

THE ROLE OF REGIONAL UNIVERSITY CENTERS IN DEVELOPING A HEALTHY LIFESTYLE.

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Abstract:

Higher education institutions also have a role in the development of local life quality. The health status of the Hungarian population, taking international data into consideration, is extremely unfavorable. This is due to a number of reasons but are all connected to the lifestyle of the population. Education for a healthy way of living must not end when leaving public education. Higher education institutions have to strive to develop the need for a healthy lifestyle while pursuing activities in public service, consultation, professional forums involving the residents. They must also take a role in prevention, training for a healthy lifestyle in order to improve the health status of the public. We wished to examine the materialization of the abovementioned within a research. The survey was carried out in Debrecen and Pécs. We evaluated the data of two affected regions, the Northern Great Plain and the Southern Transdanubia, in our evaluations.

Introduction

The European Union must pursue a much more intelligent or knowledge oriented, environmentally sound development track with more solidarity from a social point of view by 2020 compared to the current one – as it is included in the March 2010 program plan of the European Commission. According to José Manuel BARROSO, the president of the European Commission, it is a significant handicap that over 30 percent of Europeans within the work capable age group are not working, so the employment rate must be increased. [18]

All of the different evaluations on competitiveness (World Economic Forum (WEF), OECD, A.T. Kearney reports, Kok-report, Sapir-report) conclude that stimulating competitiveness plays a decisive role in employment. [7] One basic condition of sustainable development is increasing labor force supply and demand.

Numerous factors influence the development of employment rate, such as demographic processes, labor-market regulation, structure of economic growth, training and educational systems, and partnership between government and private sector.

One of the primary reasons of severe employment problems is the high rate of unemployment. The majority of the Roma population belongs to this category, as well as mothers with young children, people over 50, the majority of people with low qualifications and their work placement (again) presents a difficult task. Finding employment is even harder for the youth under the age 25, who are just starting their careers. The mobility of employees is low. Supply of human capital is also present in increasing the employment rate, but also as an independent growth factor.

According to Lengyel (2003) [11], measuring the competitiveness of a region has three levels that are built upon each other:

- Basic categories: indicators allowing the measurement of competitiveness (income, productivity and employment).
- Basic factors: economic factors directly influencing the basic categories of competitiveness, which could improve and accelerate the competitiveness of the region with conscious development.
- Success factors: factors indirectly influencing the basic categories and factors, which become modified over a long period of time.

Human capital also belongs to the basic factors category. The competency of labor force, the number of young people entering the labor market and requiring retraining, all play significant roles in sustaining regional competitiveness. The health status of people is an important element of labor force employment. [11]

The long-term objectives, priorities and tools of Hungarian development policies are defined in the National Development Policy Concept. According to this, Hungary will become one of the most dynamically developing nations of Europe by 2020, with improving living standards, increasing wages, safer and cleaner environment as well as healthier and longer life expectancy.

The New Hungary Development Plan defines the execution strategies of the abovementioned objectives for the 2007-2013 periods, and outlines the development programs.

The comprehensive objectives of the New Hungary Development Plan:

- Expansion of employment
- Establishing the long-term conditions of growth.

Development efforts, to reach the objectives, are concentrated on the following six areas:

1. economic development,
2. development of transport,
3. renewal of society,
4. environmental and energy development,
5. regional development,
6. state reform.

As it can be seen above, the third priority is: renewal of society, which is aimed at reducing the imbalances of life chances, with the help of transforming education starting from early childhood. This includes the improvement of employment and adaptability, harmonization of education and the demands of society and economy, development of human resources for research and development and innovation, but maintaining health is also an element of this, which is planned through development and preservation of health status and inspiring a healthy lifestyle.

Analysis of the current situation

The demographic trends of Hungary are very unfavorable: a decreasing population paired with an ageing population, but this is not primarily caused by low fertility, but a high early mortality rate, too.

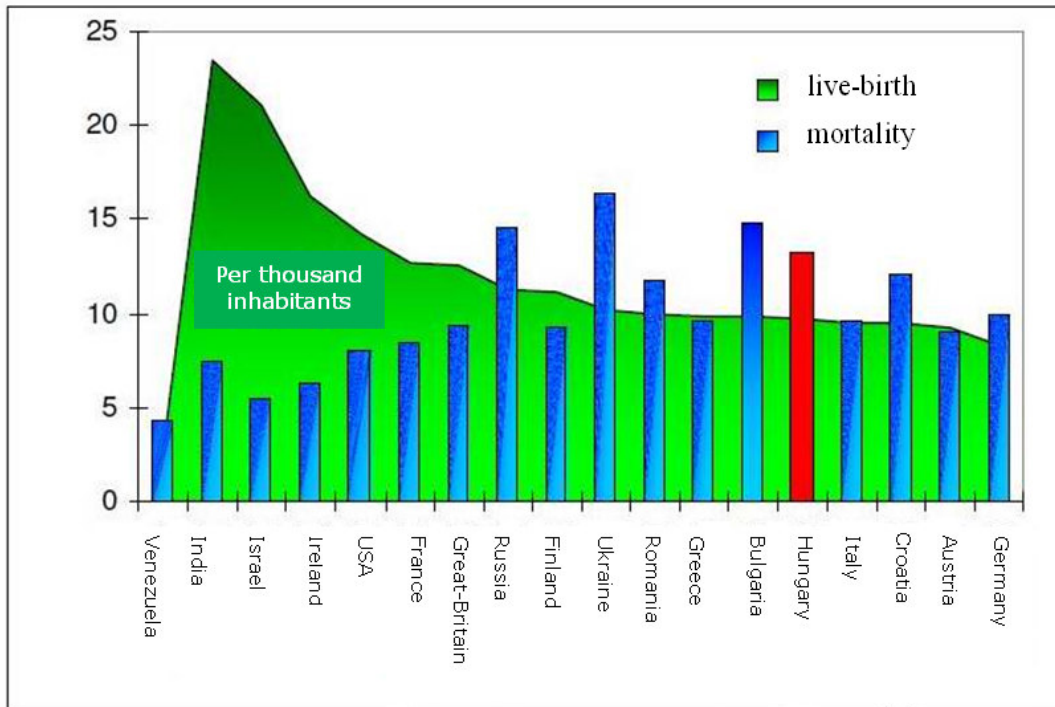


Figure 1. Live-birth and mortality indicators in thousandth in some European and non-European countries in 2007. Source : *Népegészségügyi jelentés (Public health report) 2008*[14]

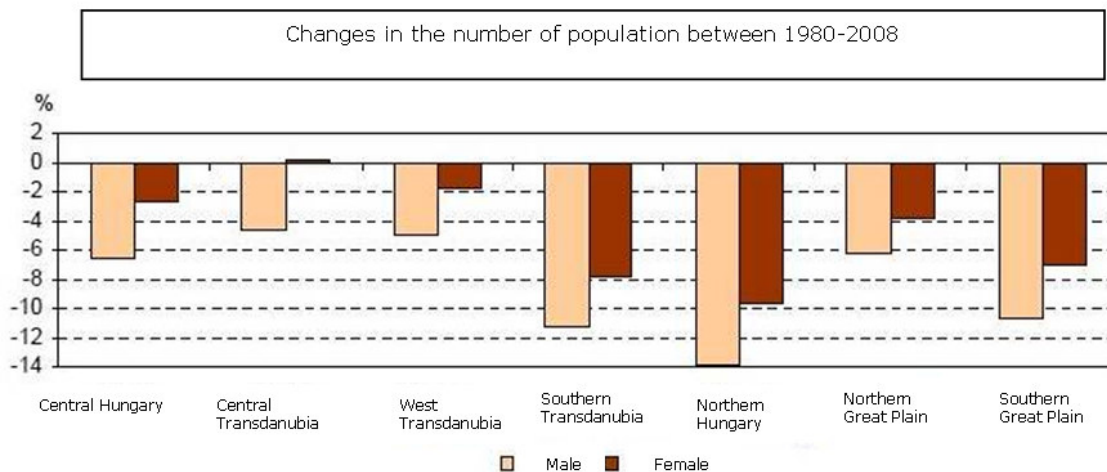


Figure 2.; Source: *Regional differences of demographic processes 1980-2007* [13]

A shocking basic phenomenon of Hungarian epidemiologic situation is that the absolute mortality rate of the middle aged (45-65) population has been higher in the past decade than in the 1930's. This incomprehensible basic problem was labeled as Central and Eastern European health and medical paradox in scientific publications. [10] We are indeed facing a paradox phenomenon, as medical services, living conditions and the economic situation is improving and the health status of the middle-aged population is deteriorating, and there are transforming illness structures and basic social processes in the background. [8]

The 2002 report of the World Health Organization (WHO) points out that a relatively small number of preventable risk factors can be blamed for increasing burdens by illnesses and the high rate of early mortalities. According to estimates, over 30 percent of all illness burdens are consequences of smoking, alcohol consumption, high blood pressure, high cholesterol level and obesity in the developed industrial countries. [17]

Health behavior includes all behavior patterns, actions and habits that contribute to maintaining, rehabilitating and improving health status [5]. The significance of health behavior factors derives from the fact that according to the figures calculated by the WHO, individual behavior is responsible for a significant ratio of mortalities from the leading causes of death, and is also due to the fact that these behavior factors can be changed [2; 15].

The World Health Organization (WHO) determined in 1946 that health is the total body, soul and social well being and not simply the lack of illnesses and deficiencies. Quality of life is multi-dimensional concept, which includes the body-soul and social components of health status. Work ability and physical performance also belong to body components.

Regular physical activity, recreational sport activity is one of the important elements of maintaining health. According to current medical sciences, regularly performed recreational sport activity is essential for sustaining the homeostasis of the body, while the lack of it is listed among the individual risk factors in the etymology of a number of chronic illnesses. [8] The result of regular physical activity is lower mortality both among the young and the elderly. According to the results of research, regular sport improves health status and the quality of life, leading to psychological wellbeing. It also has positive effect on self-esteem and self-confidence, reduction of nervousness, lifting the mood and the capacity to deal with stress. [3; 4; 12;]

According to the results of Hungarostudy 2002 [6], 75% of the adult population in Hungary does not perform regular physical activity, 6.3% performs once a week, 9.7% performs a number of times a week, and 7.2% does daily exercise. The ratio of those performing regular physical activity shows drastic decrease with the increase of age.

According to an EU survey (EUROBAROMETER 72.3; Result for Hungary), Hungarians between the age of 25-54 strain their bodies just as much as their EU counterparts, however, the sporting habits of men over the age of 55, especially that of women, drastically fall compared to that of the European Union average. Over twenty percent of the Hungarian population is over the age of 60, so this is a wide group of passive layer.

The health status of the population is significantly unfavorable taking the economic development of Hungary and international data into consideration, with a low level of health consciousness. Many are left out of the labor market due to their bad health status. [9]

Hungary is in a leading position in international statistics regarding certain illnesses and causes of mortalities. This has a number of reasons, but all of these factors are related to the lifestyle of the population. (Béla Johan National Plan of Health Decade, 2003). [16]

Preparation for a healthy lifestyle cannot end with public education; it has to continue among young adults as well. The health influencing behavior of students in higher education will serve as an example in their chosen place of work and living. The first and most important task is to shape consciousness, which is a difficult task due to deeply rooted habits. Therefore, higher education institutions have to strive to develop the need for a healthy lifestyle, daily exercise routines, right nutrition and lifestyle, and a responsible attitude to the environment among students. On the other hand, they must pursue activities in public service, consultation, professional forums, education, conferences, involving the residents. They must also take a

role in prevention, training for a healthy lifestyle in order to improve the health status of the public. [1]

Method

In order to prove the assumption, that higher education institutions play a role in the development of local quality of life, we launched a survey. The survey was carried out in Debrecen and Pécs. We evaluated the data of HCSO in two affected regions (Northern Great Plains and Southern Transdanubia), as well as processing questionnaires.

The survey was carried out at the inpatient units of the University of Debrecen, Medical School and Health Science Center and the University of Pécs. The head nurses handed out the questionnaires to all inpatients over the course of a two-week period, which was filled in voluntarily and anonymously. The data were processed and assessed by using Excel application, while interrelationships were evaluated by using SPSS statistical software. The evaluation of regional differences was done by Mann-Whitney, Chi-square test and Anova evaluation.

The questionnaire included 59 questions, which covered the following areas:

- demographic data
- assessment of residence based on specific aspects
- questions related to work and income
- lifestyle, habits
- questions related to health status
- questions related to health culture

The number of questionnaires according to regions:

- Northern Great Plains: 791
- Southern Transdanubia: 482

In this present study, I will only introduce results from the assessment of responses given to questions regarding health culture.

In order to reveal the relationship between *lifestyle* and *health status*, first I examined how the respondents view their own health status in certain regions.

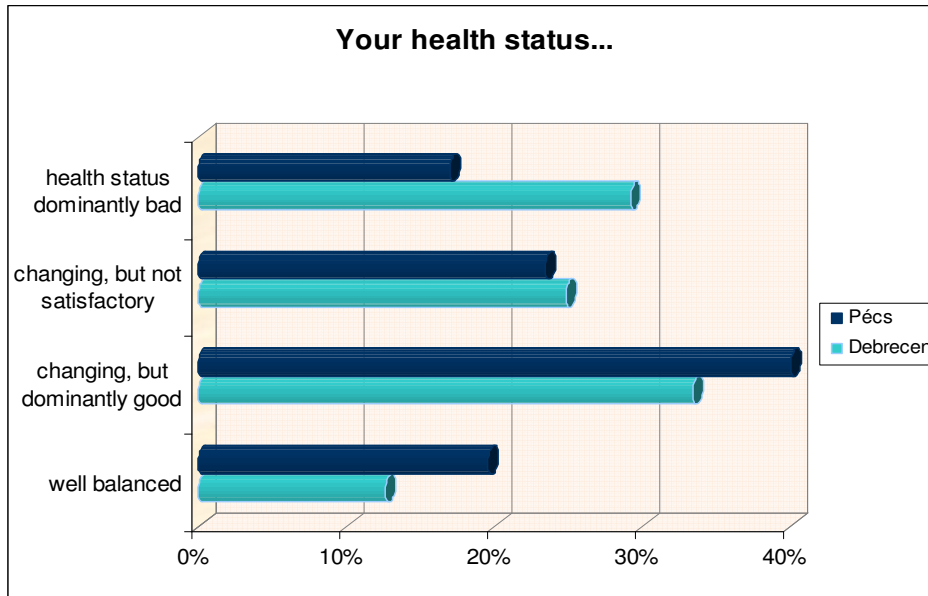


Figure 3.; Source: own compilation

As it can be seen from the illustration above, the respondents of the Southern Transdanubia region view their own health status significantly more positively. While over half (59.57%) of the respondents regarded their health status as „well balanced” or „changing, but dominantly good”, the majority of respondents in the Northern Great Plains (54.01%) regarded their health status as „changing, not satisfactory” or „dominantly bad”.

Using SPSS application, I examined the efforts made by individuals in the interest of their health belonging to certain categories. The chart below illustrates the results according to regions:

Northern Great Plains

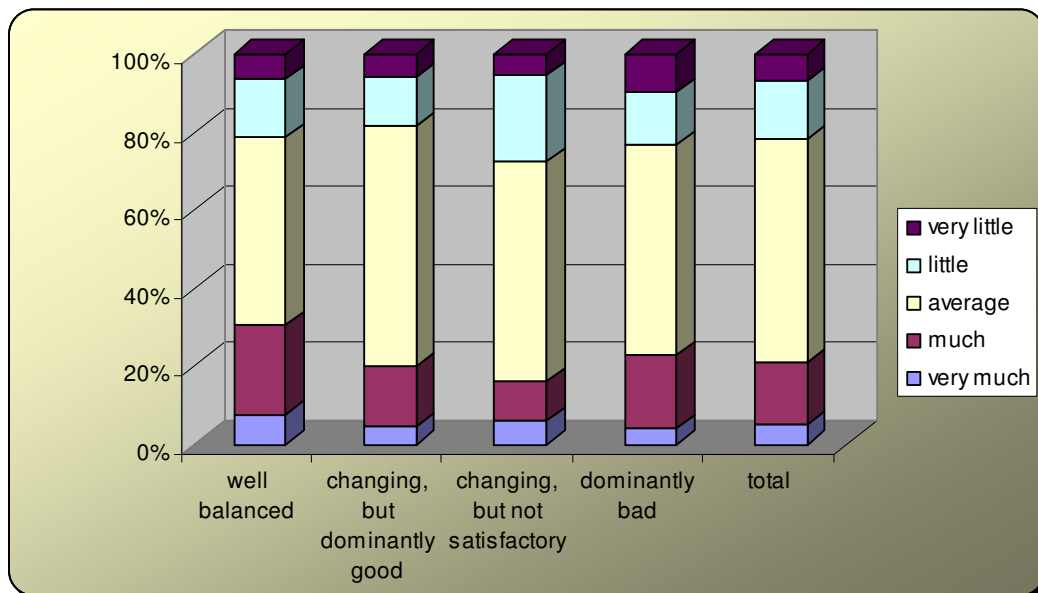


Figure 4.; Source: own compilation

Southern Transdanubia

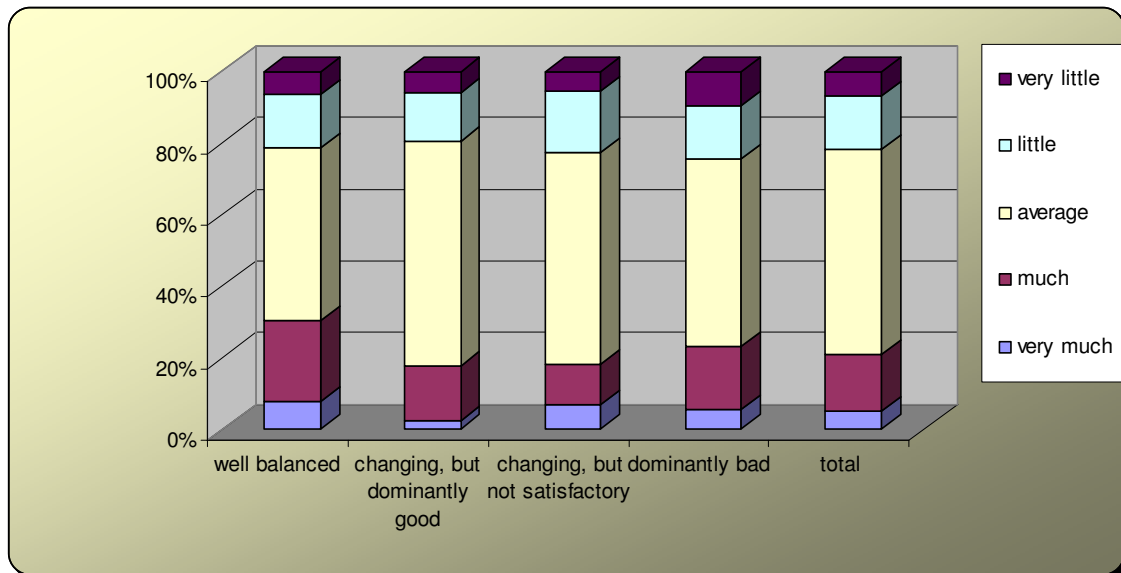


Figure 5.; *Source: own compilation*

When examining the interrelationships, I was primarily interested in the efforts made by individuals who consider their health status to be „dominantly bad”. We can detect that ratio of those who believe that they do a lot in the interest of their health is higher in Southern Transdanubia.

I examined the foundation of my hypothesis regarding the role of regional university centers by analyzing the responses to the following areas:

- interest of the respondents regarding the issue of health-illness,
- ratio of participation at university events dealing with the issues of health-illness,
- the extent to which university publications and papers dealing with the issue of health-illness are read
- judgment of the universities play in developing a healthy lifestyle from the respondents point of view.

First, I examined whether the respondents consciously look for papers and programs dealing with the issue of health-illness. The illustration below clearly shows that more than half of the respondents (Northern Great Plains: 62.08 %, Southern Transdanubia region: 68.08 %) pays attention to and looks for information regarding this issue.

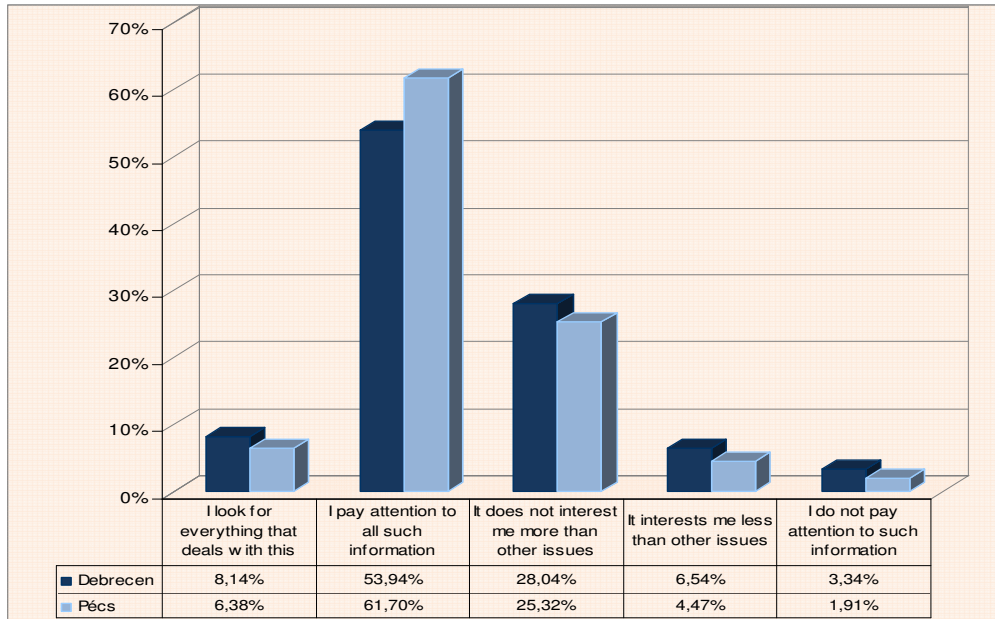


Figure 6.; *Source: own compilation*

When examining the ratio of participation at university events dealing the issue of health-illness, we can see that close to twice as many respondents took part in such events in the Southern Transdanubia region than in the Northern Great Plains region. It has to be added that in the case of the latter region, this was not primarily due to the lack of interest or time, but because a large percentage (46.19%) of respondents had no knowledge of such events.

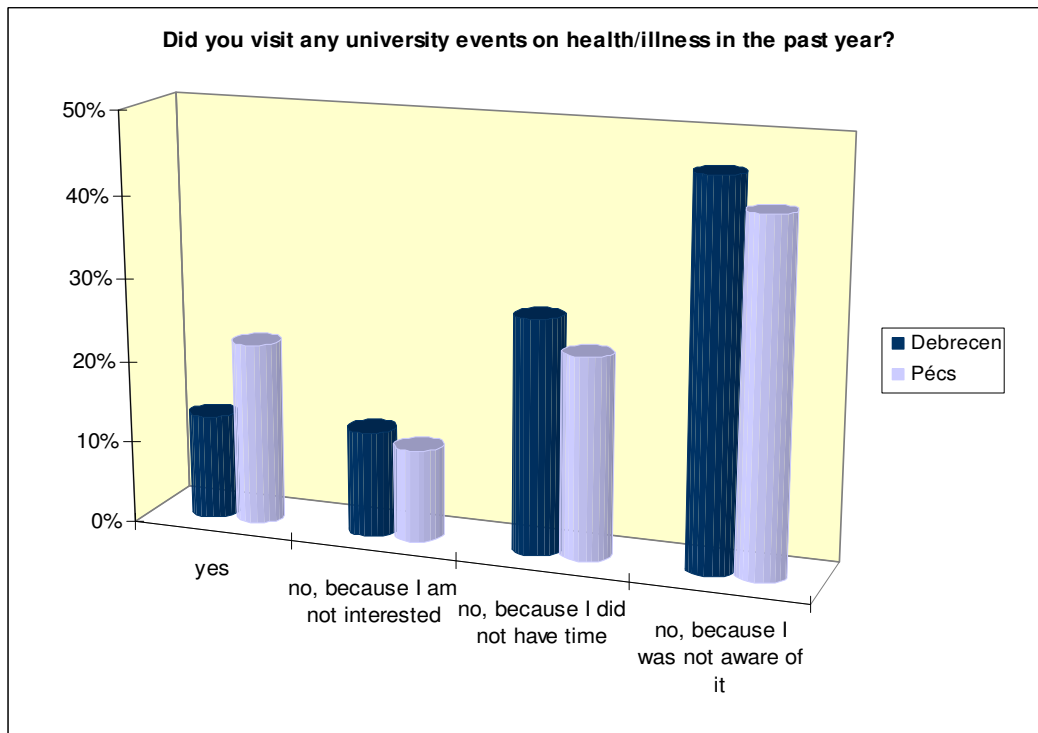


Figure 7.; *Source: own compilation*

When examining the employment of participants at university events, we can see that mainly two large groups take part in these occasions; „full-time employed” and retired people. 55.29% of respondents in the Northern Great Plains region and 47.73% of respondents in Southern Transdanubia have not come across university publications related to the issue of health-illness.

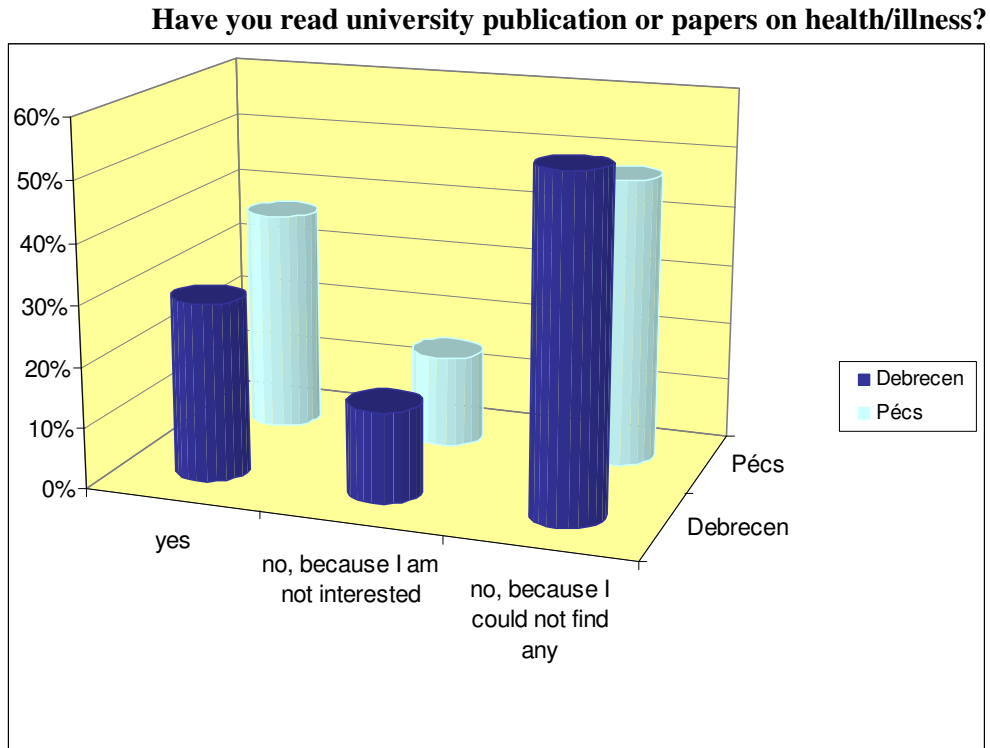


Figure 8; Source: own compilation

Close to half of the respondents in both regions gave the answer no to the question „Did you get any printed materials or leaflets on healthy lifestyle and nutrition when receiving treatment at clinics?”

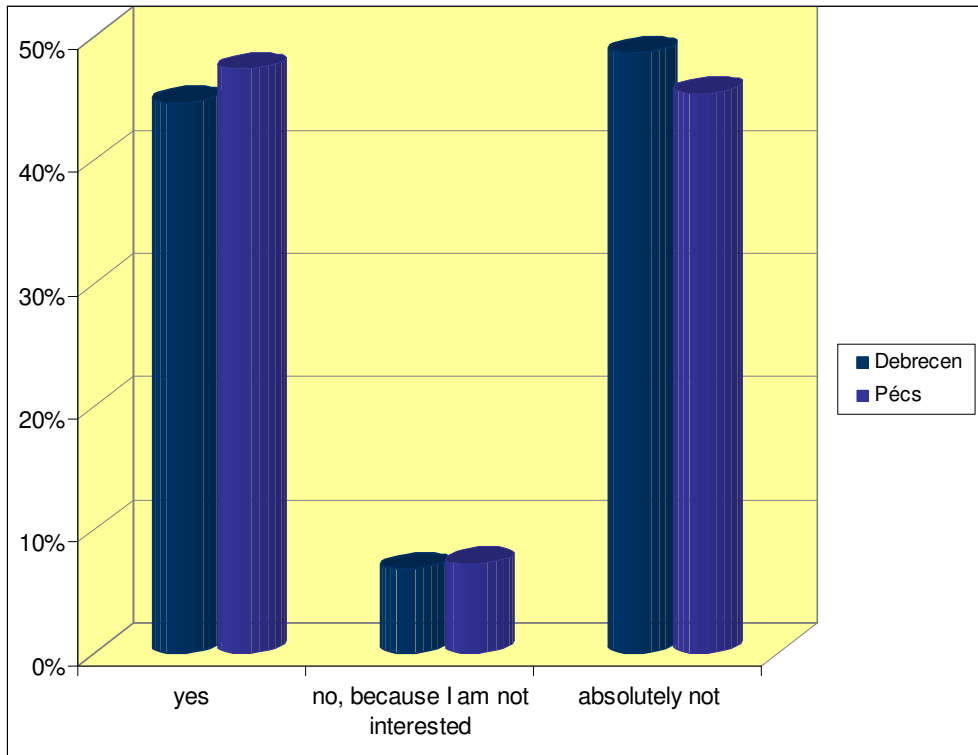


Figure 9; *Source: own compilation*

Based on the opinions regarding the roles of universities in the development of a healthy lifestyle, we can conclude that a higher ratio of respondents (50.51%) consider it significant in the Northern Great Plains region.

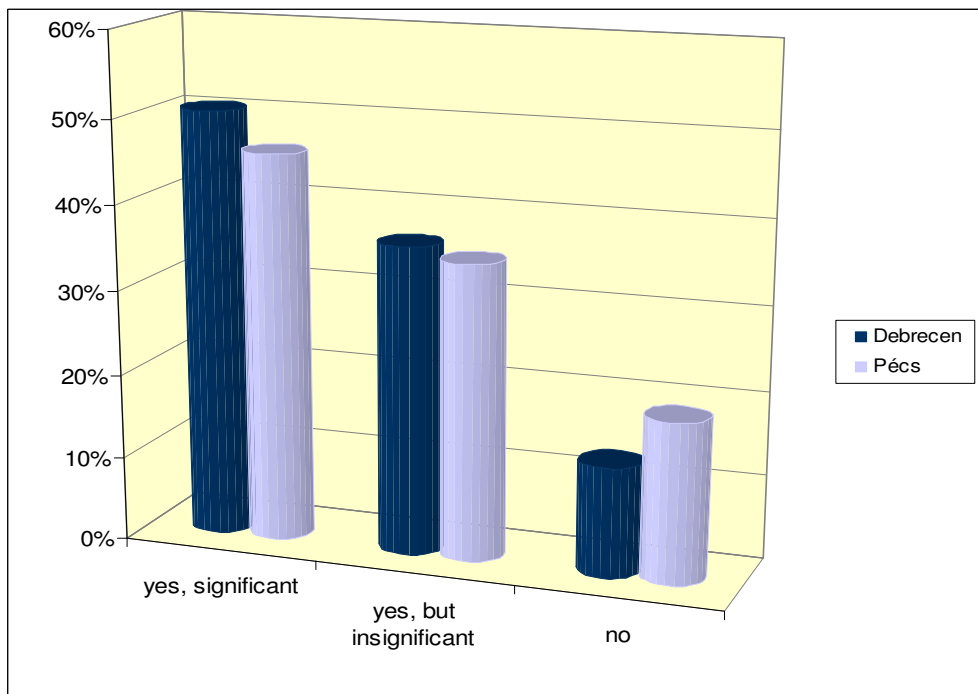


Figure 10.; *Source: own compilation*

Looking at the distribution of respondents according to schooling, we can see that while in the Southern Transdanubian region primarily those with a higher level of schooling consider the role of universities important in developing the healthy lifestyle of the population, the respondents in the Northern Great Plains region consider it important regardless of their level of schooling.

Evaluation of regional differences by Mann-Whitney and Chi-square test

<i>Question</i>	<i>Region</i>		<i>Significance</i>
	<i>Northern Great Plains</i>	<i>Southern Transdanubia</i>	
How much do you do for your health	3.06	2.97	0.012**
Have you been to university events	3.07	2.87	0.007*
Have you read any publications	2.25	2.10	0.001*
Does the university have a role	1.63	1.72	0.034*

Table 1; *Source: own compilation; *Mann-Whitney; ** Chi-square;*

Based on the table above, we can conclude that the ratio of those who do more in the interest of their health is relatively higher in Southern Transdanubia, however, view the role of the university in developing a healthy lifestyle as relatively less significant than the respondents in the Northern Great Plains. At the same time, relatively more participants attended university events and more of respondents read university publications.

Findings

- A larger ratio of respondents considers their health status bad in the Northern Great Plains region and spends more on medicine.
- A larger ratio of respondents in the Southern Transdanubian region look for information related to health (articles, programs) and a higher ratio takes part in university events.
- About half of the respondents have not come across university publications dealing with the issue of health-illness, and have not received leaflets at clinics.
- A higher ratio of respondents regards the role of universities as important in the Northern Great Plains region regardless of their level of schooling.

Summary

University centers – including the University of Debrecen and the University of Pécs – contribute to the development of quality of life and strengthening social cohesion, through their cultural role, impact and role in influencing the lifestyle of the population.

My research focused on the roles universities play in developing a healthy lifestyle, which significantly influences the quality of life and therefore the ability to work.

The health culture and health conscious behavior of the Hungarian population requires development, and changes in the health behavior factors are necessary based on the morbidity indicators. At the same time, it is clear that interest in healthy lifestyle could be raised. There are already some publications and events at universities, but the information are not widely spread.

Higher education institutions must play a larger role in prevention, educating to a healthy lifestyle in order to improve the health status of the population. Ways of implementation must be sought with civil organizations to increase the competitiveness of the regions and Hungary.

References

1. A Dél-dunántúli Humán Szolgáltatások Fejlesztésének Stratégiai Programja; Vitálpro/Forrásközpont/EcoCortex konzorcium
2. CONNER M., NORMAN P. (1996): Predicting Health Behavior. Open University Press, Buckingham, UK
3. DUPPERT PM. (2002): Physical activity and exercise: recent advances and current challenges. *J. Consult Clin Psychol*, 70 (3):526-36.
4. EMERY CF., HAUCK ER., BLUMENTHAL JA. (1992): Exercise adherence or maintenance among older adults: 1-year follow-up study. *Psychol Aging*, 7: 466-470.
5. GOCHMAN DS. (1997): Handbook of Health Behavior Research. Plenum Press, New York
6. Hungarostudy 2002., Semmelweis Egyetem Magatartástudományi Intézet, 2002
7. International Center for Economic Growth Európai Központ: Munkafüzet; 2005. december
8. KOPP M., KOVÁCS M.(2006): A magyar népesség életminősége az ezredfordulón, Semmelweis Kiadó, Budapest
9. KOPP M. (2008): Magyar lelkiállapot 2008, Esélyerősítés és életminőség a mai magyar társadalomban; Semmelweis Kiadó, Budapest, 200-205. p.
10. KOPP MS., RÉTHELYI J. (2004): Where psychology meets physiology: chronic stress and premature mortality – the Central-Eastern european health paradox. *Brain Research Bulletin*, 62, 351-367.
11. LENGYEL I. (2003): Verseny és területi fejlődés. JATEPress, Szeged
12. MORGAN WP. (1985): Affective beneficence of vigorous physical activity. *Med.Sci.Sport Exerc*, 17(1985): 94-100.

13. NÉMETH E. (2008): A demográfiai folyamatok regionális különbségei, 1980-2007;
Központi Statisztikai Hivatal
14. Népegészségügyi jelentés 2008; Public Health Report 2008, Hungary
15. OLEF 2003, Országos Lakossági Egészségfelmérés 2003.; Országos Epidemiológiai
Központ, 2005.
16. VITRAI J., VOKÓ Z., NEJ (2004): Egészségmodell, Johan Béla Országos
Epidemiológiai Központ, Budapest
17. World Health Organisation: The World Health Report 2002.;
<http://www.who.int/whr/2002/en/>
18. <http://www.mr1-kossuth.hu/hirek/kulhon/okosabb-versenykepesebb-europat-szeretne-az-europai-bizottsag.html>