further than 2 km away travel to the faculty by bus

or car. 75.3 % of students spend more than 4 hours a day on the road. 35.7 % of students are on the road for up to 1 hour, 31.2 % are on the road for 2 hours, 33.1 % are on the road for more than 3 hours, 75 % of all students are passive in traffic. 15.6% of students sleep less than 6 hours, 24% have poor or very poor knowledge of how to deal with stress, 33.1% of students are not physically active enough to stay healthy. 15.6% of students sleep less than 6 hours, 24% have poor or very poor knowledge of how to manage stress, 33.1% of students are not physically active enough to stay healthy. The average body weight increases by almost 2 kg over three years. The difference between knowledge of healthy lifestyle indicators and the actual situation shows a non-significant negative discrepancy. *Discussion and conclusions:* We believe that the current situation reflects a lack of awareness among students of the importance of healthy lifestyles, particularly in relation to the indicators of stress management, appropriate physical activity and choosing more active modes of transportation. The discrepancy between knowledge and implementation shows that it is necessary to identify the causes of this discrepancy, develop strategies to increase motivation, include healthy lifestyle content in courses, adapt the schedules of electives at faculties to favourable dates, introduce physical activity breaks and health protocols.

Keywords: *preschool teachers, promotion methods, lifestyle indicators.*

Introduction

In this article, we analyze various indicators of (un)healthy lifestyle habits among students training to become pre-school teachers. Working as a pre-school teacher is demanding from a health perspective, involving long hours of standing, lifting children, working in suboptimal positions (e.g., stooped posture, low chairs, etc.), which can lead to physical fatigue and stress (Cumming et al., 2021), musculoskeletal pain (Gregorc and Dolenc, 2020), and exposure to infections, as young children, who are frequently ill, can transmit these infections to educators (Linnan et al., 2017). It is therefore important for prospective educators to develop a healthy lifestyle. This is because a healthy lifestyle, which includes regular physical activity and a balanced diet, has a positive effect on an individual's general well-being (Snedden, 2019). Long-term relationships between healthy habits and quality of life are key to understanding the impact of these factors on adult health (Visser et al., 2023; Lin et al., 2023). A person's lifestyle, i.e., a set of habits, behaviours, and activities that affect health and well-being, is formed throughout life, but most intensely during adolescence, i.e., the university years (González Moreno & Molero Jurado, 2024). During this stage of life, young people are exposed to various challenges and influences that can significantly affect their habits (Tabrizi et al., 2024).

In order to effectively face the challenges, students first need knowledge about the harms of unhealthy habits and the long-term positive health effects of a healthy lifestyle in adulthood, knowledge about different techniques and

strategies to cope with stress, how long, how intense, how often and what type of physical activity affects health, etc., and then they need to put all these activities, techniques and strategies into practise to be able to integrate them into their own habits. In this work, we investigated the extent to which students already put into practise their knowledge about the importance of a healthy lifestyle for their health. We analysed students' commuting behaviour, weight control, dietary behaviour, sleep times, avoidance of certain habits, timing, frequency and intensity of physical activity, as well as their opinion on their knowledge and actual implementation of some aspects of a healthy lifestyle. The aim of the study was to analyse selected factors affecting students' health and to causally relate them to the need for possible changes and additions to the teaching process at the faculty.

Four research questions were posed: (1) How do students incorporate physical activity into their daily commuting routines? (2) What are the levels of physical (in)activity among students, and how do they manage stress and pain? (3) What are the eating habits of students during their studies, how often do they take medication, and how do they control their body weight? (4) How is the knowledge about certain aspects of a healthy lifestyle related to its implementation in practice?

Methods

A Sample of Participants

The statistical population consisted of all full-time and part-time third-year students of early childhood education at the University of Ljubljana, the University of Maribor and the University of Primorska. The number of students enrolled in the academic year 2023/24 was determined for each faculty through the Higher Education Information System (VIS), i.e. a total of 344 students enrolled in the third year of preschool education in the academic year 2023/24. All 344 were invited to participate in the survey, but 154 (44.8%) of the questionnaires were returned in full, representing the realisation of the sample. Of the 154 students who participated in the survey, 81 were full-time students and 73 were part-time students.

A Sample of Variables

The questionnaire used in the survey consisted of 39 closed and semi-open questions divided into 4 sections. The first three sets were designed and adapted from Maučec (2017) and Health of Slovenian Students (2012), while the fourth set was developed by us. The first set included demographic and some personal data, namely information on the type and place of study, distance of temporary and permanent residence from the faculty attended, body mass and height (answered for all three years of study). The second group included questions on physical (in)activity, namely the number of hours they spend on average per

day, the amount of time they spend actively/passively traveling, the number of hours they sleep, the amount of time they are moderately to highly physically active per week, etc. The second group included questions on physical (in)activity, namely the number of hours they spend on average per day, the amount of time they spend active/passive, the number of hours they sleep, the amount of time they are moderately to highly physically active per week, etc. The third domain included some health indicators such as diet (number of meals per day, which meal is most often skipped, how food is prepared, etc.), smoking, use of painkillers (frequency, reasons for use, etc.). The fourth area comprised two perspectives on selected aspects of health, namely 'knowledge' and 'reality'. For the 'knowledge' perspective, they were asked on a 5-point scale (1 - strongly disagree to 5 - strongly agree) about their knowledge of the importance of healthy eating, stress management, anxiety, their knowledge of overwork, etc. (e.g. I know how to eat healthily), and for the 'reality' view they were asked on the same 5-point scale how they put the selected aspects of their health into practice (e.g. I know how to eat healthily, how to deal with stress, how to deal with anxiety, etc.). For the fourth part, which we developed ourselves, we calculated the internal reliability using Cronbach's alpha, which resulted in a high internal reliability ($\alpha = 0.812$). Content validity was ensured through a literature review and the involvement of three experts who work and research in the field of healthy lifestyles in combination with exercise and are involved in the education of students.

The Organization and Process of Data Collection

All students had the opportunity to complete the survey voluntarily. The questionnaire was developed using the online tool 1-ka. The survey was completed by all three authors of the paper, each at their faculty after or before the start of the course. To conduct the survey, a generated QR code was projected onto the blackboard, which the students could read and answer the questions with their cell phones, which took them an average of 6 minutes and 29 seconds.

Methods of Data Processing

The data were processed with SPSS version 28.0. Various statistical methods were used to analyse the data: descriptive statistics with frequency (n) and percentage distribution (%), mean values (PV) and standard deviation (SD). The intraclass correlation coefficient (ICC) was used to determine the agreement between knowledge and implementation of some healthy lifestyle indicators. The limit of statistical significance was set at $p \leq 0.05$.

Results

The results of the survey, which investigated the extent to which students are already implementing their knowledge about the importance of a healthy life-

style for staying healthy, are presented in a concise form in line with the re-search questions.

How do students incorporate physical activity into their daily commuting routines? (1)

To answer this question, several questions from the questionnaire were used and answered with the help of a cross-tabulation. To illustrate the cross-tabulations, we divided the students into 2 groups. The students who live within a radius of 2 km during their studies form the first group, the others the second. Traffic was divided into passive and active traffic. We also analyzed the time spent on traffic.

Table 1: Showing the mode of daily migration of students according to distance from the faculty.

		N		% Active		Mode of transport	
						Passive	
Distance from the faculty	Less than 2 km	37	24	27	10		
				73% (within distance)	27% (within distance)		
	More than 2 km	117	76	0	117		
				0% (within distance)	100% (within distance)		
Total		154	100 17,5% (with-in distance)	27	127 (82,5%)		
				82,5% (within distance)			

Legend: % is calculated on the basis of the total number of students (N=154). The type of transportation (active or passive) is then calculated within the students who are up to 2 km and over 2 km away.

Table 1 shows that 37 (24 %) of students live within a radius of 2 km of the college. Of these, 10 (27%) use passive transportation to get to the college. All students who live further than 2 km away travel to the college by bus or car and only walk to the college from the parking lot or bus stop. For a more detailed analysis, we also looked at time spent in traffic and found that 35.7% of students spend up to one hour, 31.2% up to two hours and 33.1% more than three hours on the road, with 75% of all students using passive transportation, which takes almost three hours on average.

What are the levels of physical (in)activity among students, and how do they manage stress and pain? (2)

To answer this question, we used questions about the average number of hours per day that students sit (including hours spent on passive transportation), sleep, and are moderately to highly physically active, and calculated means and standard deviations. We analyzed the questions on stress and pain management using frequency distributions.

Table 2: Mean values of some aspects of students' physical (in)activity.

	N	M	SD
Number of hours of sitting per day (including passive transport)	154	8,4	4,3
Number of hours of sleep per day	154	7,4	1,0
Number of minutes of moderate to vigorous physical activity per week	154	206	197,9

Legend: M=mean; SD=standard deviation

Table 2 shows that students sit for an average of almost 8.5 hours a day and sleep for just over 7 hours. On average, they engage in moderate to vigorous physical activity for a good 3 hours per week (206 minutes/week).

A further analysis (frequency distribution of answers to the questions) revealed that 33.1% of students are not physically active enough to stay healthy (less than 180 minutes/week), 15.6% sleep less than 6 hours/day and 24% have poor or very poor knowledge of how to deal with stress.

What are the eating habits of students during their studies, how often do they take medication, and how do they control their body weight? (3)

To answer this question, we used questions about the number of meals per day, skipping meals, preparing meals, taking painkillers and weight control during their studies.

We found that 44.8% of all students eat up to 3 meals a day, and 14.9% eat 5 or more meals a day. 16.2% of students never skip a meal and 48.7% skip breakfast if they skip a meal. From Monday to Friday, 45% of students eat between 4 and 8 cooked meals. 31.8% of students never take painkillers, 23.4% take one per month. 18.2% of students take painkillers at least once a week.

Table 3: Mean values of weight change and weight maintenance during the study period.

	N	Minimum	Maximum	M	SD
Body mass 1st year (kg)	154	41	100	66,5	12,527
Body mass 2 nd year (kg)	154	42	110	67,4	13,248
Body mass 3 rd year (kg)	154	39	120	68,5	12,715

Legend: M=mean; SD=standard deviation

Table 3 shows that body mass increases by an average of 1 kg per year during the study period, which corresponds to an average increase of 2 kg over the duration of the study.

How is the knowledge about certain aspects of a healthy lifestyle related to its implementation in practice? (4)

To answer this question, we used two questions about student's opinion on selected aspects of a healthy lifestyle, one on 'knowledge' and one on 'implementation'. The two questions were asked on a 5-point scale (1 - strongly disa-

gree to 5 - strongly agree) and were divided into different aspects of a healthy lifestyle. An intraclass correlation coefficient (ICC) was used to determine the agreement between the ratings of the two assessors.

Table 4: Intraclass correlation coefficient between knowledge and practice of certain aspects of a healthy lifestyle.

Measures	ICC	95% CI		F Test			
		Lower Bound	Upper Bound	F	df1	df2	Sig
Single Measures	,369 ^a	,225	,498	2,172	153	153	<,001
Average Measures	,540 ^c	,367	,665	2,172	153	153	<,001

Legend: A two-way mixed effects model was used, where people effects are random and measures effects are fixed. The single measures ICC represents the reliability for individual ratings, while the average measures ICC represents the reliability for the average of the ratings. The 95% confidence interval (CI) indicates the range within which the true ICC value is expected to lie. The F value and associated degrees of freedom (df1, df2) provide the test statistic for assessing the significance of the ICC, with the p-value indicating the statistical significance of the results.

Table 4 shows that the results of the analysis demonstrate a moderate level of reliability of the individual estimates (ICC = 0.369, 95% CI [0.225, 0.498], $F(153,153)=2.172$, $p<0.001$). The statistical significance ($p<0.001$) indicates that the results are reliable and not due to chance. This means that the reliability of the estimates between knowledge and implementation is moderate. In practice, this means that there is a moderate discrepancy between knowledge and implementation, which is also indicated by the more comprehensive content analysis of the other data, particularly in relation to daily transportation choices, physical inactivity, diet and weight maintenance.

Discussion

The survey on the lifestyles of early childhood education students at three Slovenian universities revealed several important findings, which we have divided into three areas that we believe could be addressed in the future.

The first area is active transportation or daily walking. The results of our study show that 24% of students live close to the college (within a 2 km radius), which gives them the opportunity to get around actively, e.g. by walking or cycling, but 37% do not use this. Furthermore, students do not use bicycles if they live further than 2 km from the college. Considering our findings that 33.1% of students are not sufficiently physically active to maintain their health (WHO, 2022), it would make sense to promote active transportation, which was confirmed in 29 of 35 studies by Wanjau et al. (2023) that the physical activity resulting from the use of active transportation leads to additional physical activity.

The second area wish to address is ,wellbeing‘, which includes stress management, sleep, nutrition and weight maintenance. We found that students sleep on average only 7 hours, that 24% have poor or very poor knowledge of stress management, that they gain a kilogram of weight every year and that 48% skip breakfast. Wellbeing can contribute to physical and mental health (Chin et al., 2019; Francis et al., 2019), which is why we would like to highlight this area in particular.

The third area is so called »putting knowledge into practice«. Our data analysis shows that there is a positive correlation between perception of knowledge and putting healthy lifestyles into practice (Table 4). The correlation is only evident in a broader content analysis, which shows a lack of self-criticism in putting healthy lifestyles into practice. N r. They believe they are very knowledgeable about the effects of sleep on the body, but sleep 7 hours or less. They say they are not very familiar with ways to manage stress, but at the same time are very confident that their lifestyle is healthy.

Conclusion

In conclusion, the results of the survey show that awareness and motivation for a healthy lifestyle need to be increased among early childhood education students. Faculties should play an active role in promoting healthy lifestyle habits, as future educators influence children, and thus society as a whole, through their example. By better understanding and implementing healthy lifestyles, students will be better prepared for the physical and mental challenges of their profession and will be able to provide better quality education to preschool children.

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